General System Plan (GSP)

B-4-1

hydro one

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SECTION 4.0 – GSP – GENERAL PLANT SYSTEM PLAN

4.0.1 FILING REQUIREMENTS

Hydro One Networks Inc. (Hydro One) has prepared a General Plant System Plan (GSP) for the 2028-2032 period, which presents proposed investments in the General Plant assets and functions that are relied on and shared by the Transmission and Distribution businesses. This GSP is based on guidance from the Chapter 5 Filing Requirements for Electricity Distribution Applications: Consolidated Distribution System Plan Filing Requirements - issued on December 16, 2025, and Chapter 2 Filing Requirements for Electricity Transmission Applications: Revenue Requirement Applications - issued on October 30, 2025.

Consistent with the Filing Requirements discussed above, this GSP provides a consolidated view of the capital and prepaid expenditures[1] for its General Plant assets and the asset management and investment planning process (as detailed in SPF Section 1.7) that underpinned the development of this plan. The GSP reflects the unique functions and lifecycle characteristics of General Plant assets (e.g. Fleet & Aviation, Facilities & Real Estate, Digital & Technology Solutions, and System Operations), which are indispensable in supporting Hydro One's business operations and delivering services to customers.

4.0.2 FORMAT OF THE GSP

Consistent with the Filing Requirements discussed in 4.0.1, Hydro One's GSP is organized as follows in Table 1 below.

[1] Prepaid expenditures relate to cloud computing implementation costs for technology hosting arrangements. These expenditures are included in the System Plans to provide a comprehensive view of the technologies for which DTS is accountable, including both traditionally owned, capital technology assets (e.g., physical hardware and on-premises applications) and subscription-based cloud solutions. For information regarding accounting treatment of prepaid expenditures related to cloud, refer to GSP Section 4.6.6 and Exhibit E-08-01, Section 4.0.

Table 1 - GSP Structure

GSP Section	Content Description
Section 4.1	**GSP – Overview** – This section provides an overview of Hydro One's General Plant assets, the factors that were considered in developing the investment plan, and a summary of the investment plan.
Section 4.2	**GSP – Asset Information and Life Cycle Strategies** – This section presents the state of Hydro One's power system assets and their asset management and life-cycle strategies.
Section 4.3	**GSP – Benchmarking and Other Studies** – This section presents the external studies that have been undertaken to inform the investment plan.
Section 4.4	**GSP – Placeholder** – This section is not applicable for the GSP. It is included in the GSP structure to maintain alignment with the structures of the TSP and DSP.
Section 4.5	**GSP – Placeholder** – This section is not applicable for the GSP. It is included in the GSP structure to maintain alignment with the structures of the TSP and DSP.
Section 4.6	**GSP – Other Capital Planning Factors and Considerations** – This section details other factors which have informed the investment plan, including customer engagement, regulatory reform and policy, and system modernization.
Section 4.7	**GSP – Investment Planning Process** – Describes asset management and investment planning process specifics that are applicable to General Plant relative to the overall planning process (described in SPF Section 1.7).
Section 4.8	**GSP – Capital Expenditures and Trends** – This section presents Hydro One's capital and prepaid investment plan for General Plant investments for the five-year period (2028-2032).
Section 4.9	**GSP – Capital Expenditure Variances** – This section compares Hydro One's historical distribution capital spending to previous OEB-approved funding and provides a five-year snapshot (2023-2027) of Hydro One's capital and prepaid spending in General Plant investments.
Section 4.10	**GSP – Capital Work Execution Strategy** – This section discusses the capital delivery process and Hydro One's approach to accomplish the proposed capital investment plan.
Section 4.11	**GSP – Material Investments Summary Documents** – This section includes detailed summaries of large investments (with historical and forecast spending over $4M in Transmission or $1M for Distribution in any given year) over the 2023-2032 period planned in the OEB's General Plant investment category.

To assist parties in their review of the GSP, Hydro One has prepared a Table of Concordance found at Appendix A, which aligns the sections of this GSP with the Filing Requirements.

Unless otherwise specified, the asset information contained in this GSP is taken as of December 31, 2025.

1 **APPENDIX A - TABLE OF CONCORDANCE**

Hydro One Reference	OEB Filing Requirements
4.0 GSP – Introduction	Ch. 5.2
4.0.1 Filing Requirements	Ch. 5.2
4.0.2 Format of the GSP	Ch. 5.2
4.1 GSP – Overview	
4.1.1 Introduction	Ch. 5.2.1
4.1.2 General Plant Functions	Ch. 5.3.2
4.1.3 Investment Needs and Objectives	Ch. 5.2.1; Ch. 2.3.2 (Transmission)
4.1.4 Capital Expenditure Plan	Ch. 5.4.1; Ch. 2.4.1 (Transmission)
4.1.5 GSP is Reasonable and Appropriate	Ch. 5.2.1, Ch. 5.4, Ch. 5.4.1;
4.2 GSP – Asset Information and Life Cycle Strategies	
4.2.1 Introduction	
4.2.2 Fleet Services	Ch. 5.3.2, Ch. 5.3.3; Ch. 2.3.2 (Transmission), Ch. 2.4.2 (Transmission)
4.2.3 Aviation Services	Ch. 5.3.2, Ch. 5.3.3; Ch. 2.3.2 (Transmission), Ch. 2.4.2 (Transmission)
4.2.4 Facilities & Real Estate	Ch. 5.3.2, Ch. 5.3.3; Ch. 2.3.2 (Transmission), Ch. 2.4.2 (Transmission)
4.2.5 Digital & Technology Solutions	Ch. 5.3.2, Ch. 5.3.3; Ch. 2.3.2 (Transmission), Ch. 2.4.2 (Transmission)
4.2.6 System Operations	Ch. 5.3.2, Ch. 5.3.3; Ch. 2.3.2 (Transmission), Ch. 2.4.2 (Transmission)
4.3 GSP – Benchmarking and Other Studies	
4.3.1 2024 Fleet Operations Benchmarking Report – Utilimarc	Ch. 2.4.4 (Transmission), Ch. 2.8.1 (Transmission)
4.3.2 Fleet Lifecycle Study – Utilimarc	Ch. 2.4.4 (Transmission), Ch. 2.8.1 (Transmission)
4.3.3 Helicopter Lifecycle Study – Utilimarc	Ch. 2.4.4 (Transmission), Ch. 2.8.1 (Transmission)
4.3.4 Fleet Investment Strategy Study – Utilimarc	Ch. 2.4.4 (Transmission), Ch. 2.8.1 (Transmission)
4.3.5 Facilities & Real Estate (FRE) Building Condition Assessment (BCA) Review – JLL	Ch. 2.4.4 (Transmission), Ch. 2.8.1 (Transmission)

Hydro One Reference	OEB Filing Requirements
4.3.6 Enterprise IT Spending and Staffing Benchmark and enterprise IT Maturity studies – Gartner	Ch. 2.4.4 (Transmission), Ch. 2.8.1 (Transmission)
4.3.7 Attachments: Benchmarking Studies	Ch. 2.4.4 (Transmission), Ch. 2.8.1 (Transmission)
4.4 Placeholder	
4.5 Placeholder	
4.6 GSP – Other Capital Planning Factors and Considerations	
4.6.1 Introduction	
4.6.2 Customer Engagement	Ch. 5.3.1.1; Ch. 2.3.3 (Transmission)
4.6.3 Regulatory Requirements and Policy	Ch. 5.3.1.1
4.6.4 Industry Trends	Ch. 5.3.1.1
4.6.5 Environmental Stewardship	Ch. 5.3.1.1
4.6.6 Prepaid Investments Related to Cloud (DTS)	Ch. 5.3.1.1
4.6.7 Work Program Enablement	Ch. 5.3.1.1
4.7 GSP – Investment Planning Process	
4.7.1 Introduction	
4.7.2 Asset Management Process	Ch. 5.3.1, Ch. 5.3.2; Ch. 2.3.3 (Transmission), Ch. 2.4.1 (Transmission), Ch. 2.4.2 (Transmission), Ch. 2.4.4.2 (Transmission)
4.7.3 Investment Planning Process	Ch. 5.3.1; Ch. 2.3.2 (Transmission)
4.8 GSP – Capital Expenditures - Overview	
4.8.1 Introduction	
4.8.2 Current System Context	Ch. 5.4.2; Ch. 2.4.4 (Transmission)
4.8.3 Hydro One Investment Priorities	Ch. 5.3.3, Ch. 5.4.2, Ch. 5.4.2.1; Ch. 2.3.2 (Transmission), Ch. 2.4.4 (Transmission)
4.8.4 Forecast Capital and Prepaid Expenditures and Trend Analysis	Ch. 5.4.2; Ch. 2.4.1 (Transmission), Ch. 2.4.4 (Transmission)
4.8.5 Attachments	Ch. 5.4.2; Ch. 2.3.2 (Transmission), Ch. 2.4.4 (Transmission)
4.9 GSP – Capital Expenditure – Trends and Variances	
4.9.1 Introduction	

Hydro One Reference	OEB Filing Requirements
4.9.2 Historical Capital Expenditures Variances	Ch. 5.4.2; Ch. 2.3.2 (Transmission), Ch. 2.4.4 (Transmission)
4.9.3 Attachments	Ch. 5.4.2; Ch. 2.3.2 (Transmission), Ch. 2.4.4 (Transmission)
4.10 GSP - Capital Work Execution Strategy	
4.10.1 Introduction	Ch. 5.3.3
4.10.2 Fleet	Ch. 5.3.3
4.10.3 Facilities & Real Estate	Ch. 5.3.3
4.10.4 Digital & Technology Solutions	Ch. 5.3.3
4.10.5 System Operations	Ch. 5.3.3
4.11 GSP - Material Investments Summary Documents	Ch. 5.4.2; Ch. 2.4.4 (Transmission)

SECTION 4.1 – GSP – OVERVIEW

4.1.1 INTRODUCTION

This Exhibit outlines Hydro One's General Plant System Plan (GSP) for the 2028-2032 planning period. GSP investments provide the shared assets and enabling functions that underpin Hydro One's Transmission and Distribution operations, including vehicles, aircraft, facilities, work centres, enterprise systems, operational technologies, security systems, and control-centre capabilities. These foundational investments enable the safe and reliable delivery of electricity, support customer growth and electrification, and contribute to Ontario's economic growth by sustaining skilled jobs and supporting the execution of one of the province's largest capital investment programs.

The GSP is comprised of four portfolios: (i) Fleet & Aviation, (ii) Facilities & Real Estate (FRE), (iii) Digital & Technology Solutions (DTS), and (iv) System Operations. Fleet & Aviation and FRE ensure that Hydro One has ready access to appropriate vehicles, equipment and infrastructure to run its day-to-day activities and respond promptly to outages and emergency situations. DTS provides the underlying information technology, services, and security functions that deliver and manage work programs and run Hydro One’s corporate operations. System Operations’ investments provide critical control functions to manage Ontario’s electricity grid. In addition to these main functions, the GSP also encompasses General Plant investments directly related to certain aspects of the Transmission and Distribution businesses. These investments include Transmission grid operations costs and capital contributions from Hydro One Distribution to Hydro One Transmission.

Hydro One developed the GSP within its integrated planning framework, considering asset condition, lifecycle needs, operational requirements, customer preferences, regulatory obligations, benchmarking, and execution capabilities. This plan prioritizes investments that mitigate unacceptable or high operational risks, preserve service reliability, deliver value to customers through continuous improvement, ensure regulatory and legislative compliance, and facilitate the successful implementation of Transmission and Distribution work programs. Over the 2028-2032 period, Hydro One plans to invest $4,159.9M in

General Plant investments, including approximately $3,314.9M in capital expenditures and approximately $845.0M in prepaid expenditures.[1]

The GSP reflects an optimized level and mix of investments designed to balance a range of organizational needs, including:

- Renewal of assets in deteriorated condition or approaching end of life;
- Provision of adequate facilities, fleet and equipment, and digital tools to support incremental Transmission and Distribution work programs;
- Investment in critical operating infrastructure, including essential building components, to maintain compliance with North American Electric Reliability Corporation (NERC) requirements;
- Enhancement of IT and OT systems to support reliable system operations, maintain grid stability, and improve business capabilities through technology integration;
- Advancement of Hydro One's physical, cyber, and personnel security programs to strengthen organizational resilience and mitigate digital and physical security risks.

This overview explains the role of the GSP portfolio, the principal needs driving the 2028-2032 plan, the scale and composition of the proposed expenditures, and the reasons the plan is prudent and appropriate. The structure of this overview follows Hydro One's System Plan Framework and related System Plan evidence, while leaving detailed asset, planning, expenditure, historical performance, execution, and investment-level support to later sections of the GSP. More specifically:

- Section 4.2 provides asset information and lifecycle strategies,
- Section 4.3 summarizes benchmarking and other studies,
- Section 4.6 discusses other capital planning factors,
- Section 4.7 explains the investment planning process,

[1] Prepaid expenditures relate to cloud computing implementation costs for technology hosting arrangements. These expenditures are included in the System Plans to provide a comprehensive view of the technologies for which DTS is accountable, including both traditionally owned, capital technology assets (e.g., physical hardware and on-premise applications) and subscription-based cloud solutions. For information regarding accounting treatment of prepaid expenditures related to cloud, refer to GSP Section 4.6.6 and Exhibit E-08-01, Section 4.0.

- Section 4.8 provides the capital and prepaid expenditure summary,
- Section 4.9 addresses historical expenditures,
- Section 4.10 discusses work execution considerations, and
- Section 4.11 provides the Investment Summary Documents.

4.1.2 GENERAL PLANT FUNCTIONS

Each of the primary General Plant functions is described in the following subsections.

4.1.2.1 FLEET & AVIATION

The Fleet & Aviation function manages Hydro One's Transport and Work Equipment (TWE) to support Distribution and Transmission work programs and staffing requirements. As detailed in Table 1 below, the portfolio includes approximately 8,000 vehicles and other miscellaneous fleet equipment and 1,000 small off-road units, all of which are needed by field crews to reach work locations, complete maintenance and construction tasks, respond to outages, and safely perform work in varied terrain and weather conditions. Hydro One also operates an aviation fleet of 10 helicopters that supports line inspections, line maintenance, emergency restoration, and the transport of workers and materials to remote locations.

Table 1 - TWE quantities by equipment type (as of December 2025)

Equipment Type	Quantity
Light	3,178
Heavy	1,495
Off-Road	459
Small Off-Road	1,105
Miscellaneous	2,627
Helicopters	10

The assets outlined in Table 1 are essential to delivering work and serving customers across Hydro One's extensive service area, including rural and remote locations. Hydro One requires vehicles, equipment, and aircraft suited to a wide range of operational needs:

- **Light duty vehicles** include vehicles for employees who drive more than 23,000 km annually to address grid and customer requirements, as well as vans and pickup trucks to transport tools and crews to work locations.

- **Heavy duty vehicles** such as service trucks, highway tractors, cranes, bucket trucks and radial boom trucks are used by Distribution Lines, Forestry and Transmission Lines to perform activities such as towing large equipment and off-road units, lifting poles and other materials, working at heights, and setting poles.
- **Large off-road equipment** such as tracked radial boom equipment is used to build roads and rights-of-way, clear brush, build and maintain lines and serve as personnel and material carriers.
- **Small off-road equipment** such as snowmobiles and utility task vehicles (side-by-sides) is used to perform activities in remote locations that do not require the capabilities of the large off-road equipment.
- **Helicopters** are used to inspect transmission lines, conduct line maintenance, and transport workers and materials to remote locations. These assets are also especially critical for quickly accessing remote locations during storm response.
- **Miscellaneous equipment** such as boats, tensioners, chippers, trailers, manlifts and forklifts caters to distinct operational needs.

Fleet uses telematics and operational data to assess utilization and redistribute equipment where possible, thereby reducing the need for more expensive short-term rentals or new acquisitions. This strategy has delivered demonstrable results. In 2025, 57% of requests for additional short-term equipment were satisfied through redeployment of existing equipment rather than external rental, and only approximately 13% of Hydro One's vehicles were operating at low mileage levels compared to an industry average of approximately 26% (see GSP Section 4.2.2 for more information).

4.1.2.2 FACILITIES & REAL ESTATE

FRE is responsible for managing the facilities, buildings, property rights, land holdings, work centres, garages, warehouses, administrative spaces, and transmission facilities that support safe and reliable electricity delivery across Ontario. In total, Hydro One manages 1,474 buildings across 529 sites throughout Ontario (see Table 2 below), supporting front-line work execution, crew deployment, emergency and storm response, training, logistics, business operations, and protection of equipment at transmission stations. Because these facilities house workers, equipment, control systems, telecommunications systems,

batteries, generators, and critical materials, they have a direct and significant impact on business continuity, productivity, outage response, employee health and safety, and Hydro One's ability to deliver safe, reliable and cost-effective services to its customers across the province.

The FRE portfolio is comprised of the following assets:

- **Transmission Facilities** known as the "TS Facilities" portfolio, which are located primarily at transmission stations and house equipment and materials necessary to keep critical network assets secure, protected, and operational. See GSP Section 4.2.4.2, for full asset demographic details.
- **Operating Centre and Administrative Facilities (OC Admin)**, which serve as central dispatch locations, field work centres, and storm response locations for distribution lines, forestry, and fleet support crews. This category also includes Special Purpose and Administration Facilities, which comprise grid control centres, training and development campuses, fleet repair shops, warehouses, helicopter hangars, and office buildings.

Table 2 - Sites and Buildings by Asset Class

Asset Class	Sites	Buildings
TS	371 (70%)	1,085 (74%)
OC Admin	158 (30%)	389 (26%)
Portfolio	**529**	**1,474**

4.1.2.3 DIGITAL & TECHNOLOGY SOLUTIONS

DTS is accountable for Information Technology (IT), Operating Technology (OT), Security technologies, and Data Analytics and Artificial Intelligence (AI) that enable the Transmission and Distribution businesses to perform day-to-day operations, deliver reliable customer service, and enhance the customer experience through improved digital services, communications, and access to information. Each of these categories includes a combination of on-premise technologies and cloud-based solutions. On-premise systems comprise the hardware and applications required to support Hydro One's office locations, data centres and field-based technologies that enable the effective work

execution and provision of services to customers. Cloud-based solutions can include applications, platforms, and infrastructure services hosted by third-party providers and accessed through secure network connections, rather than being installed and operated on Hydro One-owned infrastructure. Unlike on-premise systems, cloud solution providers generally manage the underlying cloud infrastructure and, depending on the service model, some or most platform maintenance and software updates.

The technologies comprising the DTS portfolio span a wide range of scale and complexity, ranging from large, enterprise-wide platforms used across all lines of business to specialized applications supporting specific functions. In total, Hydro One manages a large and diverse portfolio of over 600 IT and OT business applications and thousands of supporting hardware assets that enable corporate functions, customer operations, and the reliable operation of the electricity grid, as described in GSP Section 4.2.5, and summarized below.

IT Systems

IT Systems are enterprise and customer-facing digital applications, platforms, data analytics, and supporting infrastructure that enable Hydro One's corporate, customer service, and operational business functions. This includes business software applications, end-user computing devices, and the underlying servers, storage, networks, and platforms.

IT Systems provide the digital foundation required to run the business, support customers, plan and execute work programs, manage financial and regulatory obligations, and enable enterprise-wide coordination and decision-making. These systems allow work to be planned, tracked, and executed consistently across Hydro One while maintaining service reliability and data integrity. They are grouped into four primary categories based on the core functions they support:

- **Enterprise-wide applications** allow Hydro One lines of business to perform critical business tasks, utilizing data from across the company, with supporting analytics capabilities. These applications provide common platforms for Hydro One to oversee the company's investments, monitor execution progress, and work delivery. This category inherently includes enterprise data and analytics

capabilities that transform operational, customer, asset, and financial data into actionable insights to support planning, performance management, and decision-making across the organization. Key examples include SAP, Microsoft 365 and ServiceNow.

- **Customer facing technology** connects Hydro One to its customers and provides customers with access to digital tools, self-service capabilities, account information, outage communications, and personalized insights that support more informed decisions regarding their energy services and consumption. Key examples include customer-facing systems for billing, account management, and digital self-service, such as myAccount.
- **Corporate enabling technology** helps ensure that lines of business across Hydro One have reliable access to technology that is required to perform critical business activities including financial reporting, human resources, supply chain management and various corporate initiatives. Major corporate functions generally utilize SAP modules, key examples include SAP SuccessFactors, SAP Ariba and SAP Business Warehouse.
- **Work and Asset Management (WAM) technology** enables planners and engineers to design, model, schedule, and communicate work to the field, while enabling field personnel to receive assignments, capture work execution details, and update asset information. These technologies support the end-to-end work lifecycle, from engineering design and work planning through to field execution and asset record updates. Key examples include Geographic Information Systems (GIS), SAP Service and Asset Manager, and Autodesk applications.

OT Systems

OT Systems comprise the specialized applications, hardware, and infrastructure that enable the real-time monitoring, control, and operation of Hydro One's transmission and distribution electricity networks. These systems operate in control-room and operational environments and are tightly integrated with physical grid assets.

OT Systems are foundational to safe and reliable grid operations. They support control centre visibility, outage detection and restoration, switching operations, and coordination

with field crews—directly enabling compliance with reliability standards and the continuous operation of the power system.

OT Systems include:

- **Real-Time systems** such as the Energy Management System (EMS) to support real-time monitoring and control of the transmission system, while Distribution Management System (DMS), Outage Response Management System (ORMS), and Distributed Energy Resource Management System (DERMS) capabilities support distribution operations, outage management, and DER integration. Hydro One is modernizing these distribution operational capabilities through implementation of an Advanced Distribution Management System (ADMS), which will consolidate legacy DMS, ORMS, and DERMS functionality into a more integrated platform to support evolving grid operations and future system needs.
- **Control room applications** and consoles used by system operators.
- **Supporting computing, network, and communications infrastructure** (including Common Operations Technology Infrastructure – COTI).

Security Systems

Security Systems integrate physical, cyber, and personnel-related technologies designed to protect Hydro One's facilities, systems, and workforce. These systems encompass security hardware, software, and monitoring platforms strategically implemented across critical operational sites. Hydro One's Security Systems help ensure the integrity and resilience of both IT and OT environments while safeguarding essential infrastructure from physical intrusion, cyber threats, and unauthorized access. They play a vital role in protecting Hydro One's power system and business functions from increasing security risks.

Security assets operate continuously in demanding environments and can have relatively short technology lifecycles. Continuous renewal is necessary to ensure vendor support and implement cybersecurity updates. These investments protect operational stability, meet regulatory standards, and uphold the safety of employees and the public.

Security Systems include:

- **Physical access and intrusion control infrastructure**, including access devices, monitoring points, and surveillance systems deployed at secured facilities.
- **Cybersecurity systems and equipment** that support protection, monitoring, and compliance across IT and OT environments.
- **Security hardware, monitoring, and access control infrastructure** deployed at transmission stations, control centres, and other secured operational facilities that support grid operations and BES reliability.

Data, Analytics and AI

Data, Analytics and AI capabilities provide the foundation for transforming Hydro One's growing volumes of operational, asset, customer, financial, and workforce data into actionable insights that support decision-making across the enterprise. As the organization modernizes its technology landscape through investments such as Advanced Distribution Management System (ADMS), SAP S/4HANA, Advanced Metering Infrastructure (AMI) 2.0, grid automation, cybersecurity, and cloud-based platforms, the volume, complexity, and strategic value of data are increasing significantly.

Data, Analytics and AI capabilities enable Hydro One to govern, integrate, manage, and analyze data consistently across the organization while supporting advanced reporting, forecasting, optimization, automation, and decision-support processes. These capabilities are important for improved operational awareness, asset management, customer service, workforce productivity, and investment planning allowing for trusted, accessible, and secure data.

Unlike traditional applications that support a specific business function, Data, Analytics and AI capabilities act as foundational enterprise-wide enablers across the DTS portfolio. This support is evident in the following ways:

- **IT Systems,** by providing enterprise data platforms, analytics, reporting, and AI capabilities that improve business performance, work execution, decision-making, and financial management. This includes customer technologies by enabling more

personalized customer experiences, improved outage communications, consumption insights, and enhanced self-service capabilities.

- **OT Systems** by enabling real-time operational insights, advanced grid analytics, outage analysis, asset health monitoring, forecasting, and distributed energy resource (DER) management.
- **Security Systems** by supporting cyber threat detection, monitoring, risk intelligence, anomaly identification, compliance reporting, and security event analysis.

Hydro One's Data, Analytics and AI ecosystem includes enterprise data platforms, data integration and governance capabilities, analytics and visualization tools, artificial intelligence and machine learning technologies, and the processes required to manage information as a strategic asset. Together, these capabilities enable Hydro One to derive greater value from its investments in IT, OT, and Security while supporting a more data-driven, efficient, and resilient utility.

4.1.2.4 SYSTEM OPERATIONS

The System Operations function is accountable for the safe, reliable, and continuous real-time operation of Hydro One’s electricity system, including system monitoring, control, coordination, and restoration activities. The Integrated System Operations Centre (ISOC) and the Back up Ontario Grid Control Centre (BU-OGCC) are critical facilities through which these responsibilities are executed.

- The ISOC is a purpose-built, mission-critical control centre with approximately 120,000 square feet of gross floor area, designed to support continuous, 24-hour, seven-day-per-week electricity system monitoring, control, and coordination. It opened in 2021 and serves as Hydro One's primary operating control centre. The facility provides a System Operating Division Control Centre, a Backup Integrated Telecommunications Management Centre, facilities for Security Operations, and a shared integrated data centre with critical support infrastructure.
- The BU-OGCC is Hydro One's backup control facility for monitoring and control of the transmission and distribution grids; it has operated continuously since 2003

and now supports service continuity if the ISOC or its computer systems are unavailable.

System Operations is responsible for defining the operational requirements, performance standards, and risk tolerances for ISOC and BU-OGCC facilities. This includes ensuring that these facilities are capable of operating continuously under normal, contingency, and emergency conditions, including during major storms, extreme weather events, and system disturbances. System Operations also addresses facility related risks that could impair control room operations and negatively affect customer outcomes, such as asset condition issues, single points of failure, and resiliency gaps.

4.1.2.5 OTHER GENERAL PLANT

In addition to these main functions, the GSP also includes General Plant investments that are managed by the Transmission and Distribution businesses, including Transmission grid operations costs and capital contributions from Hydro One Distribution to Hydro One Transmission.

4.1.3 INVESTMENT NEEDS AND OBJECTIVES

The needs addressed by the GSP arise from the same operating realities and challenges that shape Hydro One's Transmission and Distribution plans, as outlined in TSP Section 2.1 and DSP Section 3.1. Operating a large system spanning urban, rural, and remote communities across Ontario requires a geographically dispersed fleet, a broad facilities footprint, robust operational technology, and resilient system operations capabilities. The GSP must renew, protect, scale, and modernize these assets to ensure Hydro One can perform its work and serve customers effectively and efficiently.

The GSP is structured around three strategic investment priorities that align with the functional roles of these assets and advance key outcomes including safety, service reliability, cost-efficiency, and regulatory compliance:

- **Renewing deteriorated and end of life assets**: Maintaining and replacing assets based on their condition and lifecycle requirements to ensure Hydro One's

personnel and contractors are equipped with the necessary tools and resources to perform work safely, efficiently, and effectively.

- **Enabling work-program growth:** Facilitating the execution of expanded work programs and adapting general plant assets and capabilities to support a larger workforce to address growing system, asset, and customer requirements.
- **Responding to evolving requirements:** Addressing evolving customer needs, policy or legislative directives, with an emphasis on improving reliability and resilience, and safeguarding critical physical and digital grid infrastructure.

4.1.3.1 RENEWING DETERIORATED AND END OF LIFE ASSETS

The GSP addresses lifecycle management requirements across Hydro One's fleet, facilities, and technology assets. The portfolio includes aging fleet assets, facilities with significant renewal needs, outdated technology platforms, security systems requiring upgrades, and critical control-centre components approaching or beyond end of life. Planned lifecycle renewal investments in these assets are essential to mitigate operational, financial, safety, reliability, and regulatory risks.

Fleet & Aviation

Vehicles and equipment in poor condition or advanced age require frequent and expensive maintenance, increase the risk of failure, and reduce availability for field crews. To manage these risks, Hydro One uses a lifecycle approach that considers expected service life, asset age, mileage, engine hours where applicable, mechanical condition, maintenance history, downtime, reliability, safety risk, procurement lead times, operational requirements, and the availability of specialized equipment. Asset condition is assessed based on (i) expected service life, informed by overall mileage, engine hours (as applicable) and asset age; and (ii) assessed mechanical condition.

Fleet's planning strategy also incorporates third-party lifecycle recommendations from industry expert Utilimarc. Utilimarc evaluated Hydro One's historic performance and projected future ownership and maintenance expenses to identify optimal replacement schedules by vehicle class, detailed in GSP Section 4.3 Attachment 2. Although Hydro One excels in certain cost and utilization metrics, detailed in GSP Section 4.3 Attachment

1 — such as keeping a lower share of low-mileage vehicles compared to industry norms (Figure 1, below) — Utilimarc's analysis shows that higher annual capital investment will be required to maintain average fleet age at recommended levels and avoid rising maintenance expenses that would otherwise increase total lifecycle costs and reduce equipment availability.

2024		Hydro One		Utilimarc Participants		
Equipment Type	Quantity of Fleet (%)	Average Ages (Years)	Average Annual Mileage (KM)	Quantity of Fleet (%)	Average Ages (Years)	Average Annual Mileage (KM)
All Vehicles	**53.97%**	**7.42**	**21,549**	**62.89%**	**6.54**	**17,516**
Light	38.28%	6.13	23,062	37.49%	6.22	19,034
Heavy	15.69%	10.57	18,317	25.40%	7.02	15,433
All Other Equipment	46.02%	12.56	N/A	37.10%	11.31	N/A
Off Roads	4.08%	13.81	N/A	6.10%	8.58	N/A
Misc and Trailers	41.94%	12.44	N/A	29.11%	11.27	N/A
Other	0.00%	0	N/A	1.89%	20.7	N/A

Figure 1: Table 3.3 from the Utilimarc Benchmarking Report - All Units - Average Comparison[2]

The helicopter fleet lifecycle management is based on compliance with manufacturers' approved maintenance program and strict inspection schedules dictated by the manufacturer and approved by Transport Canada. These inspections occur at specific flight hour intervals and ensure that the helicopters remain airworthy and available to support work program execution. The helicopters also undergo a major inspection, teardown and rebuild every 12 calendar years (see GSP Section 4.2.3 for more information).

The 2028-2032 plan sustains Hydro One's fleet through condition-based, prioritized investments designed to lower the average fleet age, minimize incremental technician staffing needs, maintain stable maintenance costs, and align the fleet more closely with recommended lifecycle standards. The plan also replaces three older helicopters that have reached optimal replacement age based on annual flight hours, as substantiated by

[2] Utilimarc Hydro One Benchmarking Report, GSP Section 4.3 Attachment 1, p. 22

the Utilimarc report in GSP Section 4.3 Attachment 3. As part of this replacement, Hydro One will upgrade two helicopters to twin-engine models to enhance load-carrying capacity, improve flight safety during critical operations, and support higher performance requirements associated with evolving Transmission and Distribution work requirements.

Facilities & Real Estate (FRE)

A substantial portion of Hydro One's facility components, including high criticality and high-risk components such as foundations, structural elements, roofs and HVAC systems, are currently operating beyond expected useful life, and have been assessed as being in poor condition through Building Condition Assessments. On average, these critical components are operating 56% beyond their expected useful life, with some asset classes exceeding their expected useful life by more than 70%.

Using FRE's risk-based prioritization framework (see GSP Section 4.7.2.3.2), which evaluates both the likelihood of failure (based primarily on condition and lifecycle maturity) and the consequences of failure (including component and facility criticality), Hydro One has identified approximately $210M in high-risk deficiencies within the FRE portfolio, representing nearly 60% of the approximately $362M in total identified deficiencies. The proposed investment plan is designed to address the majority of these high-risk deficiencies. These investments are necessary to mitigate risks to health and safety, operational reliability, security, and customer service by addressing high-risk facility deficiencies before they result in asset failures, service disruptions, or degraded operational performance.

Hydro One uses Building Condition Assessments (BCAs) and related engineering analyses to evaluate facility components, including exterior walls, roofing, heating, ventilation and air conditioning systems, interior finishes, electrical systems, plumbing, fire protection systems, and siteworks. These assessments, which are based on a methodology and process that have been independently verified by a third-party expert, Jones Lang Lasalle (JLL) (see Section 4.3 Attachment 5), indicate a significant level of current and anticipated deficiencies across Hydro One's buildings, a growing risk of component failure, elevated maintenance requirements and increasing functional

deterioration. Without incremental sustainment investments, facility conditions will continue to deteriorate, operational and regulatory requirements will be hard to meet, and the risk of unplanned failures and costly emergency interventions will increase.

The proposed investment plan is intended to mitigate these risks while balancing customer bill impacts and practical execution considerations. Consistent with this approach, the plan prioritizes the highest-risk assets and building components. In the OC Admin portfolio, approximately 50% of sustainment investments are directed toward high-risk deficiencies, while approximately 85% of TS Facilities sustainment investments are targeted to similar high-risk deficiencies.

These investments are expected to improve the condition of Hydro One's most critical facilities. With the proposed investment levels, the number of high criticality buildings projected to be in poor overall condition would decline from the current amount of 238 (approximately 34% of high criticality buildings) to at least[3] 130 (approximately 18% of the high-criticality buildings) with the proposed investment levels. By contrast, under current investment levels, the number of poor condition high criticality buildings is projected to increase to at least[4] 284 (approximately 40% of the high criticality buildings).

To achieve these outcomes, the 2028-2032 plan focuses on building components in poor or failed condition that present the greatest risk to operations. Investments are concentrated on high criticality systems such as roofing, building envelopes, HVAC, electrical, plumbing, and fire and life safety systems. Overall, the proposed sustainment investments address a targeted subset of identified capital deficiencies, prioritizing the highest-risk assets and components, and represent approximately 52% and 20% of the total deficiencies in the OC Admin and TS Facilities portfolio, respectively.

[3] In light of limitations associated with forecasting building condition data more than five years beyond a BCA, this figure uses the number of buildings projected to be in poor condition in 2030 as its starting point and incorporates the effects of refurbishment work planned through 2032. Accordingly, it does not reflect any additional building deterioration that would occur throughout 2031 and 2032.
[4] *Ibid.*

The plan also includes the replacement or rebuilding of select operations facilities where continued maintenance, refurbishment, leasing, or alternative market solutions do not represent prudent long-term options. In these circumstances, replacement facilities are expected to provide the lowest lifecycle cost and most sustainable means of supporting ongoing operational requirements.

Digital & Technology Solutions (DTS)

IT, OT, and Security Systems are managed according to industry-standard lifecycle practices. Maintaining vendor support is a primary consideration, ensuring assets can be fixed or upgraded expeditiously if malfunctions or failures occur. Continued reliance on unsupported or obsolete platforms increases the risk of service interruptions, cyber incidents, escalating support costs, degraded performance, and regulatory non-compliance.

DTS plans and prioritizes investments using factors such as vendor support timelines, hardware age, system performance, cyber vulnerability exposure, operational criticality, compliance obligations, business requirements and alignment with enterprise architecture standards. This approach allows Hydro One to combine renewals with technological upgrades where possible, enabling the organization to modernize technology as assets reach end of life and maximize the value of the planned investments. Where upgrades are not practical or would introduce unnecessary complexity or cost, like-for-like replacements are undertaken to maintain system reliability, compatibility, and operational stability.

Physical and cybersecurity capabilities are a critical consideration in maintaining Hydro One's technology environment and protecting the facilities, systems, information, and infrastructure that support reliable electricity delivery. These capabilities rely on a broad portfolio of technologies deployed across Hydro One's operational environments, including security monitoring, access control, surveillance, identity management, and cyber protection platforms. As these systems age and vendor support expires, the risk of equipment failure, reduced effectiveness, cybersecurity vulnerabilities, and escalating sustainment costs increases. Planned reinvestment enables Hydro One to maintain reliable security capabilities, support regulatory and security obligations, and preserve the

protection of critical facilities, operational technology environments, and customer and corporate information.

As Ontario's distribution system becomes more complex, data-intensive, and dependent on real-time decision-making, DTS is investing in enterprise-wide data, analytics, and AI capabilities to manage, govern, and utilize growing volumes of operational, asset, and customer data. Key systems including AMI 2.0, SAP S/4HANA, GIS, ADMS, DER integration platforms, and grid automation technologies, along with business practices that result in the capture of additional photo, video, and other images, are generating substantially higher volumes of data. These increased data volumes require scalable and governed data and analytics infrastructure capable of accommodating this growth and expanding business demand, while ensuring data is secure, high quality, consistently defined, and managed through standardized governance to support trusted enterprise-wide analytics and decision making. These capabilities support a growing portfolio of business use cases focused on areas such as asset investment planning and risk management, outage response and restoration decision-making, customer insights and service delivery, forecasting, and advanced safety and operational analytics. As Hydro One's data and AI capabilities mature, additional opportunities will continue to be evaluated and prioritized through established governance processes.

For Data, Analytics and AI investments (see GSP Exhibit 4.11 G-GP-26), recognizing the rapidly evolving nature of data and AI technologies, Hydro One has adopted a flexible investment deployment approach that allocates funding annually to a prioritized portfolio of business use cases. Rather than pre-defining all initiatives over the planning horizon, opportunities are evaluated and prioritized based on factors such as regulatory requirements, expected business value, strategic alignment, implementation feasibility, and enterprise-wide scalability.

System Operations

The ISOC and the BU-OGCC house mission-critical systems and staff responsible for real-time grid control, emergency response, and coordination with system participants. The proposed initiatives address end of life, poor condition, or obsolete facility components,

including generators, electrical breakers, roofing systems, elevators, HVAC assets, and uninterruptible power supply batteries. Acting before failures occur reduces lifecycle cost, avoids emergency repairs, and maintains continuity of operations at facilities essential for system monitoring, control, and restoration.

4.1.3.2 ENABLING WORK-PROGRAM GROWTH

Hydro One's Transmission and Distribution work programs are growing to meet asset, system, customer, and policy requirements, as described in the TSP and DSP. Executing these plans requires additional field activities, enhanced coordination, and expanded materials, facilities, vehicles, equipment, digital tools, data, and infrastructure. The success of Transmission and Distribution investments depends directly on having suitable, available, well-supported, and properly configured general plant assets. As work programs expand, the General Plant portfolio must grow accordingly so crews and support teams can perform their duties safely, efficiently, and reliably.

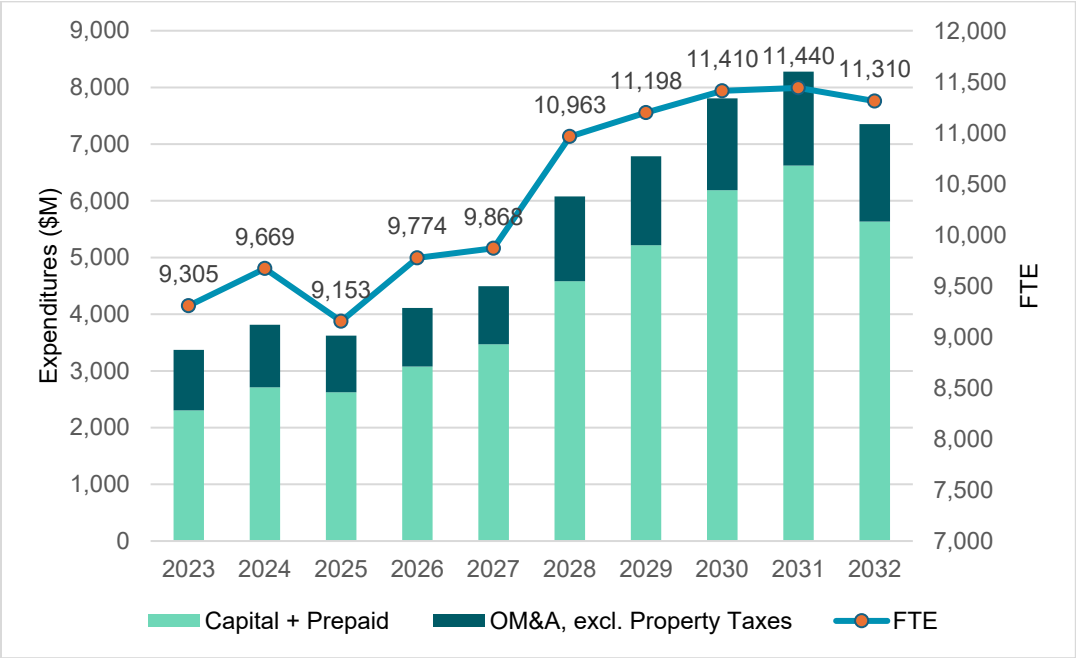

Figure 2: Transmission and Distribution System Access, System Renewal and System Service capital and prepaid expenditures, OM&A expenditures and FTE growth from 2023-2032[5]

Fleet & Aviation

Fleet & Aviation supports the expanded work program by ensuring sufficient vehicles and equipment for internal resources to complete their work. Investments in new equipment, coupled with timely renewal of existing assets in accordance with lifecycle requirements, ensure field crews have the resources required to connect and serve customers, respond to outages—including high-impact storm events—in a timely manner, and complete planned capital and maintenance projects. Figure 3 below illustrates the growth of the Fleet portfolio relative to increasing Transmission and Distribution capital work programs. For more details, please see GSP Section 4.11 G-GP-01, Subsection 2.2.

[5] Referenced in E-06-02, Figure 6: Total full-time equivalents (FTEs) include both Distribution and Transmission-specific FTEs (E-06-02, Sections 4.1 and 4.2) and the Enterprise Support and Common Corporate FTEs (E-06-02, Section 4.3) allocated to Distribution and Transmission, consistent with the methodology used and described in Appendix 2-K.

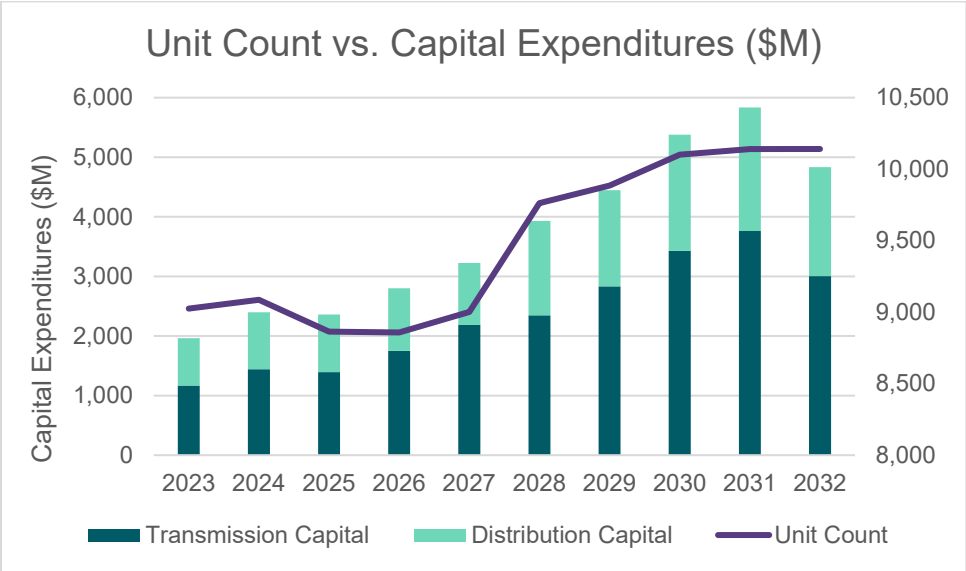

Figure 3: 2023-2032 Fleet Unit Count vs. Capital Expenditures ($M)[6]

Aviation Services will enable the work program growth through the replacement of two single engine aircraft with two twin-engine aircraft that will provide essential enhancements to the safety of flight operations as well as higher performance margins and load carrying capacity. The aviation fleet will not be increasing in size.

Facilities & Real Estate (FRE)

FRE investments play an essential role in enabling work-program growth. Many current buildings are deteriorating, overcrowded, inefficiently designed, or unable to meet the operational needs of present and future work programs. When existing structures can't support workforce deployment, vehicle staging, material management, training, logistics, business continuity, accessibility, or effective field operations, new construction and major renovations become necessary. The 2028-2032 plan includes 10 new builds, two major renovations and a land purchase to replace facilities that are in poor condition or unsuitable for Hydro One's growing work program needs. These are depicted in Figure 4 below.

[6] Capital amounts exclude capital work related to General Plant.

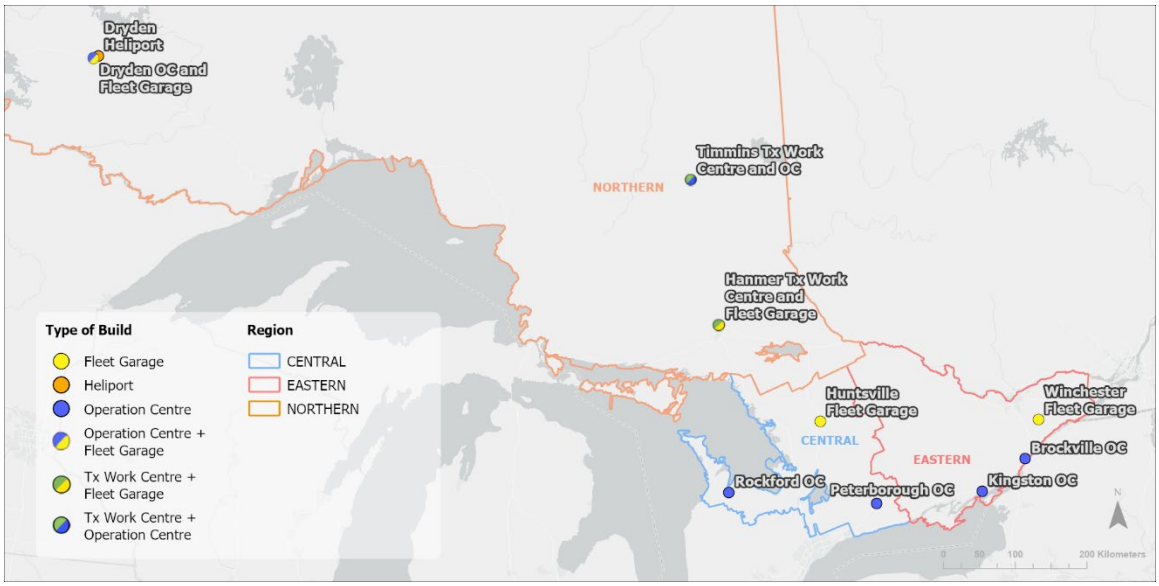

Figure 4: Facilities & Real Estate 2028-2032 New Builds and Major Renovations Plan

The key drivers for new builds include:

- **Poor Condition:** Facility deterioration confirmed through regular Building Condition Assessments (BCAs) and supplemental evaluations or inspections.
- **Operational Growth and/or Changing Business Needs:** Expansion of work programs and distribution and transmission systems, workforce increases, changing equipment and vehicle needs and new operational requirements where existing sites are constrained and cannot support Hydro One's business objectives without additional and expanded facilities.
- **Consolidation and Efficiency:** Investments are pursued where the consolidation of multiple buildings and/or sites delivers efficiencies and enhances operational effectiveness.
- **Risk to Long-Term Viability:** Unique site-specific considerations threaten the business continuity at certain facilities, including risk associated with leases and challenges associated with existing facility location.

A new build is typically pursued only when multiple factors converge, and where continued maintenance, refurbishment, leasing, or alternative market solutions do not represent prudent long-term options.

Digital & Technology Solutions (DTS)

DTS investments enable Hydro One to deliver a larger and more complex work program by ensuring that its technology environment grows with the needs of the business. As the workforce expands and field activity increases, employees and contractors require reliable access to the systems, devices, and digital services needed to plan and perform their work. DTS investments therefore increase the capacity and resilience of its technology environment so that it continues to support work across office, operational, and field locations without becoming a constraint on execution.

Growth also places greater demands on how Hydro One manages technology and information. More users and devices require additional system access, support, and security. Expanded operations also generate more data that must be integrated, governed, and made available for planning and decision-making. Investments such as Work and Asset Management Enablement, SAP S/4HANA OneCore Transformation, and Data, Analytics and AI Enablement provide the systems and information capabilities needed to coordinate field work, support enterprise processes, and maintain visibility and control as the Transmission and Distribution work programs grow.

System Operations

System Operations will enable the work program growth through additional desks in the ISOC control room. This will allow additional operators to be on shift to handle increasing work program and outage requirements. Additionally, cooling units are being added to the ISOC data hall to accommodate increased load on data hall servers.

4.1.3.3 RESPONDING TO EVOLVING REQUIREMENTS

As described below, GSP investments play a critical role in responding to an array of evolving business requirements and objectives ranging from improving reliability and

resilience, responding to cyber and physical security risks, complying with legislative obligations and regulatory mandates, and supporting environmental stewardship.

Reliability and Resilience

Customer and policy expectations are driving increased requirements for system reliability and resilience. As customers use more electricity and become increasingly dependent on the grid to support daily life, business activity, electrification, and essential services, interruptions have greater customer and economic consequences. At the same time, the frequency and severity of storms across Hydro One's large and diverse service territory are increasing. Long radial feeders and limited redundancy mean asset failures or storm damage translate directly into customer interruptions and complex restoration efforts. General Plant investments provide the fleet, facilities, operational technology, and control-centre capabilities needed to support reliable and resilient system operations.

Operational Technology (OT) investments play a particularly important role by providing the technology and communications infrastructure required for safe, reliable, and resilient operation of the electricity system. These investments enhance the availability, quality, and timeliness of operational data, enabling more effective real-time decision-making and situational awareness. They also strengthen system redundancy, improve the resilience of critical operational systems, and reduce the risk of service disruptions associated with aging or obsolete technology assets. As a transmitter, Hydro One must also address continually evolving NERC reliability obligations and standards, which necessitate ongoing investment in operational technology platforms, cybersecurity controls, and supporting infrastructure.

Legislative and Regulatory Compliance

Hydro One must comply with an array of regulatory requirements relating to safe and effective system operations, including those set by the NERC, IESO, and the OEB's Transmission and Distribution System Codes. IT and OT investments enable the utility to maintain compliance with these constantly evolving regulatory requirements. Hydro One's customer and billing systems require ongoing investment to implement OEB-directed billing and rate changes, maintain billing accuracy standards, support IESO metering and

settlement processes, and enable regulatory initiatives such as Green Button customer data access, ensuring accurate customer billing and compliance with evolving regulatory requirements.

Fleet, Facilities, and System Operations investments are also driven by evolving legislative and regulatory requirements, including accessibility legislation, building code standards, occupational health and safety obligations, and environmental requirements. These obligations require ongoing investment to ensure Hydro One's assets, facilities, and equipment remain safe, compliant, and fit for purpose. For example, compliance with the policy objectives underlying the *Accessibility for Ontarians with Disabilities Act, 2005* (AODA) necessitates investments to identify and remove physical and accessibility barriers within Hydro One's legacy facilities. These investments support the creation of inclusive, accessible, and functional workplaces through upgrades such as accessible entrances, washrooms, wayfinding systems, and workplace accommodations. In addition to maintaining regulatory compliance, these improvements support Hydro One's diversity, inclusion, and accessibility objectives and help ensure that its facilities continue to meet the needs of employees and visitors.

Similarly, Hydro One's garages operate as Ministry of Transportation-licensed Motor Vehicle Inspection Stations and play a critical role in ensuring the safety, reliability, and regulatory compliance of the utility's fleet. Investments in these facilities support Hydro One's ability to inspect, maintain, and certify fleet assets in accordance with applicable legislative and industry requirements, including CSA Standard C225, the Ontario Highway Traffic Act, and Commercial Vehicle Operator's Registration (CVOR) requirements. These investments help ensure that fleet vehicles remain safe and available for service, supporting the utility's ability to respond to outages, perform field work, and deliver reliable service to customers while safeguarding the safety of employees and the public.

Cyber and Physical Security

Hydro One's operating environment is becoming increasingly digital, interconnected, and cloud-enabled, while both cyber and physical security threats continue to increase in frequency, sophistication, and potential consequence. To protect critical electricity

infrastructure and maintain secure, reliable operations, Hydro One must continue to renew and enhance the technology, operational technology, physical security, and cybersecurity capabilities that support grid control, customer service, corporate functions, and field execution. Physical security requirements continue to evolve as a result of changing threat conditions, expanding regulatory obligations, and increasing expectations regarding the protection of critical infrastructure. In response, Hydro One is enhancing physical security capabilities using a risk-based approach that aligns protection measures with facility criticality, operational requirements, and evolving threat conditions. Together, physical and cybersecurity investments strengthen the protection of critical infrastructure, support system reliability and restoration capabilities, and improve organizational resilience against emerging threats. These investments also support continued compliance with mandatory NERC Critical Infrastructure Protection (CIP) requirements and the Ontario Cyber Security Framework (CSF), while reducing operational risk, protecting customer and corporate data, and improving resilience against disruptions that could affect the safe and reliable delivery of electricity.

Environmental Stewardship

To reduce Hydro One's impact on the environment and mitigate the impact of climate change, this GSP includes greenhouse gas (GHG) reduction efforts, working towards a long-term, sustainable carbon footprint reduction. GHG mitigation is not a driver of Hydro One's investments, but the company looks for opportunities to prudently mitigate GHGs when identifying investments. GSP investments that will contribute towards lower overall GHG emissions include:

- **Transport and Work Equipment renewal** – Hydro One's commercial fleet is beginning a gradual transition to low or zero emission technology where applicable. As stated in the Utilimarc Fleet Lifecycle Study (provided as GSP Section 4.3 Attachment 1), the proposed funding levels for the Replacement Program would provide an annual CO2 Offset of 2.9Mkg in 2028 increasing to 5.2M Kg by 2032. This transition can be accomplished at reasonable cost as there is no significant difference in the total cost of ownership of low to zero emission vehicle versus conventional fuel-based vehicles. Additional GHG reduction

opportunities are derived from the fleet renewal program and the downsizing of equipment as a result of new and emerging equipment types.

- **Facilities & Real Estate** – Hydro One is implementing energy savings initiatives at Operations and Service Centres, including installation of high-efficiency equipment (e.g., Heating, Ventilation, and Air Condition (HVAC) units, generators and lighting) and the Remote Command Centre program which monitors energy consumption remotely and allows Hydro One to take the appropriate actions required to minimize energy consumption. In addition to prudently addressing business needs, these investments have the added benefit of contributing to GHG emissions reductions.

4.1.4 SUMMARY OF THE CAPITAL AND PREPAID EXPENDITURE PLAN

4.1.4.1 CURRENT RATE TERM: 2023–2027 INVESTMENTS

As described in GSP Section 4.9, Hydro One managed the 2023 to 2027 GSP in a period marked by changing operational needs, market and input cost pressures, technology reprioritization, and emerging work requirements. This required trade-offs across the General Plant portfolios to address critical asset and operational requirements while continuing to support Transmission and Distribution work programs. Those trade-offs were manageable in the near term, but the 2028-2032 plan reflects the need to address accumulated lifecycle, facility, technology, security, and control-centre requirements that cannot be deferred further without increasing risk to customers and operations.

Prepaid expenditures relate to implementation costs for cloud-computing and technology-hosting arrangements. These expenditures are presented separately from capital expenditures due to their distinct accounting and regulatory treatment further described in Section 4.1.4.2 below.

Table 3 - General Plant 2023-2027 Actual/Forecast versus 2023-2027 Planned Capital Expenditures[7]

Net Capital Expenditures	2023–2027 Plan ($M)	2023–2027 Actual / Forecast ($M)	Variance
Fleet & Aviation	352.3	359.6	2.1%
Facilities & Real Estate	300.0	305.1	1.7%
Digital & Technology Solutions	593.7	485.1	-18.3%
System Operations	4.2	2.5	-39.6%
Other	144.0	130.9	-9.1%
Total General Plant	**1,394.0**	**1,283.8**	**-7.9%**
Transmission	593.1	561.3	-5.4%
Distribution	801.0	722.6	-9.8%

Table 4 - General Plant 2023-2027 Actual/Forecast versus 2023-2027 Planned Prepaid Expenditures

Prepaid Related to Cloud	2023–2027 Plan ($M)	2023–2027 Actual / Forecast ($M)
Digital & Technology Solutions	0.0	248.7
Total Prepaid Related to Cloud	**0.0**	**248.7**
Transmission	0.0	89.7
Distribution	0.0	159.0

The capital performance reporting for 2023, 2024, and 2025 shows that Hydro One has managed a portfolio affected by execution factors, emergent needs, manufacturer delays, cost pressures, reprioritization, and heightened security risk profile.

- Transport and Work Equipment expenditures were generally in-line with forecast during 2023 and 2024, but unit variances were impacted by rising cost pressures and manufacturer constraints.
- Facilities & Real Estate experienced material and construction costs escalation increases which impacted the timing of projects such as the Orillia Warehouse.
- Security and technology investments were affected by reprioritization, cybersecurity risks, long-lead hardware, and pursuing a single Advanced Distribution Management System rather than continue with separate ORMS and DMS projects.

[7] Figures presented in the tables may not sum to the totals shown due to rounding.

The historical trends described above, and further detailed in GSP Section 4.9, support two key conclusions for the 2028-2032 planning period. First, Hydro One has demonstrated its ability to prudently reprioritize General Plant investments in response to evolving circumstances, including changes in project scopes, supply chain constraints, emergent operational needs, and technological developments. Second, while this flexibility is an important element of prudent capital management, it can also lead to the deferral of investment needs that ultimately must be addressed. The FRE portfolio illustrates this dynamic. Years of constrained investment have contributed to a growing renewal need and significant facility deficiencies, necessitating increased investment during the 2028-2032 period to manage associated risks and maintain facilities that support critical utility operations.

4.1.4.2 FUTURE PLANNING PERIOD: 2028–2032 INVESTMENTS

The GSP represents a material change in scale and composition compared to the prior period. Over the 2028-2032 forecast period, Hydro One plans to invest approximately $4,159.9M in General Plant investments, including approximately $3,314.9M in capital expenditures and approximately $845.0M in prepaid expenditures. This compares to approximately $1,532.5M over the 2023-2027 historical and bridge period, including approximately $1,283.8M in capital expenditures and approximately $248.7M in prepaid expenditures. As further detailed below, the increase results from multiple factors, including asset lifecycle needs, facility deterioration, expansion of work programs, reliability requirements, cloud migration, cybersecurity, physical security, and control centre resilience.

The plan allocates General Plant expenditures to Transmission, Distribution, or shared functions. Expenditures that are fully attributable to the Transmission or Distribution systems are allocated to the relevant business. Shared investments are allocated between Transmission and Distribution using the Shared Asset Allocation Study prepared by Atrium Economics and presented in Exhibit E-04-08 Attachment 1.

Table 5 and Table 6 summarize the planned capital investments and prepaid expenditures related to cloud for the 2028-2032 period by General Plant function, respectively. Figures

5 and 6 provide an overview of the General Plant actual, forecasted and planned capital expenditures from 2023-2032 by General Plant function.

Table 5 - GSP 2028 - 2032 Planned Capital Expenditures[8]

Line of Business	Forecast Period (Planned $M)					Total 2028-2032	% of Total GP
	2028	2029	2030	2031	2032		
Fleet & Aviation	285.9	158.0	190.7	136.3	132.9	904.0	27.3%
Facilities & Real Estate	131.1	230.1	231.6	225.8	154.3	972.9	29.3%
Digital & Technology Solutions	152.6	150.9	155.4	144.7	137.4	741.1	22.4%
System Operations	18.4	5.5	7.3	10.4	13.5	55.1	1.7%
Other	41.9	25.7	32.5	313.3	228.4	641.8	19.4%
General Plant Total	**630.0**	**570.2**	**617.5**	**830.5**	**666.6**	**3,314.9**	
General Plant - Transmission Allocation	287.9	259.0	275.3	247.2	217.6	1,287.0	38.8%
General Plant - Distribution Allocation	342.1	311.2	342.2	583.3	449.0	2,027.9	61.2%

Table 6 - GSP 2028-2032 Planned Prepaid Expenditures[9]

OEB Category	Forecast Period (Planned $M)					Total 2028-2032	% of Total GP
	2028	2029	2030	2031	2032		
Prepaid Related to Cloud	168.8	190.0	189.3	157.9	138.9	845.0	
General Plant Total	**168.8**	**190.0**	**189.3**	**157.9**	**138.9**	**845.0**	
General Plant - Transmission Allocation	70.9	65.4	70.4	58.4	44.0	309.0	36.6%
General Plant - Distribution Allocation	98.0	124.7	118.9	99.5	94.9	536.0	63.4%

[8] Figures presented in the tables may not sum to the totals shown due to rounding.
[9] Figures presented in the tables may not sum to the totals shown due to rounding.

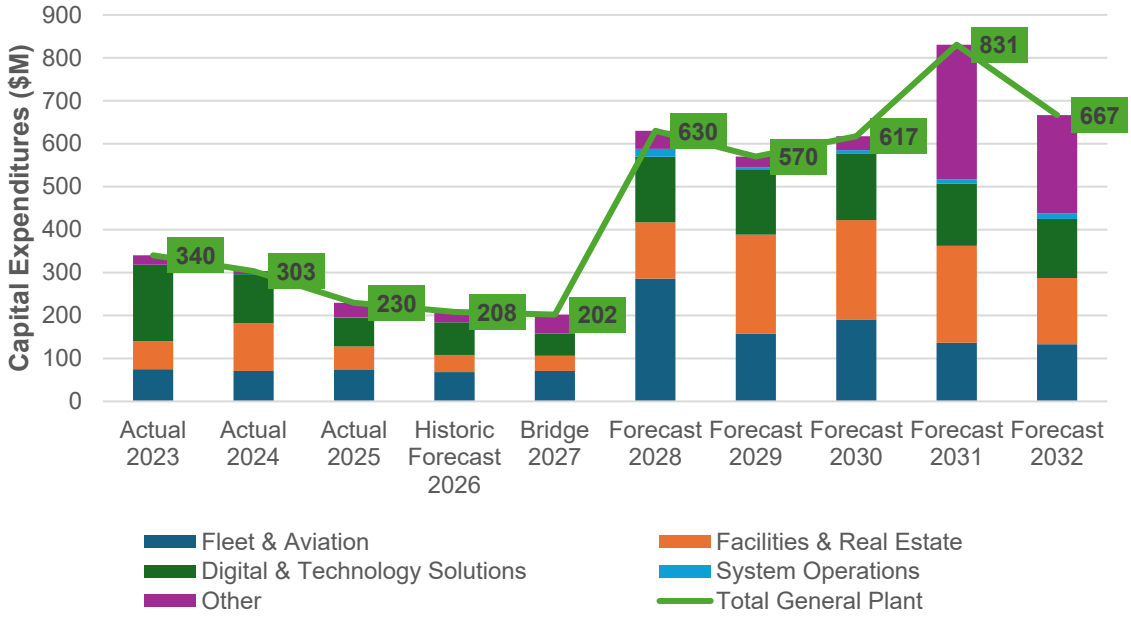

Figure 5: General Plant actual, forecasted and planned capital expenditures from 2023-2032 by General Plant function

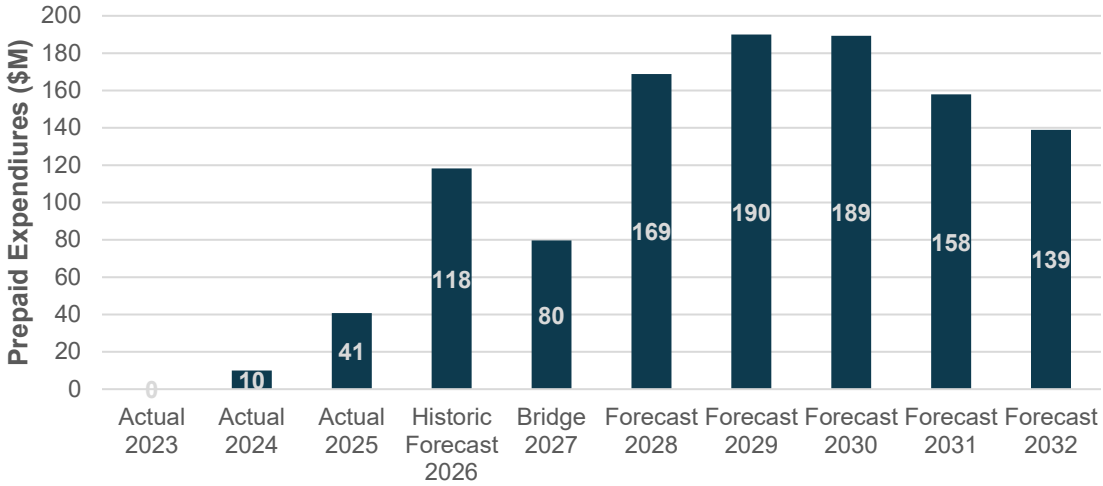

Figure 6: General Plant actual, forecasted and planned prepaid expenditures related to cloud from 2023-2032

The following sections summarize the programs and Investment Summary Documents (ISD) that comprise each GSP portfolio, together with their forecast expenditures and objectives. Further details on each program are provided in GSP Section 4.8 and in the ISDs in GSP Section 4.11.

Fleet & Aviation

Fleet & Aviation investments total $904.0M over 2028-2032 (as described in Table 7), representing 27% of the GSP capital portfolio and an increase of $544.4M (151%), from the 2023 to 2027 historical and bridge period. The increase is driven by the need to replace transportation and work equipment at the appropriate point in its lifecycle, before maintenance costs exceed ownership costs and result in higher total lifecycle expenses. This investment will also help reduce unscheduled downtime associated with an aging fleet, improving equipment reliability and operational efficiency and customer reliability (approximately $611.5M). Additional equipment will be acquired to support the larger Transmission and Distribution work programs (approximately $238.6M), and renew three aging helicopters that support field work, inspections, emergency response, and access to remote locations (approximately $53.8M). The fleet plan also reflects cost pressures and supply-chain realities faced over the historical period, as fleet prices surged by more than 50%, increasing the capital required to acquire the number of units needed to maintain a safe and functional fleet. The plan incorporates a gradual transition to clean energy and low-emission vehicles, initially focusing on light-class vehicles where market maturity and work requirements are more compatible with available technology.

Table 7 - Fleet & Aviation Material Investments for 2028-2032[10]

Program / ISD	2028–2032 ($M)	Objective	Description
G-GP-01 Transport and Work Equipment	850.1	Workforce Enablement and Safety	Replaces transport and work equipment based on expected service life and condition, and adds equipment required to support growth in the Transmission and Distribution work programs.
G-GP-02 Helicopter Renewal	53.8	Workforce Enablement and Safety	Replaces three older helicopters to modernize the aviation fleet and support inspections, line maintenance, emergency restoration, and remote work access.
Total	**904.0**		

Facilities & Real Estate (FRE)

FRE investments represent approximately 29% of the total GSP capital portfolio and total $972.9M over the 2028-2032 period (as described in Table 8), an increase of $667.8M, or 219%, from the 2023 to 2027 historical and bridge period. The increase is attributed to the critical need to remediate deficient or failed facility components, stabilize overall facility conditions, accommodate new construction and significant renovations for expanding operational demands, and fulfill investments associated with accessibility, employee accommodations, energy efficiency, facility resilience, and regulatory obligations. Facilities & Real Estate investments are strategically aligned to address these priorities.

Of the proposed $972.9M capital expenditures, Sustainment investments ($434.3M) focus on maintaining existing facility assets and major components, enhancing grid reliability, improving outage management, ensuring workplace safety, and supporting business continuity. Growth investments ($339.7M) provide funding for new facilities and substantial renovations necessary to serve customer expansion, facilitate facility consolidation, and meet operational requirements beyond the capacity of current infrastructure. Compliance & Governance investments ($198.9M) are directed toward accessibility initiatives,

[10] Figures presented in the tables may not sum to the totals shown due to rounding.

inclusive facility design, greenhouse gas mitigation, increased energy efficiency, fleet electrification support, and climate adaptation or facility resiliency where applicable.

Table 8 - Facilities & Real Estate Material Investments for 2028-2032

Program / ISD	2028–2032 ($M)	Objective	Description
G-GP-03 Facilities and Accommodations	723.2	Workforce Enablement and Safety	Replaces, restores, and modernizes deteriorated buildings and facility components, including sustainment, new build, major renovation, accessibility, energy efficiency, and operational accommodation investments.
G-GP-04 Transmission Facilities	249.7	Protect and Secure Critical Infrastructure	Funds new facilities, major renovations, upgrades, and sustainment at Transmission facilities to meet operational requirements and address reliability, safety, and security risks.
Total	**972.9**		

Digital & Technology Solutions (DTS)

DTS investments total approximately $1,586M including $741.1M of capital (representing 22.4% of GSP capital) and $845.0M of prepaid expenditures. The proposed expenditures are an increase of $851M, or 116%, from the 2023 to 2027 historical and bridge period (including both capital expenditures and prepaid expenditures for cloud-based technology hosting arrangements). The increase reflects both the renewal of aging and unsupported technology assets and the growing role of digital systems in utility operations, customer service, system visibility, cybersecurity, and work execution. To that end, the DTS investments support four key outcomes:

- **Grid reliability and resilience,** supported by Work and Asset Management Enablement, Control Centre Communication Refresh, Energy Management System Investments, Operations Projects, and Control Room Equipment.

- **Protection and security of critical infrastructure,** supported by Physical Security Upgrades, Cybersecurity and Digital Protection, Common Operations Technology Infrastructure, and Enterprise Security Platforms and Controls.
- **Customer Centricity,** supported by Customer Service Technology Enablement and related digital customer service platforms.
- **Workforce Enablement and Safety,** supported by Corporate Services Enablement, Work and Asset Management Enablement, Enterprise Platform Modernization and Sustainment, and SAP S/4HANA One Core Transformation.

Each of these investment outcomes is supported by the foundational enablers of Data Analytics as a Strategic Asset (including AI Enablement) and Technology Operations, both of which are integrated across the DTS portfolio.

Technology vendors are increasingly concentrating innovation, artificial intelligence capabilities, and long-term product support on cloud-based platforms. As a result, Hydro One is adopting cloud solutions where they provide operational, technical, security, or economic benefits and align with business requirements (see GSP Section 4.6.6 for more details). Cloud-based solutions reduce the need to procure and maintain supporting infrastructure while providing access to vendor-managed updates, cybersecurity enhancements, and new functionality. However, Hydro One continues to evaluate deployment models based on operational, regulatory, cybersecurity, reliability, and architectural requirements and will continue to employ on-premise or hybrid solutions where they are the most appropriate option. Over the 2028-2032 period, this deployment approach contributes to both capital investments and prepaid expenditures associated with cloud-hosted technology solutions.

1 **Table 9 - Digital & Technology Solutions Material Investments for 2028-2032**

Program / ISD	2028–2032 Capital ($M)	2028–2032 Prepaid ($M)	Objective	Description
G-GP-05 Information Technology Services Enablement	201.2	51.9	Workforce Enablement and Safety	Replaces aging and unsupported servers, network equipment, end-user computing, and voice devices to reduce outage, cybersecurity, and operating risks.
G-GP-06 Corporate Services Enablement	15.0	82.5	Workforce Enablement and Safety	Strengthens data quality, governance, platform consolidation, reliability, transparency, and scalability of corporate services technology.
G-GP-07 Customer Service Technology Enablement	19.7	178.0	Customer Centricity	Modernizes customer-service systems to meet customer expectations, protect sensitive information, and operate in vendor-supported and regulatory-compliant environments.
G-GP-08 Work and Asset Management Enablement	29.0	184.3	Workforce Enablement and Safety; Grid Reliability and Resilience	Enables cloud-aligned digital capabilities that support risk-based planning, storm preparedness and response, outage coordination, field execution, and capital project delivery.
G-GP-10 Physical Security Upgrades	173.3	0.0	Protect and Secure Critical Infrastructure	Strengthens physical security at facilities essential to reliable transmission system operations and supports NERC and CIP compliance.
G-GP-11 Cybersecurity and Digital Protection	45.1	0.0	Protect and Secure Critical Infrastructure	Reduces operational risk, strengthens protection of customer and corporate data,

Program / ISD	2028–2032 Capital ($M)	2028–2032 Prepaid ($M)	Objective	Description
				improves cybersecurity maturity, and supports NERC, CIP, and OCSF compliance.
G-GP-12 Common Operations Technology Infrastructure	120.3	0.0	Protect and Secure Critical Infrastructure	Modernizes foundational operating technology infrastructure used to support critical systems for monitoring and control of the Bulk Electric System.
G-GP-16 Energy Management System Investments	65.7	6.0	Grid Reliability and Resilience	Modernizes the Energy Management System to sustain 24/7 control-room operations, meet compliance obligations, and prepare the control platform for future operational complexity.
G-GP-25 Operations Projects	36.5	7.6	Grid Reliability and Resilience	Supports operational projects, including outage coordination, storm management, and migration from legacy operational applications to modern enterprise platforms.
G-GP-26 Data, Analytics and AI Enablement	26.0	17.5	Workforce Enablement and Safety	Develops centralized data, analytics, and AI platforms and tools to enable data-driven decision-making and operational efficiency.
G-GP-28 Enterprise Platform Modernization and Sustainment	0.0	30.8	Workforce Enablement and Safety	Modernizes and standardizes Hydro One's digital workplace platform and improves enterprise-wide adoption, security, and compliance.
G-GP-29 SAP S/4HANA One	0.0	242.0	Workforce Enablement and Safety	Continues modernization and stabilization of Hydro

Program / ISD	2028–2032 Capital ($M)	2028–2032 Prepaid ($M)	Objective	Description
Core Transformation				One's enterprise resource planning environment, reduces technical debt, and aligns the platform with SAP's product roadmap and regulatory requirements.
G-GP-30 Enterprise Security Platforms and Controls	0.0	44.4	Protect and Secure Critical Infrastructure	Strengthens cloud-based cybersecurity and digital protection capabilities to support expanding cloud adoption and alignment with OCSF and NERC CIP expectations.
G-GP-31 Control Room Equipment	9.3	0.0	Workforce Enablement and Safety	Integrates provincial radio and satellite phone systems at the Integrated System Operations Centre and Backup Ontario Grid Control Centre to improve voice communications reliability.
Total	**741.1**	**845.0**		

System Operations

System Operations investments represent approximately 2% of the total GSP capital portfolio and total $55.1M over the 2028-2032 planning period (as described in Table 10), an increase of $52.6M, from the 2023 to 2027 historical and bridge period. The increase results from targeted investments in the Integrated System Operations Centre and Backup Ontario Grid Control Centre, aimed at maintaining facilities and infrastructure essential for real-time operation of the electricity system during normal, contingency, and emergency scenarios. These investments ensure facility reliability, robust backup systems, building system integrity, compliance with health and safety regulations, adherence to building standards, operational capacity, and uninterrupted functioning of mission-critical control-

centre environments. Although modest in financial scale compared to the overall General Plant portfolio, these investments are critical to operations, as they enable Hydro One to manage the transmission and distribution systems in real time.

Table 10 - System Operations Material Investments for 2028-2032

Program / ISD	2028–2032 ($M)	Objective	Description
G-GP-13 Operational Technology Facility Sustainment	49.0	Security	Replaces failing common operating facility components and mitigates risks to backup systems at the Backup Ontario Grid Control Centre and Integrated System Operations Centre.
G-GP-15 OGCC and ISOC Office Remediation	6.1	Workforce Enablement and Safety	Minimizes risks of failures and downtime in critical control facilities and supports compliance with health and safety and building standards while addressing operational capacity requirements.
Total	**55.1**		

Other General Plant and Capital Contributions

Other General Plant and Capital Contributions represent approximately 19% of the total GSP capital portfolio in the forecast period and total $641.8M over 2028-2032 (as described in Table 11), an increase of $510.9M from the 2023 to 2027 historical and bridge period. The variance is not meaningful for this portfolio because the historical period includes amounts resulting from the timing and treatment of capital contributions and other offsets. This increase is driven by inflation, capital contributions between the Transmission and Distribution businesses, grid control and data-management investments, new synchrophasor investments, and other General Plant investments below materiality.

Table 11 - Other General Plant Investments for 2028-2032[11]

Program / ISD	2028–2032 ($M)	Cost Allocation	Description
G-GP-19 Grid Control Network Sustainment	30.7	Transmission	Sustains grid control network equipment and supports reliable transmission grid operations.
G-GP-22 Hydro One Distribution Capital Contribution to Hydro One Transmission	568.0	Distribution	Non-discretionary capital contributions to Hydro One Transmission for transmission system upgrades to increase capacity.
G-GP-23 PMU Synchrophasors Program	15.8	Transmission	Synchrophasor data consists of time-synchronized, high resolution telemetry of power system elements and is collected using a Phasor Measurement Unit (PMU) to comply with the IESO market rules.
G-GP-27 Hydro One Transmission Capital Contribution to Third Party	8.0	Transmission	Provides Transmission capital contribution to third party for battery plant to address regional need.
Other investments below materiality*	19.0		Captures other General Plant investments below the materiality threshold
Total	**641.8**		

**Includes G-GP-20 is an ISD from Hydro One's previous rate application (EB-2021-0110) which has no investments with material expenditures in the 2028-2032 period*

[11] Figures presented in the tables may not sum to the totals shown due to rounding.

4.1.5 GSP IS REASONABLE AND APPROPRIATE

The GSP was prepared through a robust investment planning process. It reflects customer needs and preferences, is backed by third-party benchmarking and analysis, and promotes OEB RRF outcomes. Its implementation has been reviewed and supported by advanced strategies and delivery models. Each of these considerations is summarized below.

4.1.5.1 INVESTMENT PLANNING PROCESS

Hydro One established the GSP through its comprehensive System Plan Framework, as outlined in SPF Section 1.1. The investment planning process identifies requirements, formulates potential investments, evaluates and prioritizes options, aligns portfolios across business units, collaborates with execution teams, and produces a practical and actionable plan. Candidate investments are reviewed for alignment with Transmission and Distribution objectives, operational efficiency, customer expectations, regulatory mandates, and corporate strategies. Enterprise-wide calibration and challenge sessions facilitate consistent evaluation, validate assumptions, and critically examine investment feasibility and value prior to portfolio finalization. This approach ensures appropriate balance between asset requirements, operational risk, customer outcomes, affordability, and implementation capability.

Through its investment planning process Hydro One has paced the GSP to address the most significant operational, reliability, safety, compliance, and lifecycle risks while managing customer bill impact and execution capabilities. The plan addresses the highest-priority needs over the 2028-2032 planning period, while recognizing that not every portfolio issue can or should be resolved at once. For example:

- The Fleet & Aviation plan brings the fleet closer to recommended lifecycle levels and stabilizes maintenance costs without immediately moving every asset class into full lifecycle compliance.
- The FRE plan prioritizes a targeted subset of identified capital deficiencies, focusing on the highest-risk assets and components. These investments represent approximately 52% and 20% of the total identified deficiencies in the OC Admin and TS Facilities portfolios, respectively.

- The DTS plan sequences major capital and prepaid investments based on lifecycle, vendor support, cloud implementation timing, business readiness, security, and operational need.

The following sections detail the function specific planning approaches that informed the development of the GSP, which are further discussed in GSP Section 4.2, 4.6 and 4.7.

Fleet & Aviation

Fleet & Aviation uses a multifaceted planning approach that combines expected service life analysis, condition verification, operational requirements, utilization data, telematics, cost-per-kilometre, availability, downtime, repair time, safety risk, and procurement lead times. Utilimarc's lifecycle recommendations inform the replacement timing for key vehicle classes, but Hydro One also applies mechanical inspections and business judgment to determine whether an identified candidate should be replaced, repaired, redeployed, retained, or managed through another solution. This approach avoids replacing assets solely because they have reached a numeric age threshold, while also avoiding excessive reliance on aging assets that increase maintenance cost and downtime. Utilimarc’s lifecycle recommendations also inform the replacement of helicopters based on age and annual flight hours utilization.

Facilities & Real Estate (FRE)

FRE uses a risk-based approach that considers both the probability and consequences of failure to evaluate and prioritize investments, maximize customer value and ensure resources are directed to the areas of greatest need. This risk-based framework considers inputs such as Building Condition Assessments, component criticality, building criticality, field manager input, work order data, operational requirements, safety, reliability, productivity, customer impacts, and lifecycle cost. The risk assessment approach incorporates condition-adjusted life, asset replacement value, failure probability, and failure impact across over 50,000 building components in the FRE portfolio. Hydro One's current plan seeks to address a substantial share of the high-risk capital deficiencies and a minor share of moderate-risk capital deficiencies, thereby stabilizing the portfolio while recognizing cost and execution constraints.

Digital & Technology Solutions (DTS)

DTS uses a structured, risk-based, and value-driven process that considers system needs, regulatory obligations, customer priorities, cybersecurity, vendor support, operational criticality, performance, business requirements, and long-term technology sustainability. DTS emphasizes business value, reuse of existing platforms, minimization of customization, avoidance of duplicative solutions, appropriate use of commercial off-the-shelf and enterprise platforms, and a cloud-smart approach where cloud solutions best meet business requirements. Investments are prioritized based on reduction of operational, cyber, and compliance risks, contribution to safety and reliability, customer benefits such as improved outage information and service responsiveness, and financial impacts including productivity gains or avoided future costs.

System Operations

System Operations applies a structured planning process that reflects the mission-critical nature of the ISOC and BU-OGCC. Investments are evaluated based on operational, reliability, safety, security, compliance, redundancy, recovery, operator performance, workload management, human reliability, and lifecycle cost considerations. Mandatory and high-risk investments that address single points of failure, aging infrastructure, compliance gaps, backup power, cooling, communications, or control-centre availability receive priority due to their potential impact on system reliability and customer outcomes. The planning approach recognizes that operator effectiveness, facility systems, power, cooling, IT, communications, and physical security are interdependent in control-centre environments, and that failures can cascade quickly if critical systems are not sustained.

4.1.5.2 CUSTOMER ENGAGEMENT

As described in SPF Section 1.6, customer engagement feedback directly informed and shaped the development of the System Plans, including the GSP. In 2024 and 2025, Hydro One engaged Innovative Research Group to conduct a comprehensive, two-phase customer engagement exercise in conjunction with the planning process. The engagement process incorporated feedback from a broad cross-section of Hydro One's customers, using multiple engagement methods to capture input from different customer segments.

The first phase occurred early in the planning process and focused on identifying customers' general needs, priorities, and desired outcomes. The second phase occurred after preliminary investment options had been developed and focused on gathering customer perspectives on trade-offs between different investment priorities. The results of this engagement informed Hydro One's understanding of customer outcome preferences, including priorities related to reliability, affordability, and resilience.

Customer priorities identified in Phase I informed the development of investment strategies and candidate investments, including the appropriate pacing for the planning period. Key themes included support for replacing poor-condition assets to improve reliability and resilience, maintaining or enhancing service performance, and enabling economic growth and system visibility, provided costs remain within the bill impacts presented during customer engagement.

Hydro One considered these priorities together with asset condition, lifecycle requirements, operational needs, and regulatory obligations as part of the investment planning process described above. These priorities also informed the investment scenarios presented in Phase II, including associated service outcomes and rate impacts. Customer feedback on trade-offs helped shape and refine the final proposed investment plan.

Key customer feedback on the GSP during the Phase II customer engagement exercise included the following:

- **Facilities:** Customers generally supported the draft plan level of spending for facilities-related investments. Most customers supported Hydro One making the necessary facilities investments to address urgent and critical needs, support business continuity, and maintain a reliable network of buildings. Customers also supported facilities investments to address at-risk building components, make at-risk sites more resilient to severe weather, and repair or retrofit field offices to meet modern and accessibility standards. The GSP reflects this feedback through planned facilities sustainment, resilience, and compliance-related investments, including work to renew critical, poor-condition building components, address

capacity-constrained operational facilities, and improve facility resilience and accessibility.

- **DTS:** A clear majority of customers supported Hydro One making information technology investments at the draft plan level to maintain current technology systems, enhance customer service, improve operational efficiency, and protect the grid from physical and cyber-attacks. The GSP reflects this feedback through planned DTS investments to renew aging and unsupported IT and operational technology platforms, enhance customer-facing technologies and digital channels, improve operational tools and data capabilities, and strengthen physical and cyber security protection.

4.1.5.3 THIRD-PARTY STUDIES

Hydro One's General Plant System Plan is informed by benchmarking and third-party studies that provide independent context for asset condition, cost, maturity, and planning assumptions. Hydro One commissioned Utilimarc for fleet operations benchmarking, fleet lifecycle analysis, helicopter lifecycle analysis, and fleet investment strategy review. Hydro One commissioned Gartner studies for enterprise IT spending and staffing and enterprise IT maturity. Hydro One also retained JLL to perform an independent third-party review of Building Condition Assessment reports for the FRE portfolio. These studies provide external validation, identify opportunities for improvement, and support the reasonableness of the investment plan. The sections below summarize these studies, which are further discussed and appended in GSP Section 4.3.

Fleet Benchmarking and Fleet and Helicopter Lifecycle Analysis (Utilimarc)

Utilimarc's Fleet studies support the fleet plan in several respects. The benchmarking report shows that Hydro One effectively manages utilization, including a low proportion of low-mileage vehicles compared to the industry average, while the lifecycle studies show that capital spending and maintenance costs must be balanced to minimize total cost of ownership over the life of fleet assets. Utilimarc assessed the relationship between replacement pacing and overall cost of ownership and identified proposed funding as a reasonable and prudent approach that balances rising costs, reduces fleet age, and supports reliability for expected work programs. These findings support Hydro One's

decision to pursue a balanced fleet funding level rather than a purely reactive replacement strategy or a full acceleration to place all assets within lifecycle immediately.

IT Cost and Maturity Benchmarking (Gartner)

Gartner's IT benchmarking and maturity studies support the DTS plan. The enterprise IT spending benchmark shows Hydro One's overall IT spending is broadly aligned with peer electric utilities, but Hydro One's spending mix is more heavily weighted toward sustaining existing services and platforms than the peer group. The maturity assessment shows overall IT maturity is below the peer average and that Enterprise Architecture and Data and Analytics are two of the lowest maturity domains, with improvement in these areas expected to add comparatively more value. These results align with Hydro One's proposed investments in application rationalization, enterprise platforms, data analytics, AI enablement, strategic portfolio management, operations maturity, and technology governance.

Facilities Building Condition Assessments (JLL)

The JLL Building Condition Assessment review supports the FRE plan, which is heavily grounded in condition evidence. JLL reviewed a representative sample of 50 sites containing 151 buildings, representing approximately 10% of the portfolio of approximately 1,474 buildings, and evaluated the process and methodology against ASTM E2018-24, which is recognized as an authoritative framework for building condition assessments in North America. JLL concluded that the Building Condition Assessment program demonstrates a standard of technical practice consistent with prevailing industry practice. JLL expressed a high degree of confidence in the quality and reliability of the assessment process employed by Hydro One’s consultants, and concluded that the reports provide a sound technical foundation for understanding Hydro One’s building conditions and capital needs.

4.1.5.4 ALIGNMENT WITH OEB OUTCOMES

In alignment with OEB requirements, individual programs are presented within the applicable OEB investment categories as defined by the primary trigger for the investment,

and include explicit consideration of RRF outcomes. Through the DSP, Hydro One is committed to meeting the OEB's RRF outcomes as follows:

Customer Focus

The GSP supports Customer Focus by enabling Hydro One to deliver the outcomes customers care about most: reliable service, reasonable rates, timely restoration, clear communications, safety, and resilience during major events. Customers experience the benefits of General Plant investments both directly, through customer-facing technologies, digital services, outage communications, and self-service capabilities, and indirectly through the tools, facilities, systems, and infrastructure that enable Hydro One to safely and reliably operate the electricity system. These benefits are realized when customer platforms work reliably, outage tools provide timely information, crews have the right equipment and resources to respond to customer needs, control centres operate continuously, and facilities support efficient storm response and work execution.

Operational Effectiveness

The GSP supports Operational Effectiveness by providing the assets, tools, facilities, systems, security capabilities, and control-centre infrastructure needed to execute work reliably and efficiently. These investments improve operational readiness, reduce downtime, and support effective delivery of the transmission and distribution work programs.

Public Policy Responsiveness

The GSP supports Public Policy Responsiveness by enabling Hydro One to comply with mandatory reliability, cybersecurity, safety, accessibility, building, environmental, and customer service obligations. It also supports broader policy objectives of climate adaptation and resilience, greenhouse gas mitigation where prudent, modernization of Ontario's electricity system, gradual fleet electrification where feasible, energy efficiency, inclusive facility updates, improved system visibility, data analytics, and cybersecurity.

Financial Performance

The GSP supports Financial Performance through lifecycle cost management, risk-based pacing, external benchmarking, alternatives analysis, prudent prioritization, and execution governance. The plan is intended to manage total cost over time, rather than focusing only on short-term outcomes. The GSP plan addresses risks of higher maintenance, lower availability, increased rentals and emergency repairs, higher break-fix costs, productivity losses, safety risks, service disruption risk, cyber risk, and more expensive future interventions caused by underinvestment.

4.1.5.5 ABILITY TO EXECUTE

The portfolio work execution strategies detailed in GSP Section 4.10 demonstrate that Hydro One has the capability, processes, and governance to deliver the proposed 2028–2032 General Plant investment plan. The sections below summarize the key elements of each portfolio's execution strategy.

Fleet & Aviation

Fleet & Aviation works with Hydro One lines of business to confirm equipment needs, standardize equipment based on safety and reliability requirements, engage original equipment manufacturers to align configurations with industry standards, reserve build slots, maintain manufacturer contracts with delivery and deficiency provisions, and inspect equipment before acceptance. It also monitors total cost of ownership, uptime, utilization, and telematics data to ensure the fleet remains aligned with work-program needs. These processes reduce procurement and delivery risk and support the timely integration of vehicles and equipment into work programs.

Fleet & Aviation investments support ongoing work program needs, including hard to access work zones and timely response to storms and unplanned incidents. Aviation Services is engaged to meet the evolving work program needs of the Transmission and Distribution lines of business.

Facilities & Real Estate (FRE)

FRE's execution model is designed for a large, geographically dispersed, and technically diverse portfolio, which requires access to specialized construction trades and technical expertise across structural, building envelope, HVAC, electrical, plumbing, fire protection, siteworks, and related systems. Hydro One uses an outsourced service provider model to deliver its work programs while retaining governance, oversight, and strategic decision-making. This model allows Hydro One to access regional presence, subcontractor relationships, procurement scale, specialized expertise, and market capacity without building an internal construction workforce for every trade and region.

Hydro One has strengthened FRE governance to support the larger 2028-2032 plan. The governance framework includes clearer escalation pathways, consistent reporting cadences, enhanced visibility at project, program, and portfolio levels, modernized financial administration and reporting processes, and more timely cost and schedule insights. Hydro One also embeds metrics such as cost per unit, cost-reduction rate, and time to complete into planning assumptions and execution oversight. These controls support transparency, early identification of variances, disciplined decision-making, and accountability for outsourced delivery.

Digital & Technology Solutions (DTS)

DTS uses a formal five-stage technology delivery governance framework consisting of Project Initiation, Planning, Design, Execution, and Closing. The framework is intended to ensure that technology investments are clearly scoped, aligned with business objectives, subject to proportionate financial, architectural, security, risk, testing, readiness, and sustainment controls, and transitioned effectively into operations. Hydro One's DTS technology delivery model encompasses both traditional capital investments and cloud-based solutions, and is supported by business-aligned organizational structures, lifecycle ownership, disciplined and fit-for-purpose governance, retained internal expertise, and strategic use of external partners for implementation, specialized skills, sustainment, and scalable delivery capacity.

System Operations

The System Operations capital portfolio is a discrete set of primarily facilities-related investments associated with the ISOC and the BU-OGCC. These projects will be delivered by contracted resources, with oversight from internal System Operations resources. Technology investments associated with the operational technology within the control centres are included in the DTS portfolio and are executed under the DTS delivery model described above. This division of accountability reflects the practical distinction between facility-related control-centre investments and technology delivery, while ensuring that System Operations remains accountable for operational requirements, risk tolerances, and fitness for purpose.

1 This page has been left blank intentionally.

SECTION 4.2 – GSP – ASSET INFORMATION AND LIFE CYCLE STRATEGIES

4.2.1 INTRODUCTION

General Plant assets are critical to Hydro One's operational continuity and enable the successful execution of a complex portfolio of Transmission and Distribution work programs. This section presents the purpose, characteristics, condition, demographics, and performance information for Hydro One's General Plant assets relating to Fleet & Aviation Services (Fleet), Facilities & Real Estate, Digital & Technology Solutions (DTS) and System Operations, along with their lifecycle optimization policies and practices.

This Exhibit is organized by the following functions: Fleet Services (4.2.2), Aviation Services (4.2.3), Facilities & Real Estate (4.2.4), Digital & Technology Services (4.2.5) and System Operations (4.2.6). All information presented is current as of December 31, 2025, unless otherwise noted.

4.2.2 FLEET SERVICES

4.2.2.1 ASSET DESCRIPTION / PURPOSE

Fleet Services (Fleet) manages Transport & Work Equipment (TWE) assets to support the execution of Hydro One's Distribution and Transmission work programs. These assets enable efficient work execution by Hydro One staff, and ensure compliance with regulatory requirements and functional needs, including adherence to engineering specifications and designs.

TWE assets are divided into 5 equipment categories – light duty, heavy duty, large off-road, miscellaneous, and small off-road. Table 1 shows the equipment types that comprise each category and outlines the functional purpose served by each equipment type.

1 **Table 1 - Summary of TWE Asset Types**

Categories	Equipment Type	Line of Business Requirement
Light duty	Cars/SUVs	Used by all lines of business for employees driving over 23,000 km annually (23,000 km/year is the point at which a company vehicle becomes more cost-effective than mileage reimbursement).
	Vans/Pickups	Used by all lines of business to transport tools and crews to work locations and to tow small trailers.
Heavy duty Radial Boom Derrick	Service Trucks	Used primarily by Distribution Lines, Forestry, Stations, Construction, Transmission Lines and Fleet Maintenance to support and service off-road units and work locations.
	Highway Tractors	Used primarily by Distribution Lines, Forestry, Transmission Lines and Construction to tow large equipment and Off-Road units.
	Cranes	Used primarily by Distribution Lines and Transmission Lines for lifting poles and other material.
	Bucket Trucks	Used primarily by Distribution Lines and Forestry to work at heights to complete line maintenance and tree trimming.
	Radial Boom Derricks (RBD)	Used by Distribution Lines to dig holes and to set poles at roadside and for heavy towing.
Large Off-Road	Off Roads	Used by Distribution Lines, Forestry and Transmission Lines to perform activities such as building roads and rights-of-way, clearing brush, building/maintaining lines and act as personnel/material carriers.

Categories	Equipment Type	Line of Business Requirement
Miscellaneous Chipper Tensioner 	Boats	Used primarily by Distribution Lines and Forestry work programs to access our isolated customers. Strategically located around the province to minimize hauling from waterway to waterway.
	Trailers	Used by all lines of business, including boat trailers, office trailers, open-deck trailers, cargo trailers, pole trailers for various business requirements.
	Chippers	Used by Forestry in conjunction with bucket trucks - required for environmental cleanup.
	Manlifts	Used by Stations working within a non-energized environment and by Fleet for working on elevated equipment/aerial devices.
	Forklifts	Used by all lines of business and are required for loading/unloading material at various work sites.
	Tensioners	Used by Distribution Lines and Transmission Lines for stringing projects.
Small Off-Road Equipment[1] 	Snowmobiles	Used by Distribution Lines, Forestry, and Transmission Lines in remote/inaccessible areas during the winter months. They are used for the following activities: clearing brush, building/maintaining lines and acting as personnel/material carriers.
	UTV/Side-by-Side 6 Wheeler 8 Wheeler	Used by Distribution Lines, Forestry and Transmission Lines in remote/inaccessible areas for work that cannot be completed without large off-road units. This work includes: clearing brush, building/maintaining lines and acting as personnel/material carriers.

[1] Small Off-Road Equipment were previously managed by the Lines of Business and were amalgamated into TWE in 2019.

Hydro One also has minor fixed assets (referred to as Service Equipment) such as generators, power washers, sprayers and compressors. These are purchased by the Lines of Business on an as-needed basis and managed locally.

4.2.2.2 ASSET DEMOGRAPHICS, CONDITION AND PERFORMANCE

DEMOGRAPHICS

Hydro One's TWE investments are determined through a multi-faceted approach that examines the organization's needs, existing assets' expected service life (ESL), and condition reports. Assets' ESLs are based on age, mileage, engine hours and Utilimarc's Lifecycle Analysis.[2] Assets' ESLs and condition reports are indicators of the overall condition of the fleet. Condition reports from technicians are used to verify that specific assets identified for replacement have exceeded their useful life and are candidates for replacement.

Hydro One has approximately 8,000 vehicles and other fleet equipment, as well as approximately 1,000 small off-road equipment. Table 2 shows the breakdown of the TWE asset quantities and current demographics by average age and, where applicable, mileage and engine hours. Engine hours are a relevant consideration for various types of heavy equipment due to their use of Power Take Off (PTO) (i.e., taking power from a running engine) to enable the operation of an aerial device.

Table 2 - Average Age and Mileage as of December 2025

Equipment Type	Actuals as of December 2025				
	Quantity	Percent of TWE Fleet	Average Age (Years)	Average Mileage (km)	Average Engine Hours
Light	3,178	36%	4.9	110.730	N/A
Heavy	1,495	17%	9.3	153,600	8,852
Off-Road	459	5%	13.4	N/A	N/A
Miscellaneous	2,627	30%	13.2	N/A	N/A
Small Off-Road	1,105	12%	8.2	N/A	N/A

[2] Utilimarc, Hydro One Fleet Lifecycle Study – GSP Section 4.3 Attachment 2, p. 11

Hydro One plans to reduce operations-driven emissions by 30% by 2030 and has pledged to be at net zero emissions by 2050.[3] Direct emissions from fossil fuel owned and operated fleet vehicles represent approximately 44% of Hydro One's operational emissions. Hydro One's Fleet Green vehicle count is listed in Table 3.

Table 3 - Current Green Fleet Demographics

Equipment Type	Actuals as of December 2025					
	Fully Electric	Plug-In Hybrid	Hybrid	Electric PTO	ICE	Total
Light	78	200	11	N/A	2,881	2,970
Heavy	0	0	0	10	1,495	1,505
Off-Road	0	0	0	0	459	459
Miscellaneous	10	0	0	N/A	2,617	2,627
Small Off-Road	0	0	0	N/A	1,102	1,102

CONDITION

The condition of individual fleet assets is determined based on the following criteria: (i) the ESL of the asset, which is informed by overall mileage, engine hours (as applicable) and asset age (see Table 4); and (ii) the assessed mechanical condition. As further explained in Section 4.2.2.3 below, these criteria are used to identify assets due for replacement.

Table 4 shows the ESL of equipment types based on manufacturers' recommendations. These ESLs are further supported by industry benchmarking.

[3] Hydro One Limited, Hydro One 2025 Sustainability Report (May 7, 2026), p.13, Section "Climate change mitigation", (https://www.hydroone.com/Sustainability/Documents/CSR_2025/2025-Sustainability-Report.pdf)

Table 4 - ESL by Equipment Type[4]

Equipment Type	ESL Age (Years)	ESL Mileage (km)	ESL Engine Hours (Engine hours)
Light	7-10	180,000	N/A
Heavy	7-13	300,000 to 400,000	14,000
Off-Road	14	N/A	N/A
Miscellaneous	Individual Asset Assessment	N/A	N/A
Small Off-Road	8	N/A	N/A

The mileage range and the average engine hours (heavy only), where applicable, of Hydro One's on-road vehicles are shown in Figure 1, with the "over mileage" column representing assets that have exceeded their ESL in terms of overall kilometres. Engine hours indicate how long a vehicle's engine ran even when the vehicle was stationary. The industry standard used by the largest Original Equipment Manufacturer (OEM) is that 1 engine hour is the equivalent of driving 67 kilometres.

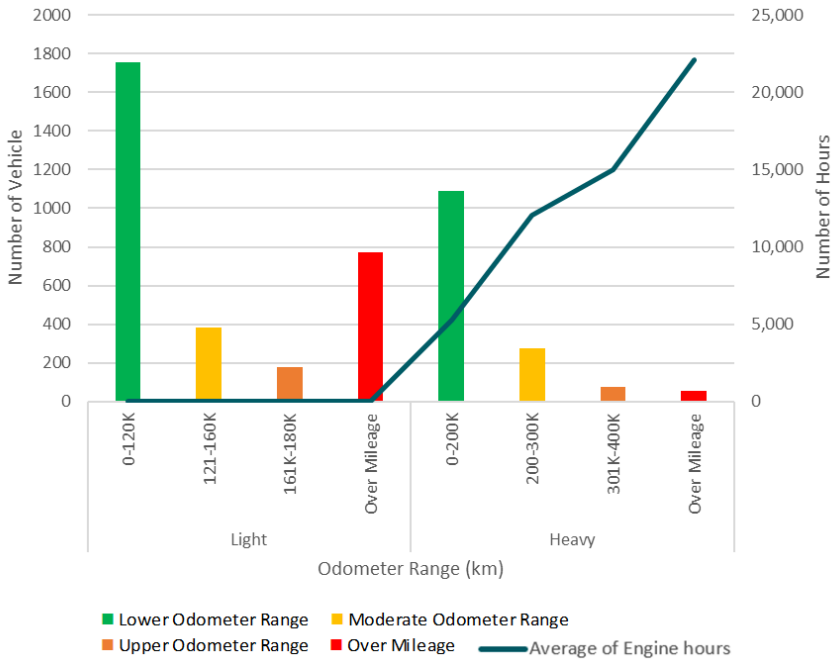

Figure 1: Mileage of On-Road Fleet as of December 2025

[4] ESL are an average of the Utilimarc lifecycle recommendations Utilimarc, Hydro One Fleet Lifecycle Study – GSP Section 4.3 Attachment 2, p. 11

The age of the fleet by equipment type is illustrated in Figure 2, with the "overaged" column representing assets that have exceeded their ESL in terms of age.

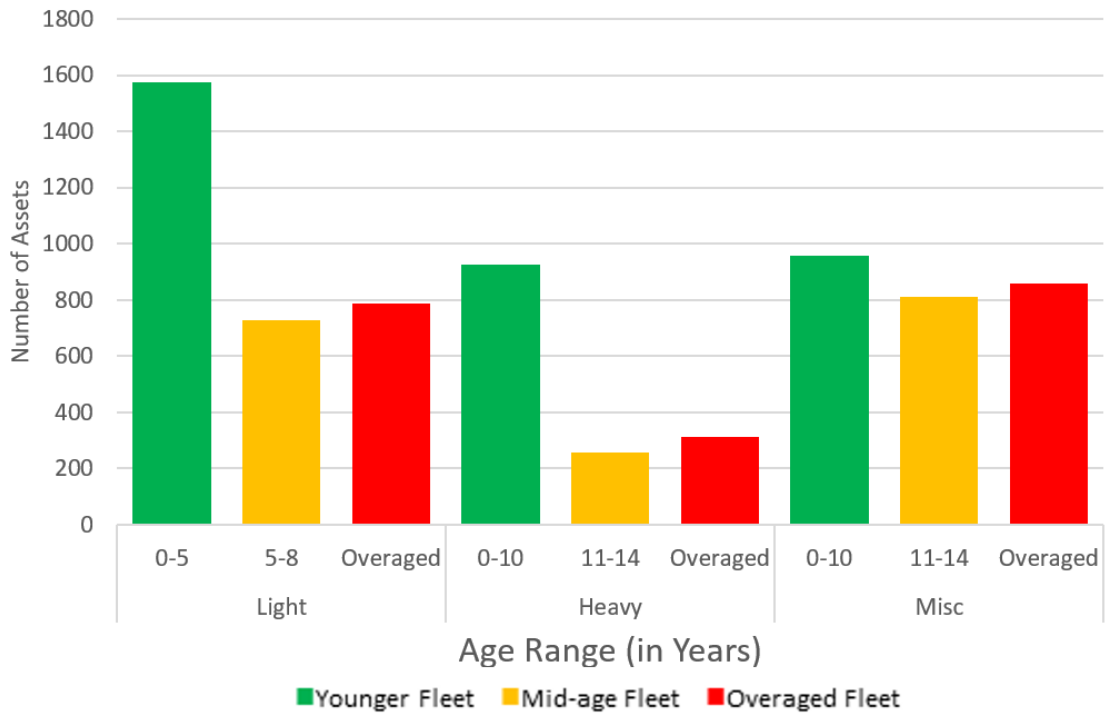

Figure 2: Age (in Years) of the Fleet as of December 2025

The proportion of assets beyond their ESL impacts the safe and reliable operation of TWE, leading to increased maintenance costs and downtime.[5] At the fleet level, the proportion of assets beyond ESL must be managed to minimize TWE lifecycle costs.

Figure 3 below is based on Utilimarc's Fleet Lifecycle Study (see GSP Section 4.3, Attachment 2, page 14). The study projects that the average age of on-road assets will remain high exceeding 9 years, over the 2028-2032 period if current funding levels (Sustained Funding scenario) were maintained. In comparison, the average age of on-road assets among Hydro One's peers as seen in the Utilimarc Benchmarking report is 6.5 years. [6]

[5] Utilimarc's fleet lifecycle study (GSP Section 4.3 Attachment 2, p. 9)
[6] Utilimarc's 2024 Fleet Operations Benchmarking Report (GSP Section 4.3 Attachment 1, p. 20)

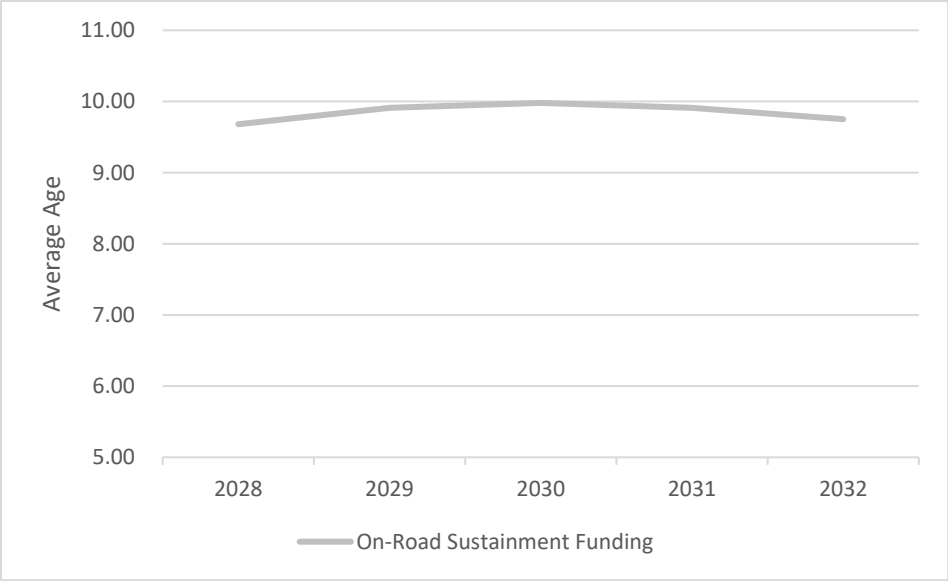

Figure 3: Average Age of the On-Road Fleet Over the Planning Period Under the Sustained Funding Scenario from Utilimarc's Fleet Lifecycle Study[7]

PERFORMANCE

Hydro One assesses the performance of its TWE assets by their availability to meet work demands. Fleet Services monitors the real-time availability of all work equipment to support this assessment process.

Maintenance, inspection and repair work on heavy and off-road equipment is completed in-house by Hydro One's specialized heavy-duty mechanics. This work is tracked to measure and minimize equipment downtime. For example, because of this additional monitoring and visibility, vehicles can quickly be redirected from a Hydro One garage that is at capacity to an alternate Hydro One garage that has repair capacity, leading to optimized garage space and reduced downtime. As a result, equipment availability is maximized to enable work programs that are essential to delivering reliable and safe service to customers. In 2025, the average monthly uptime of the heavy and off-road category was 92%, a performance level that has been sustained since 2020.

[7] Values are based on the Sustained Funding scenario presented of the Utilimarc Fleet Lifecycle Study (GSP Section 4.3 Attachment 2, p. 14)

Hydro One manages and sets equipment inventory levels based on staffing requirements, the composition and volume of work programs, geographic locations, utilization levels, and customer service commitments.

To maximize equipment availability and optimize fleet size and associated costs, Hydro One monitors TWE location and performance using a fleet telematics system,[8] and leverages operational insights from this system for performance optimization and alignment with work program needs. This approach mitigates the need to pursue other more costly options (e.g. short-term rental and new asset acquisition) to meet the evolving work requirements. In 2025, 57% of requests for additional, short-term equipment were satisfied by redeploying existing equipment instead of the more costly external rental option.[9]

Utilization metrics also provide important insight to assess Hydro One's TWE asset management efficiency. As illustrated in the 2024 Fleet Operation Benchmarking Report (see GSP Section 4.3 Attachment 1), only approximately 13% of Hydro One's vehicles are considered to be operating at low mileage levels, while the industry average is approximately 26%.[10] However, Hydro One's ability to effectively maximize usage of existing TWE, means fewer low mileage vehicles are available for redeployment to meet work program demands, increasing reliance on external rentals for short-term projects at a higher cost.

4.2.2.3 ASSET LIFECYCLE

Fleet manages its assets through acquisition, maintenance, replacement and disposition to provide safe and reliable TWE that is available when and where needed to support Transmission and Distribution work programs. As discussed below, preventative maintenance and service intervals help to reduce degradation of equipment and gather

[8] Fleet Management Services has implemented a telematics system for more than 4,700 fleet vehicles (on-road only) and 1,000 small off-road equipment. Through integrated telecommunications, GPS and informatics systems leveraging satellite and cellular data, telematics provides the location of vehicles and other key operational insights.
[9] Where required, external rentals are utilized for short term projects and work programs but have costs approximately 63% higher than owned equipment rates based on an internal assessment.
[10] Utilimarc, 2024 Fleet Operations Benchmarking Report – GSP Section 4.3 Attachment 1, p. 24.

asset data. Asset mechanical condition and maintenance history, as well as age, kilometres, engine hours and cost per kilometre, are the primary criteria used to determine replacement needs.

INSPECTION AND MAINTENANCE PROGRAM

Fleet has developed a balanced maintenance model to efficiently service and repair equipment and minimize downtime. Preventative maintenance and service intervals help to reduce degradation of equipment and maximize the life of the asset. Table 5 below summarizes the maintenance and service intervals for TWE.

Table 5 - Fleet Service Interval Guidelines (Transport and Work Equipment)

Equipment Type	Lube, Oil, Filter			Dry Services	Type of Work
	Km	Engine Hours	Months	Months	
Light	8,000	-	6 / 12	N/A	• Service • Annual Inspection
Light - dual wheels	-	200	6 / 12	3	• Service • Annual Inspection • Attachment Inspection
Heavy - Service Trucks, Compact Bucket trucks	-	200	6 / 12	3	• Service • Annual Inspection • Attachment Inspection
	Replace fuel filter at every oil change with OEM Filter				
Heavy – RBD and Bucket Trucks	-	250-500	12	3	• Service • Annual Inspection • Attachment Inspection
	Replace fuel filter at every oil change				
Miscellaneous	-	100-250	12	3-6	• Service • Annual Inspection • Attachment Inspection

Hydro One has over 35 maintenance hubs strategically positioned throughout the province (shown in Figure 4 below) to provide high-quality service and minimize response and travel time.

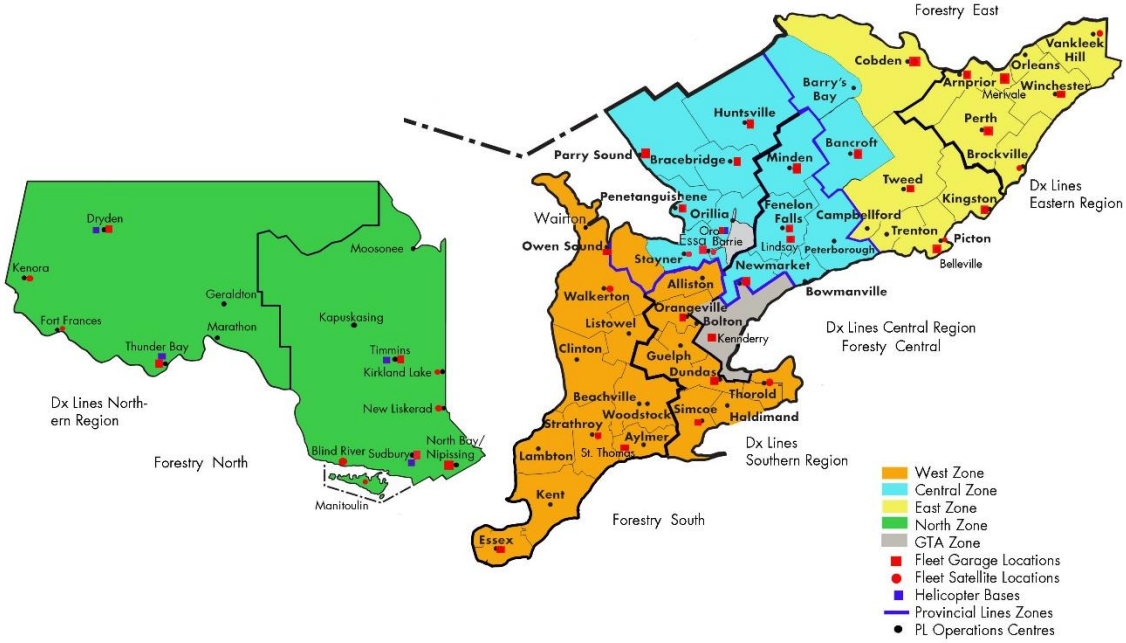

Figure 4: Map of Fleet Maintenance Hubs and Helicopter Hangars

Fleet Services employs specialized heavy-duty mechanics that inspect and repair heavy, off-road and miscellaneous equipment. Hydro One's skilled technicians and their service trucks provide timely on-site field support for various field work programs, such as vegetation control, new construction and off-road tower maintenance. As Motor Vehicle Inspection Stations licensed by the Ministry of Transportation, Hydro One's garages ensure that fleet vehicles are adequately maintained to ensure public and employee safety, and compliance with laws and regulations (including CSA 225, *the Highway Traffic Act, R.S.O. 1990, c. H.8*, and Commercial Vehicle Operator's Registration requirements).

For light duty vehicles, Hydro One outsources all inspections, services and repairs. This approach allows Hydro One technicians to focus on the inspection and repair of specialized hydraulic equipment. All external vendors must receive pre-approval from authorized personnel in Fleet Services prior to the commencement of any work.

As technicians monitor and assess the condition of TWE assets during inspections and routine maintenance, their findings are logged in the Garage Management System (GMS). Other information managed through the GMS includes internal labour, inventory levels, and warranty information.

Fleet Services is committed to improving the GMS, through product enhancements, technology upgrades, and system replacement. These changes will improve analytics, inventory management, work scheduling, and warranty management. The maintenance program provides visibility to repairs and equipment downtime, which assists in maximizing equipment availability and performance. Both internal and external service providers have access to relevant information through this automated management system, allowing for fact-based decision-making at all levels of the maintenance program.

ASSET REPLACEMENT AND REFURBISHMENT

As part of the process to determine possible candidates for replacement, Fleet Services completes annual asset reviews to identify assets that have reached their ESL in terms of age and mileage (including engine hours, where applicable). It also uses feedback from internal staff on vehicle performance. The lifecycles Hydro One uses to establish ESLs were validated in the 'Hydro One Fleet Investment Strategy Report' by Utilimarc in GSP Section 4.3 Attachment 4. Mechanical assessments are also performed by Hydro One's specialized technicians to determine if the asset needs to be replaced based on the costs to maintain or repair the unit. In addition, Fleet Services considers equipment downtime and reliability, operational needs, safety risk, and the procurement lead-time and availability of specialized equipment in making the final replacement decision.

4.2.3 AVIATION SERVICES

4.2.3.1 ASSET DESCRIPTION / PURPOSE

Helicopters are used by Distribution Lines, Forestry and Transmission Lines to inspect distribution and transmission lines, conduct line maintenance, support emergency restoration and to transport workers and materials to remote locations.

Figure 5: Helicopter

4.2.3.2 ASSET DEMOGRAPHICS, CONDITION AND PERFORMANCE

DEMOGRAPHICS

Hydro One has 10 helicopters. Table 6 provides the breakdown of the current demographics of Hydro One's helicopter assets. Annual flight hours and age are key considerations for helicopter demographics, as both metrics contribute to the maintenance and inspection requirements for these assets.

Table 6 - Demographics of Helicopters as of December 2025

Tail Number	Type of Aircraft	Age (Years)	Average Annual Flight Hours (2025)
C-GHOY, C-GHOD, C-GHON	AS 350B3	19, 18, 17	249
C-GHOQ, C-GHOZ, C-GHOU, C-GFHO, C-GHOA, C-GHHO, C-GZHO	AS 350B3e	7, 5, 4, 3, 3, 2, 2	372

CONDITION

Helicopter condition is not measured in the same way as the rest of the fleet due to the unique and strict maintenance schedule for replacement of the airframe components, engines and accessories, which are regulated and enforced by Transport Canada. The decision to replace aircraft is driven by the lifecycle of the aircraft between 14 to 20 years to reach the optimal costs as demonstrated in Utilimarc's Helicopter Lifecycle Analysis (see GSP Section 4.3 Attachment 3, page 5).

PERFORMANCE

The helicopter fleet is maintained according to strict inspection schedules dictated by the manufacturer and approved by Transport Canada. These inspections occur at specific flight hour intervals and ensure that the helicopters remain airworthy and available to support work program execution. Upcoming maintenance events are closely monitored and individual helicopters are rotated throughout the province to maximize availability. Furthermore, whenever possible, major maintenance inspections (e.g. after 600 flight hours) that take 4-6 weeks to complete are scheduled to occur during slower periods of programmed work (typically November through January).

4.2.3.3 ASSET LIFECYCLE

Aviation Services manages the lifecycle maintenance and replacement of its fleet based on compliance with the manufacturer's approved maintenance program and Transport Canada regulatory requirements. Individual helicopters undergo regular inspection cycles based on flight hours and calendar life. Each helicopter component also undergoes regular inspection based on the manufacturer's approved maintenance program. The helicopters also undergo a major inspection, teardown and rebuild every 12 calendar years.

INSPECTION AND MAINTENANCE PROGRAM

Aviation Services has structured its operations to efficiently support work requirements, with four remote locations in northern Ontario and a main operating and maintenance base in central Ontario, shown in Figure 4 above. All maintenance and operations activities are governed by federal regulations (Canadian Aviation Regulations), manufacturer's approved maintenance program, and oversight from the regulator on an annual basis.

In addition, service intervals for Hydro One's helicopters (based on flight hours) guide the inspection and maintenance for the airframe, hydraulic servos, main gearbox, tail gearbox, engine, engine modules and fuel controls. Complete refurbishment of the hydraulic servos, main gearbox, tail gearbox engine modules and fuel controls are also completed based on the flight hours or age of the unit. Inspection cycles run on a 30hr / 100hr / 150hr / 300hr / 600hr / 12-year cycle with varying degrees of maintenance work required at each milestone.

ASSET REPLACEMENT AND REFURBISHMENT

Helicopters are replaced on a case-by-case basis depending on age (as validated in the 'Hydro One Fleet Investment Strategy Report' by Utilimarc in GSP Section 4.3 Attachment 4), condition of the aircraft, and the cost of refurbishment. The strategy for the replacement of helicopters is designed to minimize the risks of equipment failure, emergency response time, work program repair time and costs, as well as environmental impacts.

The helicopter types and models chosen in the replacement program will be purpose-fit to support both current and future lines of business work activities. The current aircraft models (AS350/H125) are the most widely used single engine aircraft in Canada. The newest variant of this aircraft provides additional engine performance and enhanced safety features. For some of the low-level patrol work and evolving work program requirements, it is anticipated that a next generation twin engine helicopter will replace two of the single engine helicopters as described in GSP Section 4.11, G-GP-02, Subsection 3.0.

4.2.4 FACILITIES & REAL ESTATE

4.2.4.1 ASSET DESCRIPTION / PURPOSE

Facilities & Real Estate (FRE) is responsible for managing the facilities and property rights that enable safe and reliable electricity delivery across Ontario. This includes the stewardship of operations centres, administrative buildings, and grid operations buildings, as well as the acquisition and maintenance of right-of-way and land holdings necessary for transmission and distribution infrastructure.

FRE also supports capital projects and system growth by securing strategic property assets and ensuring compliance with building-related regulatory requirements and safety standards (for further details on facility-related legislation and regulation, see GSP Section 4.6.3.1).

By maintaining resilient facilities and enabling critical infrastructure corridors, FRE supports customer-focused system operations, outage restoration, and grid reliability.

The FRE portfolio includes 1,474 buildings at 529 sites across Ontario.[11] This portfolio supports the broadest operational footprint and largest customer base in Ontario. It supports safe and reliable delivery across Hydro One's transmission and distribution systems.

The sites and buildings are classified into two portfolios:

- **Transmission Facilities**[12]**:** These facilities are primarily located at Transmission Station (TS) sites and are part of a portfolio referred to as the "TS Facilities" portfolio. The TS Facilities portfolio includes control buildings, relay buildings, communications buildings, storage buildings, and other structures that shelter power system equipment or support the delivery of the transmission work program. These facilities house protection and control systems, relay equipment, communications infrastructure, batteries, backup power systems, and other sensitive electrical equipment necessary for the safe operation of transmission assets. They provide safe and productive working environments for employees and support the reliable operation of the transmission system. Approximately 74% of the buildings in the FRE portfolio are located within TSs.
- **Operating and Administrative Facilities (OC Admin)**[13]**:** This portfolio has two sub-categories:

[11] This is in addition to approximately 220,000 acres of Hydro One corridors, stations, and lands.
[12] Investments pertaining to the TS Facilities portfolio are addressed in GSP Section 4.11 G-GP-04.
[13] Investments pertaining to the OC Admin Facility portfolio are addressed in GSP Section 4.11 G-GP-03.

- **Operating Centre (OC) Facilities:** These sites act as central dispatch locations, field work centres, and storm response locations for distribution lines, forestry, and fleet support crews. These facilities contain smaller office and meeting rooms, shops and/or garages, storage areas, and material yard spaces for Hydro One resources. They enable day-to-day business operations, outage and customer response, workforce deployment and training, and administrative functions necessary to support Hydro One's operations.
- **Special Purpose and Administration Facilities:** These facilities support efficient operations at Hydro One. They include grid control centres, training and development campuses, fleet maintenance and repair garages, warehouses, helicopter hangars, and office buildings.

4.2.4.2 ASSET DEMOGRAPHICS AND CONDITION

Table 7 below outlines the number of facilities within the TS Facilities and OC Admin portfolios. A "site" refers to a distinct geographic location or property, while "buildings" refers to the individual structures located within each site. A single site may contain multiple buildings.

Table 7 - Sites and Buildings by Asset Class

Asset Class	Sites	Buildings
TS Facilities	371 (70%)	1,085 (74%)
OC Admin	158 (30%)	389 (26%)
Portfolio	**529**	**1,474**

OWNERSHIP

Hydro One has facilities with different types of occupancy tenure. While most of the portfolio is owned – especially within the TS Facilities asset class – some OC Admin facilities are leased. As further discussed, in GSP Section 4.7.2.3.3, ownership offers advantages for certain FRE assets, depending on the nature of the facility. Ownership is generally advantageous for facilities that support core operations and for special purpose facilities where business continuity and operational control are of greater importance. Conversely, leasing may be appropriate for office facilities in markets with sufficient depth

to allow for flexibility. Table 8 below sets out the ownership tenure of facilities within the TS Facilities and OC Admin portfolios.

Table 8 - Number of Sites by Ownership Tenure

Asset Class	Owned	Leased	Other[14]
TS Facilities	307 (58%)	6 (1%)	58 (11%)
OC Admin	115 (22%)	41 (8%)	2 (<1%)
Portfolio	**422 (80%)**	**47 (9%)**	**60 (11%)**

SQUARE FOOTAGE

Across Ontario, Hydro One manages over 5 million square feet of buildings. While there are more buildings in the TS Facilities portfolio, the building footprint of FRE's portfolio is split nearly evenly between the TS Facilities and OC Admin portfolios.

The TS Facilities portfolio primarily consists of buildings used for operations and storage associated with Hydro One's transmission systems, such as equipment shelters and warehouses that support the transmission work program. By contrast, the OC Admin portfolio includes more varied uses, including administrative functions (e.g., office space), as well as specialized operational functions (e.g., shops, garages, and locker rooms). Table 9 below presents the rentable square footage within the TS Facilities and OC Admin portfolios.

Table 9 - Square Footage

Asset Class	Rentable Square Footage (RSF)[15]
TS Facilities	2.80M sq. ft (51%)
OC Admin	2.67M sq. ft (49%)
Portfolio	**5.47M sq. ft**

[14] The "Other" category primarily refers to sites where Hydro One has split ownership and capital responsibility with another entity such as another distributor or generator, typically by virtue of legacy arrangements.

[15] Rentable Square Footage (RSF) is an industry standard metric that represents the total area of space used for reporting and analytics purposes. RSF is not a perfect indicator of actual usable space, since it incorporates shared building areas and may include structural elements, mechanical shafts, and walls. The useable square footage available exclusively for operations and occupants can be up to 15% less than the RSF.

STAFF AND HEADCOUNT

Hydro One employs approximately 9,500 employees as of 2025. Over 95% of Hydro One employees are office or field-based workers that require facilities to conduct work safely and efficiently. The majority of Hydro One staff report to an OC Admin site on a regular basis. Table 10 details the number of staff permanently reporting to facilities within the TS Facilities and OC Admin portfolios.

Table 10 - Number of Employees Reporting per Facility Asset Class

Asset Class	Number of Employees
TS Facilities	~2000 (21%)
OC Admin	~7500 (79%)
Portfolio	**~9500**

GEOGRAPHIC FOOTPRINT AND OPERATING TERRITORY

Hydro One operates one of the largest geographic service territories in North America, with a majority of rural and remote customers in Ontario being serviced by Hydro One. Given the dispersed nature of its customer base, Hydro One requires more OC Admin facilities than peer utilities to maintain comparable service levels, including emergency response times.

Hydro One leverages spatial analytics methods to optimize the siting of OC Admin facilities, balancing customer needs and operational efficiency with cost. The average Hydro One customer is 27 minutes from their nearest staffed OC under ideal conditions. However, for Hydro One's more remote distribution territories (e.g., Kenora, Dryden, Fort Frances, Ear Falls, Nipigon, Geraldton, Marathon, Chapleau, and Kapuskasing), the nearest and second-nearest facilities are 54 minutes and 144 minutes away, respectively, under ideal conditions.

This assessment highlights that northern and remote communities are highly dependent on a single OC facility for emergency response and outage restoration activities, and that Hydro One does not operate redundant OC facilities in northern and remote areas of Ontario.

Figure 6 and Figure 7 below detail the location of Hydro One's core OC facilities in Northern and Southern Ontario.

Figure 6: Operations Centres in Northern Ontario

Figure 7: Operations Centres in Southern Ontario

VALUE

Asset Replacement Value (ARV) is a standard metric in asset management and financial planning that represents an approximate estimate of the direct, present-day cost to replace an asset with a like-for-like component.[16] ARV provides useful context for assessing the approximate value of the portfolio, and is an input for key performance indicators such as the Facility Condition Index (FCI), a metric related to building condition described below. Table 11 below details the ARV of facilities within the TS Facilities and OC Admin portfolios.

Table 11 - Asset Replacement Value

Asset Class	Asset Replacement Value (ARV)
TS Facilities	$1,592M (61%)
OC Admin	$1,036M (39%)
Portfolio	**$2,628M**

DEMOGRAPHICS

The following sections provide demographic indicators for the portfolio including age, and condition.

AGE

While a building's condition is the key input for capital planning decisions, building components have lifecycles that may give rise to needed investments. Older buildings approaching the end of their lifecycle generally require structural investments that can render them cost-prohibitive to repair. Major components like the roof and HVAC systems are expected to be replaced every 15-20 years.

Figure 8 below provides the distribution of building age in the FRE portfolio.

[16] Because ARV is intended to provide an approximate estimate and is not exhaustive in the elements it considers, it is one of the many inputs that inform Hydro One's capital planning. For example, ARV excludes soft costs (e.g., design, permitting, engineering, and testing), does not account for code compliance or performance standards, and may not reflect external factors - such as market-driven cost escalations - that can impact investment levels.

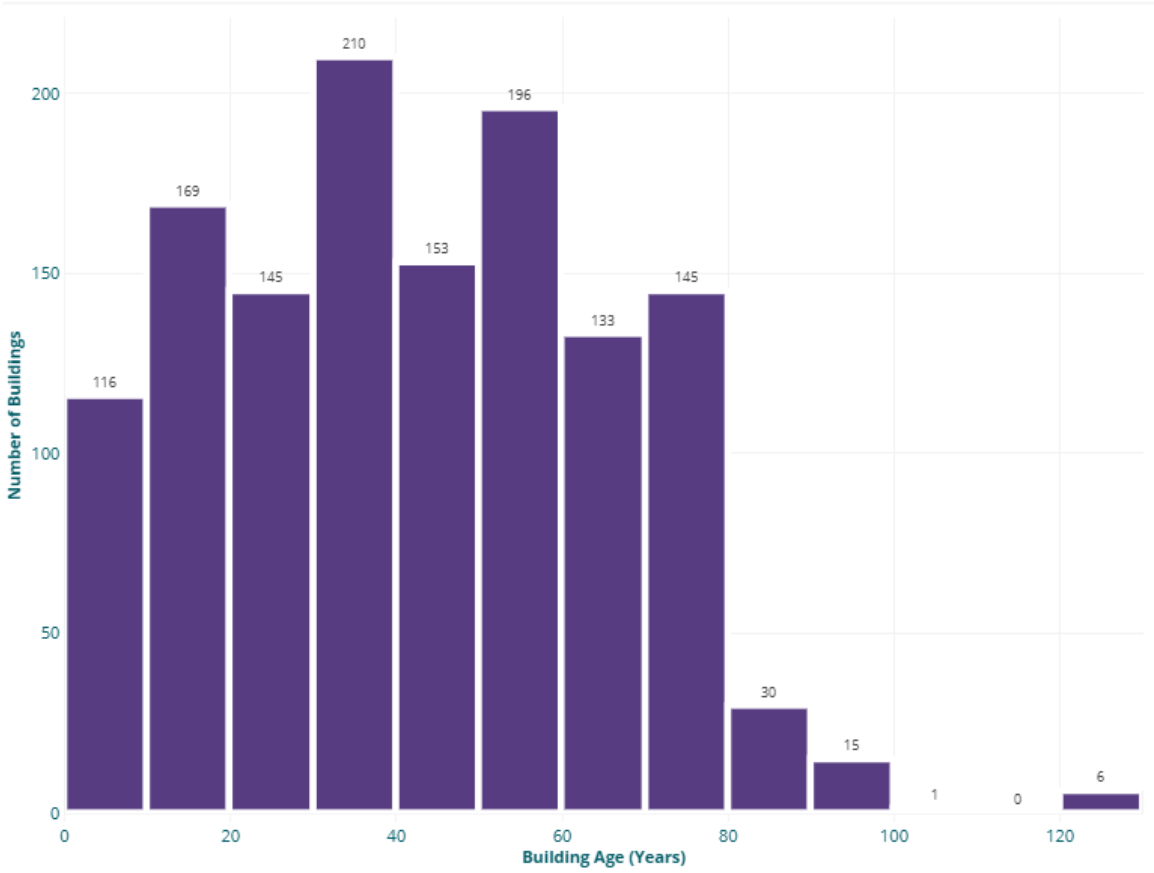

Figure 8: Age of Buildings

The age profile of the portfolio indicates an aging asset base. The majority of buildings are decades old, with substantial concentrations in the 30 to 80-year range and a notable number exceeding 50 years of age. This suggests an increased likelihood of lifecycle renewal, modernization, and maintenance requirements.

CONDITION

The condition of buildings and their components are a key input in Hydro One's capital planning. As condition deteriorates, Hydro One’s facilities experience an increasing risk of component failures, higher maintenance and break-fix costs, reduced functionality, and growing renewal requirements. To assess building condition, Hydro One relies primarily on Building Condition Assessments (BCAs), described below.

Inspections and Assessments - Building Condition Assessments (BCAs)

Hydro One uses BCAs as its primary tool for evaluating the condition of building components. A BCA is an industry-standardized assessment performed by an accredited professional that provides a comprehensive evaluation of building and site condition. BCAs form the foundation for data-driven decision making, asset inventorying, and work prioritization. Once the BCA is completed, an FCI score can be determined based on its findings (see section below, *Facility Condition Index*).

To this end, Hydro One engaged Jones Lang Lasalle (JLL) to perform an independent assessment of the rigour of Hydro One's BCAs (see GSP Section 4.3 Attachment 5). JLL concluded that the BCA program is professionally executed, is carried out in a manner consistent with industry standards[17], and provides Hydro One with consistent building condition data across the majority of the portfolio. JLL expressed a high degree of confidence in the quality and reliability of the assessment process employed by Hydro One's consultants, and concluded that the reports provide a sound technical foundation for understanding Hydro One's building conditions and capital needs.

BCAs include a full asset inventory of all buildings at a subject site, documenting the type, age, performance, and condition of building components such as substructure, superstructure, exterior walls, roofing, HVAC, interior finishes, and siteworks. These components are classified by the building systems according to the Uniformat® building construction specification. They also document a range of conditions, including environmental issues such as mold or water treatment upgrades, space constraints, and security and safety concerns.

Hydro One commissions BCAs on a rolling basis to ensure accurate, consistent, and current condition data across Hydro One's FRE portfolio. Hydro One has completed BCAs

[17] American Standard for Testing and Materials (ASTM), E2018-24 Standard Guide for Property Condition Assessments: Baseline Property Condition Assessment Process.

on 90% of the serviceable[18] portfolio, up from 55% in 2023. Table 12 describes the coverage and age of BCAs that have been conducted within the TS and OC Admin portfolios.

Table 12 - BCA Completion

Asset Class	# of BCA's Completed (Sites)	Average BCA Age[19]
TS Facilities	312 (88%)	2.6 years
OC Admin	123 (96%)	3.3 years
Portfolio	**435 (90%)**	**2.8 years**

In addition to BCAs, Hydro One relies on a range of specialized inspections assessments to strengthen its understanding of the condition of building components, and to further inform its capital planning. Notably, Hydro One conducts specialized assessments or inspections in respect of potential HVAC, roofing, structural work, drainage, utility infrastructure, and generator systems. For example, Roof Condition Reports or Designated Substance Surveys may be undertaken to evaluate major capital building elements. The outcomes of these assessments can significantly affect the work plan (e.g., the presence of designated substances may substantially increase the cost of a building envelope repair project). Hydro One integrates these results into its FRE investment planning process.

FRE's planning is also supported by monthly inspections and Virtual Location Surveys, which provide 3D and photographic views of facilities. These digital tools enable cost-effective validation of condition data and support effective capital planning and delivery. Facility management personnel also use these tools to maintain operational awareness and reduce the need for site travel to verify basic information. These tools enhance Hydro One's ability to make informed, data-driven capital decisions.

[18] Serviceable sites refer to a site (i) with at least 1 building, and (ii) where Hydro One has capital responsibility for managing base building components. Hydro One has deprioritized completing BCAs for sites with no buildings or where Hydro One has limited capital responsibility for managing base building components. The OC Admin portfolio has 128 serviceable sites, and TS Facilities portfolio has 354 serviceable sites.
[19] As of December 31, 2025.

In addition to expanding its BCA coverage, Hydro One has enhanced its inspection and assessment process by incorporating the outputs into technology and data-driven analytics tools. Hydro One's improved understanding of the condition and performance of major building and site components has enabled it to more precisely define the work needed at each facility to address critical deficiencies, and has enhanced FRE portfolio intelligence, capital planning, and execution.

Facility Condition Index (FCI)

FCI is an industry-recognized[20] asset management metric used to quantify high-level building condition and investment need based on validated condition assessment information; including currently identified deficiencies (0-Year FCI) and deficiencies expected to emerge within the next five years based on observed asset condition and assessor forecasts (5-Year FCI). FCI produces a percentage score, with higher values indicating a greater proportion of deficiencies and poorer overall condition, and is categorized as Excellent, Good, Fair, or Poor based on established thresholds. Hydro One interprets FCI alongside risk, criticality, and other asset management considerations.

FCI is calculated by dividing the value of components in a state of deferred replacement or deficiency, by ARV, within a specified period, of the relevant building components. All components subject to FCI calculation are assessed as part of a condition inspection or evaluation, such as a BCA. The formulas for each metric are as follows:

$$0\ Year\ FCI\ (\%) = \frac{Total\ Value\ of\ Capital\ Deficiencies\ (\$)}{Asset\ Replacement\ Value\ (ARV)(\$)} * 100$$

$$5\ Year\ FCI\ (\%) = \frac{Total\ Value\ of\ Deficencies\ (\$) + 5yr\ Future\ Expected\ Deficiencies\ (\$)}{Asset\ Replacement\ Value\ (ARV)(\$)} * 100$$

[20] The use of FCI as an indicator was first published in 1991 by the National Association of College and University Business Officers (NACUBO). Today, academic journals published globally (e.g., International Journal of Strategic Property Management) further reinforce the credibility of FCI. The Association of Physical Plant Administrators (APPA) and the National Research Council (NRC) both reference FCI, and many public institutions, including federal, provincial and municipal governments globally publish FCI as part of their asset management reporting for buildings and facilities.

The 0-Year FCI provides a snapshot of a component's condition based on current condition data, without forward-looking forecasts of future deterioration. As a result, it provides a clear view of the current capital deficiencies and deferred investment requirements. The 5-Year FCI is based on observed deficiencies as well, but it also accounts for expected deterioration in the absence of investment within the next five years.

FCI scores, when aggregated to a building or portfolio, can be categorized into the following condition thresholds:

a) **Excellent**: Facilities are new or near new and well-maintained needing minor routine maintenance only;
b) **Good**: Facilities are in a state-of-good-repair, building systems are in working order with minor deferred maintenance accumulating;
c) **Fair**: Meaningful deferred maintenance backlog with multiple major building systems approaching end of life; and
d) **Poor**: Major building systems failing or near-failed, requiring significant deferred maintenance backlog with frequent emergency repairs.

The specific numeric thresholds for each condition category are different for the 0-Year FCI and 5-Year FCI metrics. For example, the "Poor" condition threshold is 10% for the 0-Year FCI and 35% for the 5-Year FCI. Figure 9 and 10 below describe the established condition thresholds in connection with the Hydro One portfolio's 0-year and 5-year FCI, respectively.

Figure 9: 0-Year FCI of Hydro One's Portfolio

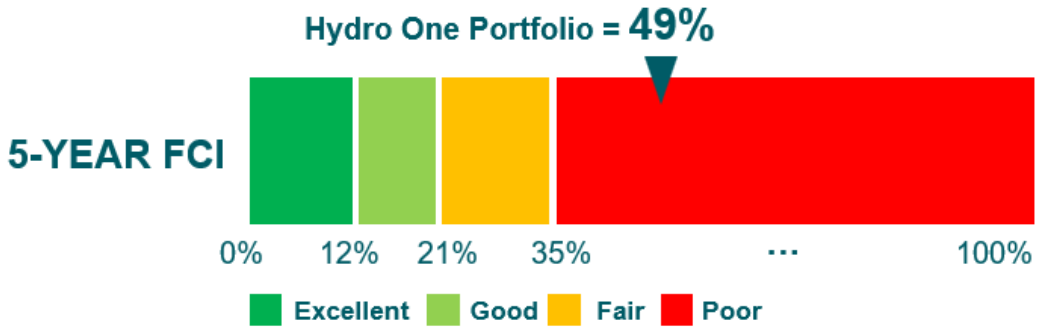

Figure 10: 5-Year FCI of Hydro One's Portfolio

Consistent with Figure 9 and 10, Table 13 below shows that the portfolio's current 0-Year FCI score as of 2025 and the expected FCI score by 2030 without investment. Currently, approximately 14% of the portfolio's total ARV corresponds to assets that require refurbishment or replacement based on observed deficiencies identified through BCAs. This is above the "poor" threshold of 10% for the 0-Year FCI. Without intervention, approximately 49% of the portfolio is expected to require refurbishment or replacement by 2030.[21] This is above the "poor" threshold of 35% for the 5-Year FCI. This outcome is not acceptable because it would result in a substantial increase in deteriorated facility assets, increasing the likelihood of asset failures, operational disruptions, health and safety risks. Hydro One's proposed investments are intended to mitigate these risks by addressing the highest-priority deficiencies before failures occur.

Table 13 - Facility Condition Index (FCI) of FRE Portfolio[22]

Scenario	Asset Replacement Value (ARV) % of Total Portfolio	Overall Portfolio Condition
Current State (i.e. 0-year FCI)	14% of the portfolio requires replacement or refurbishment	Poor
Future State 2030 without investment (i.e. 5-year FCI)	49% of the portfolio requires replacement or refurbishment	Poor

[21] In accordance with widely adopted methodology, Hydro One employs a five-year outlook to building component deterioration, using condition data as of 2025.
[22] This includes the OC Admin and the TS Facility portfolios.

Buildings in Poor Condition

In addition to using FCI to assess the overall condition of the FRE portfolio, Hydro One also applies this metric to assess the overall condition of its buildings. Table 14 indicates the number of buildings that are currently in poor condition, and that are expected to be in poor condition by 2032. Table 15 provides the same information for high-criticality buildings. A building's criticality reflects its operational importance, including the impact that would ensue if the building were to fail. High criticality buildings are those where failure or prolonged unavailability would have significant consequences for business operations, the provision of distribution and transmission service, employee safety, or customer service. Failure or prolonged unavailability of these facilities can significantly impair business continuity, operational effectiveness, customer response, and the safety of Hydro One employees.

Table 14 - Number of FRE Buildings in Poor Condition

Scenario	Buildings in Poor Condition
Current State (i.e. 0-year FCI)	530 (approx. 36% of portfolio)
Future State 2030 without investment	832 (approx. 56% of portfolio)

Table 15 - Number of High Criticality FRE Buildings in Poor Condition

Scenario	High Criticality Buildings in Poor Condition
Current State (i.e. 0-year FCI)	238 (approx. 34% of total high criticality buildings)
Future State 2030 without investment	378 (approx. 54% of total high criticality buildings)

GSP Section 4.11 G-GP-03 and G-GP-04, Subsections 2.2 describe the expected number of buildings in each of the OC Admin and TS Facility portfolios across different investment levels.

Condition and Reliability Performance

Regions that are served by operations centre sites in better condition can support Hydro One's response to trouble calls and storm events due to the practical impacts that facility condition has on operational effectiveness. Aging or deteriorated fleet garages can constrain vehicle dispatch during storm events; deteriorated electrical or backup power systems can disrupt communications or delay mobilization; and deficient building systems

(e.g., HVAC, lighting, generators) can impact crew readiness and coordination. Envelope failures and unreliable building systems can introduce unplanned disruptions that reduce overall workforce responsiveness.

Facility condition also affects transmission system performance. Since 2018, eight major transmission outages have been at least partially attributable to FRE asset failures involving poor condition building envelopes. While some of these events were compounded by severe weather, improving the condition of these buildings and their components will make them more resilient and should reduce the frequency and severity of such outages in the future. For more discussion on FRE investment plans at TS Facilities to target climate adaptation and resilience, see GSP Section 4.11 G-GP-04, Subsection 3.3, *Compliance and Governance*.

4.2.4.3 ASSET LIFECYCLE

FRE's asset lifecycle management approach integrates inspection programs, condition assessments, and risk-based prioritization to inform maintenance and capital investment decisions. The subsections below describe (i) Hydro One's maintenance practices, and (ii) asset replacement practices, including how investment decisions are based on Hydro One's risk-based framework.

Maintenance Practices

Hydro One's facilities maintenance program is supported by preventative maintenance programs and BCAs at planned intervals (see description of BCAs above in section 4.2.4.2). Hydro One also carries out preventive and corrective maintenance through practices to help ensure facility assets are in acceptable operational condition, prevent equipment failure, and reduce health and safety risks.

Hydro One conducts visual inspections at all facilities to monitor and optimize asset performance. Inspection frequencies vary based on the component: each facility and its major sub-systems (e.g., lighting, fire extinguishers, spill kits, eye wash stations, first aid kits, and fences) are inspected monthly, while the building envelope, site, fire systems, building auxiliary systems, sewage system, roof, and foundation and floor pads are

inspected less frequently (typically, quarterly or annually). In addition to regularly scheduled inspections, Hydro One may carry out additional inspections following events such as storms, fires, vandalism, or other notable incidents.

The results from preventative maintenance and BCAs may trigger corrective maintenance, or sustainment investment for a building component renewal or replacement. The level of corrective maintenance performed at each site depends on a combination of factors, including the operational impact of not conducting the work, and whether the site is owned or leased, the remaining estimated life of the asset, future operational requirements, and other investment priorities.

Asset Replacement

Candidate renewal or replacement investments are informed by condition assessments and evaluations, work order data, and field manager insights. For Hydro One's leased facilities, some of the burden of capital repairs and/or replacements resides with the lessor, other than those specific to Hydro One's operations, such as tenant improvements. A building component becomes a candidate for replacement when its Condition-Adjusted Life Remaining (CALR) reaches zero or becomes negative. Hydro One determines a component's CALR based on the age and condition of the assets, as described in section 4.7.2.3.1. Hydro One also considers other factors such as the extent to which the asset complies with regulatory requirements and standards and aligns with Hydro One's policy objectives such as sustainability, as described in section GSP 4.6.5.2. These considerations apply primarily to owned facilities. Further details on these considerations and the process of prioritizing investments are discussed in GSP Section 4.7.2.3.2.

For leased facilities, Hydro One generally does not have responsibility for capital repairs and replacements under the terms of its leases; rather, responsibility for base building components typically resides with the lessor. Hydro One's capital responsibility for leased facilities is generally limited to tenant improvements specific to its operations.

As further detailed discussion of this framework is provided in GSP Section 4.7.2.3, FRE applies a risk-based asset management framework to inform and prioritize investment

decisions. The framework evaluates risk using two primary dimensions: (i) the probability of failure, which considers the condition and condition-adjusted useful life of each building component; and (ii) the impact of failure, which considers the criticality of both the building and the component to operational continuity, safety, and grid reliability. Each dimension is scored on a scale of 1 to 5, and the two scores are multiplied to produce an overall risk score out of 25. This score is then classified as high, medium, or low risk, enabling data-driven capital planning decisions.

High-risk deficiencies involve components with both high probability and high impact of failure, such as building envelopes, HVAC systems, and fire and life safety components. Medium-risk deficiencies include siteworks, fencing, and drainage systems, where failure may cause flooding or security concerns. Low-risk deficiencies, such as interior finishes, have limited operational impact but may require attention for health and safety reasons.

Figure 11 below quantifies the dollar value of the deficiencies within the FRE portfolio by their risk classification, absent of funding.

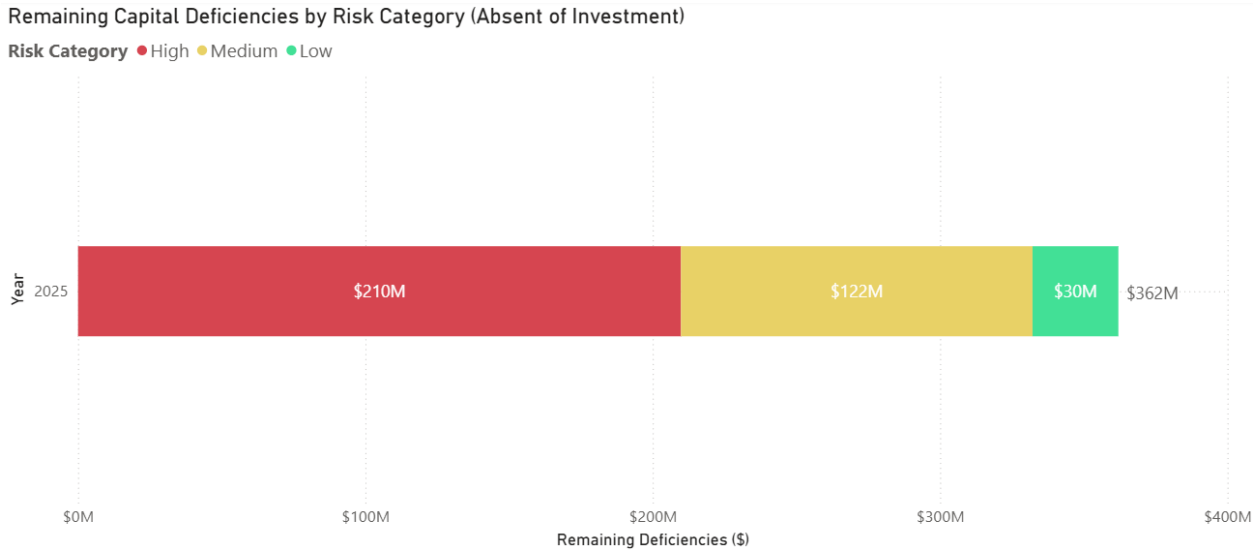

Figure 11: Value of FRE Deficiencies (2025) by Risk Level ($M)

For portfolio-specific breakdowns of the risk classification of deficiencies over the future rate period, refer to GSP Section 4.11 G-GP-03 (OC Admin Facilities) and G-GP-04 (TS

Facilities), Subsections 2.3. As discussed, the population of high-risk deficiencies are expected to exponentially increase in the absence of increased investment levels.

4.2.5 DIGITAL & TECHNOLOGY SOLUTIONS

4.2.5.1 TECHNOLOGY ASSETS AND CLOUD SERVICES OVERVIEW

Digital & Technology Solutions (DTS) is accountable for Information Technology (IT), Operating Technology (OT) and Security technologies enabling Hydro One's Transmission and Distribution businesses to effectively perform day-to-day operations and meet customer service obligations. These technologies can be traditionally owned technology assets (e.g., physical hardware and on-premises applications), or subscription-based cloud technologies.

IT Systems

Information Technology (IT) Systems are technologies comprised of enterprise applications, platforms, and end-user technologies that enable Hydro One employees and business units to perform their functions efficiently, consistently, and in alignment with regulatory and corporate requirements. These systems support core business processes and cross-business capabilities, including customer service and billing, finance, supply chain, workforce management, asset management, and corporate administration.

The IT application landscape managed by DTS spans a broad range of technologies with differing scale, complexity, and usage profiles. At one end of the spectrum are enterprise platforms—such as ServiceNow—that support multiple lines of business and have a user base that spans the entire organization. These platforms may house common information that is utilized across business, with specific add-on modules that enable unique capabilities required. At the other end are specialized applications that support specific business functions or localized use cases with more limited user communities. In addition to software applications, IT Systems also include the underlying infrastructure and end-user technologies required to support these capabilities, such as servers, data storage, networks, and employee hardware (e.g., laptops and mobile devices). These assets are delivered through a mix of on-premises environments and cloud-based

solutions, reflecting differences in functionality, security requirements, and lifecycle considerations.

OT Systems

Operating Technology (OT) Systems are comprised of specialized technologies, applications, and infrastructure that enable the real-time monitoring, control, and operation of Hydro One's transmission and distribution power network. These systems support control centre operations, outage response and restoration, and the safe operation of grid assets across Ontario. OT Systems include both software and hardware components, ranging from control systems and operational applications to the supporting computing, networking, and communication infrastructure required to maintain continuous, reliable operations.

OT investments are subject to heightened requirements related to system availability, resilience, and cybersecurity, as well as compliance with mandatory standards and obligations, including NERC reliability and cybersecurity requirements and applicable OEB codes.

Security Systems

Security systems comprise the physical security, cybersecurity, personnel security, and supporting technologies used to protect Hydro One's employees, facilities, information, and operational environments. These systems support the secure and reliable operation of Hydro One's Transmission and Distribution businesses, including the Information Technology and Operational Technology environments that enable business and grid operations.

Physical security technologies support functions such as access control, surveillance, intrusion detection, perimeter protection, security communications, and centralized monitoring. Cybersecurity technologies support functions such as identity and access management, network and endpoint protection, security monitoring, threat detection and response, data protection, governance, and recovery. These technologies operate as

coordinated layers of protection and are supported by associated computing, communications, platform, and data services.

Security systems are managed having regard to the criticality of the facilities, systems, information, and business or operational functions they protect. The required level of protection varies based on applicable regulatory obligations, operational requirements, security risk, and the potential consequences of a loss or compromise. Hydro One's security systems support compliance with applicable North American Electric Reliability Corporation Critical Infrastructure Protection (NERC CIP) requirements, the Ontario Energy Board's Ontario Cyber Security Framework (OCSF), and other corporate and regulatory security obligations.

Information is presented at a portfolio and capability level. Facility-specific assessments, system architecture, deployment locations, technical configurations, asset quantities, control coverage, identified vulnerabilities, implementation designs, and other security-sensitive information are addressed, where appropriate, in the associated confidential evidence. Additional public information regarding Hydro One's planned physical security, cybersecurity, and enterprise security platform investments is provided in GSP Section 4.11, G-GP-10, G-GP-11, and G-GP-30.

4.2.5.2 ASSET DEMOGRAPHICS AND PERFORMANCE DEMOGRAPHICS

<u>IT Systems</u>

As mentioned in the Overview section of this document, IT Systems are comprised of both tightly integrated or standalone applications, but also their underlying infrastructure and end-user technologies, such as servers, data storage, networks, and employee hardware (e.g., laptops and mobile devices). This section will describe these systems as *IT Applications* and *IT Minor Fixed Assets (MFA)*.

IT Applications

Digital & Technology Solutions (DTS) manages a large and diverse IT application portfolio, consisting of over 500 applications that collectively support Hydro One's enterprise

operations, customer services, and regulatory obligations. These applications vary significantly in scale, complexity, and usage profile, ranging from enterprise-wide platforms that are critical to core business functions to more specialized applications that support localized or niche business processes.

Current application demographics indicate a growing concentration of aging assets within the portfolio. As of December 31, 2025, approximately 65% of IT applications have not undergone a major upgrade within the past four years, signaling increasing exposure to risks associated with aging technologies, including reduced vendor supportability, higher maintenance effort, and heightened cybersecurity vulnerability. In parallel, approximately 40% of applications have identified end of life (i.e. end of standard vendor support), being reached in the 2028-2032 rate period, reinforcing the need for systematic and proactive lifecycle investment planning.

One of Hydro One's most critical applications is its SAP Enterprise Resource Planning (ERP) software suite. Enterprise applications are large, complex systems that are used for core business functions, and make up most of the application architectural landscape. SAP is a central application that is used throughout the company with different modules supporting the management of assets (including their condition), investments, projects and work programs, inventory and warehousing, supply chain management, finance, time reporting, human resources, customer information and relationships, and customer billing. GSP Section 4.11 G-GP-29 presents the ongoing SAP S4/HANA transformation and additional large SAP application related investments.

Another example of a critical application managed by Digital & Technology Solutions is the enterprise Geographic Information System (GIS) system utilizing the ESRI solution. This system provides the geospatial connectivity view for the Transmission and Distribution network, which is used by many work processes and acts as the backbone for the Distribution Management System.

With respect to customer service focused technologies, Digital & Technology Solutions manages the Genesys technology platform that is the essential workforce management

and work routing engine for the Hydro One contact centres. It allows Hydro One to forecast, schedule and manage staff, as well as ingest, route and report on customer-focused work from its SAP, email, telephone and website platforms. This allows Customer Service staff to respond to customer requests in a timely manner and ensures that Hydro One is managing work in a responsible and balanced fashion. Genesys is a core platform that will be leveraged for the rest of the enterprise for similar work functions in the future.

IT Minor Fixed Assets

Hydro One's IT Minor Fixed Assets (MFA) program accounts for the hardware and IT equipment that support the continued operation of Hydro One's technology systems, which in turn serve the company's business operations and customers. The MFA program includes (i) core assets, such as data center servers and computers, as well as (ii) business telecom equipment, which transmits voice and business data required for the company to run business applications. This includes the network to connect end users to the various applications running from data centers. Additional description of these assets is found in GSP Section 4.11 G-GP-05. A summary of the key hardware categorized within MFA is shown in Table 16 below.

Table 16 - Key IT Minor Fixed Assets as of December 31, 2025

Category	Description	Quantity	Average Age (Years)	Typical Refresh Cycle (Years)*
IT Core Assets	Enterprise Physical Servers	196	2.0	5
	Virtual Servers	3,546	NA**	NA**
	Enterprise Data Storage (TB)	4,922	2.0	NA***
	Client PC (Desktop and Laptop)	8,811	2.2	4
	Tablets	1,031	2.2	4
	Printers and Plotters	801	7.4	5-10****
IT Business Telecom Assets	Network Routers	174	5.3	5
	Network Switches	768	6.5	5
	Firewalls	31	4.7	5
	UPS Systems	257	5.6	7*****
	Wireless Access Points	959	4.7	5
	Load Balancers	19	1.2	5

**Refresh values represent typical planning assumptions based on vendor lifecycle guidance. Actual replacement timing is determined by vendor support timelines, asset condition and operational requirements.*
*** Virtual servers operate on shared host infrastructure; lifecycle is governed by the underlying physical server infrastructure.*
**** Storage platform lifecycle is driven by vendor support timelines and evolving capacity and performance requirements rather than asset age.*
***** Printer and plotter refresh timing is influenced by elements such as usage levels, device condition, and vendor support availability rather than a fixed lifecycle.*
****** UPS systems are typically replaced on an approximately seven-year cycle, with battery components replaced mid-cycle as required based on condition and performance*

Over the 2023–2027 rate period, IT Minor Fixed Assets for end-user computing remained broadly stable, with total deployed desktops, laptops, and tablets declining modestly over the period. The asset mix has shifted, with fixed desktop workstations reduced significantly and laptops becoming the dominant end-user device, reflecting sustained hybrid work practices, office footprint optimization, and continued standardization of end-user configurations. Tablet deployments also declined as several use cases were consolidated into laptop-centric solutions or transitioned to alternative mobile arrangements. Despite these shifts, average device ages as of 2025 remain within established planning assumptions, indicating ongoing lifecycle renewal rather than deferred replacement. Looking ahead to the 2028-2032 rate period, end-user device counts are expected to

increase modestly, aligning with Hydro One's proposed workforce additions, while continuing to favor a predominantly laptop-based, standardized computing environment.

In parallel, the number of printers and plotters declined materially, reflecting lower dependency on physical printing as hybrid work practices and digitized workflows became more entrenched. The printer and plotter fleet has reduced by more than one-third, and as the reliance on physical media has reduced, Hydro One maintains the residual print fleet on a "as-required" basis, rather than a broad-based refresh requirement. While overall reliance on printing has declined, specific operational use cases - particularly outage response and storm restoration - continue to require dependable printing and plotting capabilities, and these assets are managed as operationally critical infrastructure where required. These same rationalization trends are expected to persist through the 2028-2032 rate period. Printer assets are expected to continue to represent a smaller, stable portion of IT MFA, focused on essential use cases rather than widespread deployment.

The number of enterprise physical servers declined significantly over the existing rate period as workloads were consolidated through virtualization and hypervisor technologies. Physical servers were reduced by more than 60%, while the average age of remaining hosts has improved, indicating a newer and more standardized residual platform. Virtual server instances now represent a substantial portion of deployed compute capacity. Consistent with industry practice, virtual servers are not tracked individually as minor fixed assets, as their lifecycle is governed by the underlying physical host infrastructure rather than discrete virtual instances. As such, age is not applicable at the virtual server level and infrastructure renewal is driven primarily by host lifecycle planning.

Through the 2028-2032 rate period, enterprise compute demographics are expected to remain aligned with this model. Physical server counts are not expected to return to prior levels, with future investment focused on periodic renewal of a smaller number of high-capacity host platforms. Overall, server-related IT MFA expenditures are expected to reflect lifecycle replacement of foundational infrastructure supporting virtualized environments, rather than growth in physical asset counts.

OT Systems

As with IT systems, OT systems are comprised of both applications and the associated foundational infrastructure that supports those applications referred to as “Common Operating Technology Infrastructure” (COTI). OT Systems are managed separately from IT Systems and are required for critical network operating systems that are used to monitor and control the Bulk Electric System (BES). OT Systems are managed to meet the 24/7 reliability and cybersecurity needs of the system operations control room. This section will describe these systems as OT Applications and COTI.

OT Applications

As with the IT applications described above, Hydro One relies on a set of OT applications that directly support the real-time monitoring, control, and safe operation of the transmission and distribution system. These applications underpin control room operations, field automation, and grid visibility, and are tightly integrated with physical assets such as stations, protection and control equipment, telecommunications infrastructure, and control centre environments.

An example of a critical application managed within the OT domain is the Energy Management System (EMS). The EMS is the mission-critical, 24/7 real-time platform that enables monitoring and control of the transmission system, including the Ontario Bulk Electric System (BES), supporting real-time switching operations and alarm monitoring at Hydro One’s control centres, including the Integrated System Operations Centre (ISOC) and the Back-Up Ontario Grid Control Centre (BU-OGCC). By providing operators with continuous visibility of system status and enabling controlled switching activities, the EMS directly supports the safe and reliable operation of power system assets and the work protection of field staff. As with other OT applications, the EMS operates within a real-time operational environment where availability, accuracy, and stability are essential, and where lifecycle decisions must be carefully coordinated with control-room operations and related physical infrastructure.

Common Operating Technology Infrastructure (COTI)

COTI assets are similar to IT Minor Fixed Assets (MFA) in that they comprise the underlying hardware and platform components required to support Hydro One's OT systems on a sustained basis. COTI includes the shared compute, storage, network, virtualization, operating system and control-room technology that underpin mission-critical OT applications used to monitor, control and operate the transmission and distribution system. These assets provide the foundational platform relied upon by key grid operations systems - such as the Energy Management System (EMS), Network Outage Management System (NOMS), Outage Response Management System (ORMS), and Distribution Management System (DMS) - to support secure, reliable and continuous grid operations from the ISOC and the BU-OGCC. Additional detail on the scope and composition of COTI assets is provided in GSP Section 4.11 G-GP-12, and a summary of the COTI hardware categories is provided in Table 17 below.

Table 17 - Common Operating Information Technology Infrastructure as of December 31, 2025

Category	Description	Quantity	Average Age (Years)	Typical Refresh Cycle (Years)*
OT Assets	Enterprise Physical Servers	256	3.5	5-7 years
	Virtual Servers	2218	NA**	NA**
	Client PC (Desktop and Laptop)	527	4.6	4-5 years
	Volume of Enterprise Data Storage (TB)	2,600	3.5	5-7 years
	Network Routers	93	3.0	5 – 7 years
	Network Switches	256	2.0	5 – 7 years
	Firewalls	101	5.0	5 – 7 years
	Load Balancers (virtualized)	50	NA***	NA***

**Refresh values represent typical planning assumptions based on vendor lifecycle guidance. Actual replacement timing is determined by vendor support timelines, asset condition and operational requirements.*
*** Virtual servers operate on shared host infrastructure; lifecycle is governed by the underlying physical server infrastructure.*
**** OT load balancers have been virtualized, and like the virtual servers note above, their lifecycle is dependent on the underlying physical infrastructure.*

Over the 2023-2027 rate period, COTI demographics remained comparatively stable relative to IT Minor Fixed Assets, reflecting the more controlled and less dynamic nature of the OT environment. COTI assets are largely deployed on-premises to meet stringent reliability, security, and regulatory requirements, limiting the degree of architectural change observed elsewhere in the technology portfolio.

Similar to IT MFA, there has been a gradual shift from desktop to laptop computing where operationally appropriate; however, control room environments continue to rely on fixed computing stations to support real-time operations, situational awareness, and operator ergonomics. Overall asset counts and refresh patterns have therefore reflected sustained, lifecycle-driven renewal, resulting in major shifts in its fleet.

Within this stable footprint, several minor demographic changes are evident. Enterprise storage capacity increased from approximately 2,000 TB to 2,600 TB over the period, driven primarily by large OT initiatives - such as Advanced Distribution Management System (ADMS) - that require parallel operation of legacy and new platforms during transition periods. Storage requirements are expected to continue to grow gradually through the 2028-2032 rate period as additional OT projects come into service, while remaining predominantly on-premises due to security, operational, and regulatory constraints.

Network architecture has also evolved, with load-balancing capabilities migrating from physical to virtual implementations and an associated increase in load balancer instances to support new OT domains introduced by major programs. This represents a temporary elevation aligned with project delivery, with some normalization expected post-implementation alongside incremental additions required to support expanding operational technology needs over the next rate period.

Security Systems

Hydro One manages a diverse portfolio of physical security and cybersecurity technologies deployed across corporate, operational, and field environments. The portfolio includes both physical assets and software or platform-based capabilities.

Individual technologies have different lifecycle characteristics depending on their function, deployment environment, operating conditions, vendor support model, cybersecurity requirements, and integration with other systems.

The security portfolio is described using high-level asset categories rather than facility-level inventories, device quantities, deployment locations, or detailed technical configurations. This approach provides the information necessary to explain the nature and lifecycle of the assets while avoiding disclosure of information that could reduce the effectiveness of Hydro One's security controls.

The security portfolio includes technologies supporting the following principal capabilities in Table 18.

Table 18 - Security Technology Asset Categories

Asset Category	Primary Purpose	Lifecycle Considerations
Physical security technologies	Support access control, surveillance, intrusion detection, perimeter protection, security communications, and monitoring of Hydro One facilities and assets.	Physical condition, environmental exposure, reliability, vendor support, availability of replacement components, cybersecurity updates, and compatibility with supporting platforms.
Cybersecurity monitoring and protection technologies	Support the identification, protection, detection, response, and recovery functions used to protect Hydro One's IT and OT environments.	Vendor support, security-update availability, technology obsolescence, evolving threats, performance, integration, and regulatory requirements.
Identity, access, and data protection technologies	Support authorized access to systems and information and help protect sensitive corporate, customer, and operational information.	Supportability, interoperability, evolving access and data-protection requirements, changes in hosting models, and the ability to maintain effective governance.

Asset Category	Primary Purpose	Lifecycle Considerations
Security governance, analytics, and reporting technologies	Support security oversight, risk visibility, compliance evidence, analytics, reporting, and decision-making.	Data integration, supportability, auditability, reporting requirements, technology evolution, and the efficiency and sustainability of operating processes.
Security computing, communications, and supporting infrastructure	Provide the underlying platforms and connectivity needed to operate physical security and cybersecurity capabilities.	Capacity, resilience, vendor lifecycle, cybersecurity updates, component compatibility, performance, and dependencies on related IT and OT infrastructure.

The asset population changes over time as technologies are renewed, consolidated, modernized, or transitioned to vendor-hosted or subscription-based delivery models. Accordingly, the number of individual assets is not, by itself, a complete measure of portfolio condition or investment need. Hydro One assesses security technologies using a combination of supportability, operating condition, performance, cybersecurity risk, compliance requirements, operational criticality, and continuing fitness for purpose.

Detailed asset quantities, locations, configurations, control coverage, age profiles, condition assessments, and system-specific information are not included herein. The public versions of G-GP-10, G-GP-11, and G-GP-30 provide additional information on the investment needs and intended outcomes associated with the principal security portfolios, while security-sensitive detail is addressed in confidential evidence.

PERFORMANCE

Security-system performance is assessed using measures appropriate to the function and criticality of the technology. Depending on the asset or service, these may include availability, reliability, supportability, timely security updating, monitoring continuity, control effectiveness, compliance performance, incident response capability, and the ability to recover from disruption. Because the security portfolio includes a broad range of physical, on-premises, cloud-based, and integrated technologies, no single performance measure is representative of the entire portfolio. Performance requirements are therefore

established and monitored based on the function supported, applicable obligations, operating environment, and consequences of failure.

Detailed control-performance information, monitoring coverage, identified weaknesses, and system-specific security measures are not presented in this public exhibit. Where relevant to individual investments, public outcomes are described in G-GP-10, G-GP-11, and G-GP-30, with security-sensitive performance information addressed through confidential evidence.

System availability is a principal technology-performance measure used by DTS. It measures the proportion of time that a system is available to support its intended users and business or operational function. Availability can be affected by application, infrastructure, network, data-centre, vendor-service, or integration issues.

Availability requirements are established having regard to the criticality of the system and the function it supports. Systems supporting continuous business or electricity-system operations are assigned higher availability requirements and are monitored and maintained accordingly.

For IT Systems, applications designated as Support Level 1 or Support Level 2 had a target system availability of 99.50% in 2025. Actual availability for these applications was 99.69% in 2025, as shown in Table 19.

For designated critical OT systems, the 2025 target system availability was 99.95%. Actual availability was 99.99% in 2025, as shown in Table 20.

Table 19 - IT Systems Uptime Expectations by Support Level

Support Level	Expected System Availability	2025 Actual System Availability
SL-1	99.50%	99.69%
SL-2	99.50%	99.69%

Table 20 - OT Systems Uptime Expectations by Support Level

Support Level	Expected System Availability	2025 Actual System Availability
Critical	99.95%	99.99%

4.2.5.3 ASSET AND CLOUD SERVICE LIFECYCLE MANAGEMENT

The lifecycle management of owned applications and infrastructure typically involves manual provisioning, configuration, maintenance, and eventual decommissioning of physical servers and software in on-premises environments. In contrast, a cloud model streamlines lifecycle management through automated on-demand provisioning, on-demand scalability, and managed services that reduce operational complexity. Cloud environments enable rapid deployment, continuous integration and delivery, and ongoing automated patching and upgrades, often handled by the cloud provider. Additionally, cloud models can support a more flexible resource allocation that allows for optimization based on usage, adapting quickly to changing business needs. As with on-premise technologies, Hydro One is subject to a vendor's decision to maintain, update/patch, enhance, and ultimately retire cloud applications. Cloud technologies that reach end of vendor support often mean vendors remove access to the application, meaning Hydro One must act prior to applications reaching beyond end of support. Across both on-premises and cloud-based environments, Hydro One applies a structured lifecycle management approach to ensure applications remain secure, supported, and aligned with business needs over time.

Hydro One's DTS division has observed increased reliance on vendor offerings that are delivered on a subscription-based or cloud-native basis, influencing the shift away from capital-intensive IT delivery models across applications, platforms, and infrastructure. Hydro One will need to continue to invest in cloud adoption to ensure it has access to the tools necessary to support operational needs. Hydro One evaluates each cloud solution on a case-by-case basis, and the degree to which volume has shifted to cloud varies by asset category as discussed in GSP Section 4.6.4.2.

IT Systems Lifecycle Management

IT Applications

Lifecycle management of IT systems is guided by governance that balances risk, vendor supportability, and evolving business needs. This governance translates the lifecycle characteristics and risks identified across the application portfolio into specific actions, including sustaining, enhancing, modernizing, consolidating, or retiring applications. These factors inform decisions to sustain, enhance, modernize, consolidate, or retire applications, ensuring a secure and supportable environment.

Lifecycle decisions and actions are embedded into ongoing IT investment planning and architecture processes to control application growth and reduce complexity over time. By routinely rationalizing and modernizing the portfolio, Hydro One improves long-term maintainability and supportability, reduces operational and cybersecurity risk, and enables greater reuse of standard enterprise platforms and capabilities (including cloud-based solutions where appropriate). In parallel, foundational dependencies such as operating systems are kept current through scheduled refresh and upgrade cycles to maintain interoperability and vendor-supported security patching across the broader application landscape.

In applying this lifecycle management approach, DTS evaluates each application using a consistent set of criteria, including:

- **Vendor Support** – ability to maintain vendor support, and required upgrade support schedule;
- **Age** – the lifecycle of the existing application and the costs of maintaining aging systems;
- **Capability Needs** – evolving customer and lines of business technology functionality/capability expectations;
- **Technology Advancement** – advancements in technology that either significantly improve functionality and capabilities, or ease operations and reduce ownership cost

- **Regulatory Drivers** – legislative changes or market driven initiatives, including evolving security requirements;
- **Others** – For example: complexity, cost and duration of the upgrade process, potential impact to the business (e.g. tolerance for downtime), risk, dependencies and potential impacts to other applications, and integration and interoperability with other applications.

This structured and consistent approach ensures that lifecycle risks and portfolio needs are translated into targeted investment and prioritization decisions over the planning period.

IT Minor Fixed Assets

Hydro One follows industry standard practice of an asset lifecycle management approach, which aims to ensure that vendor support is available and decrease the likelihood and impact of asset failure. These asset replacement or upgrade decisions account for factors based on software lifecycles, vendor upgrade and supportability schedules, business and customer requirements, and experience with similar equipment. The timing and lifecycle planning of large enterprise applications (e.g. SAP) may also increase hardware requirements, which can in turn increase the need for asset refresh.

In general, replacement of IT hardware is planned every three to five years. This is consistent with industry practices outlined by leading technology analytic organizations including Gartner. This timeline also aligns with information received from vendors around product support agreements and end of sale announcements, and it is consistent with the fact that hardware maintenance costs typically increase materially after four to five years of in-service life. Further details on IT asset replacement plans can be found in GSP Section 4.11 G-GP-05.

The purchase and replacement of MFAs are completed to meet the growing demand for IT services and devices across the company, address potential capacity and processing limitations, and address devices that are end of life. Replacement of hardware is typically done based on device age and factors in applications that may be running on the hardware.

Where possible, equipment may be upgraded or enhanced to extend the assets' useful life and meet business demands. Examples of this include: upgrading an existing server rather than replacing it, adding additional memory (RAM), or expanding storage capacity on an existing server to address increased processing or storage demands. These types of enhancements allow the asset to continue supporting business needs and defer full replacement, thereby extending the asset's useful life while meeting capacity and performance requirements.

As with IT applications, Hydro One considers many factors when determining whether individual IT MFA assets should be sustained through maintenance activities or retired and replaced. Lifecycle decisions are informed by a combination of technical, operational, security, and business considerations. These factors are assessed collectively to ensure that assets remain reliable, secure, vendor supported, and aligned with operational needs, while avoiding unplanned service disruptions or compliance risks. Replacement timing is not driven by fixed age thresholds alone; rather, Hydro One considers the overall condition, supportability, and risk profile of each asset type within the broader IT environment. Key lifecycle considerations are mentioned below; however, they are not exhaustive. In practice, Hydro One may also consider additional asset-specific factors such as observed premature failure rates, emerging reliability trends, or unforeseen operational constraints where these materially affect risk, service continuity, or supportability.

- **Asset Condition and Reliability** - The physical condition and operational reliability, including age of assets, are assessed to determine the likelihood and impact of failures. As assets age, the probability of hardware failure, reduced reliability, and recovery limitations increases, particularly for data centre infrastructure, end user computing devices, and power support systems. Poor condition may accelerate replacement beyond typical planning horizons.

- **Vendor Support Status (End of Support / End of Life)** - Assets approaching or exceeding vendor end of support or end of life milestones are evaluated for replacement due to increased risk of failure, loss of security patching, and limited access to vendor firmware updates and technical support. This consideration is

particularly critical for infrastructure hardware, operating systems, and networking equipment where vendor support is a prerequisite for secure and reliable operation.

- **Cybersecurity Risk Exposure** - Lifecycle decisions account for the extent to which aging or unsupported assets introduce cybersecurity vulnerabilities, including the inability to receive security patches, firmware updates, or meet evolving security standards. Assets that pose elevated cyber risk due to obsolete software or hardware are prioritized for renewal. This consideration applies broadly across infrastructure, end user devices, and network assets.

- **Regulatory, Legal, and Records Compliance** - Lifecycle decisions consider the role of assets in supporting regulatory compliance, legal obligations, privacy requirements, and record retention. Assets such as backup, recovery, and storage systems that underpin data protection and retention obligations are maintained or replaced to ensure continued compliance.

- **Cost and Risk of Deferred Replacement** - The longer term cost and risk implications of deferring renewal are considered, including the potential for unplanned outages, emergency replacements, accumulated technical debt, and more complex future refresh activities. Where deferral materially increases these risks, proactive lifecycle renewal is favored. This consideration applies across all IT asset types addressed by this investment.

- **Others** – For example: Supportability and Operational Maintainability, Performance and Capacity Adequacy, Compatibility with Evolving Technology Standards, Operational and Business Criticality, Ability to Recover from Failure or Disruption

A summary of identified system application investments across IT that include new functionality, replace or upgrade end of life applications, and focus on meeting compliance needs can be found in the following Investment Summary Documents:

- GSP Section 4.11 G-GP-05 – Information Technology Services Enablement
- GSP Section 4.11 G-GP-06 – Corporate Services Enablement
- GSP Section 4.11 G-GP-07 – Customer Service Technology Enablement
- GSP Section 4.11 G-GP-08 – Work and Asset Management Enablement
- GSP Section 4.11 G-GP-26 – Data, Analytics, and AI Enablement
- GSP Section 4.11 G-GP-28 – Enterprise Platform Modernization and Sustainment
- GSP Section 4.11 G-GP-29 – SAP S/4HANA OneCore Transformation

The capital and prepaid expenditures detailed in GSP Section 4.11 reflect the investments for the next rate period.

OT Systems Lifecycle Management

OT Applications

Due to the required reliability to maintain critical network operating systems for managing the electric grid, the primary driver of OT asset lifecycle management is maintaining vendor support to lower support costs and decreasing likelihood of failure. Lifecycle management for OT applications is more constrained than for IT applications, reflecting stricter regulatory obligations (including NERC standards) and a heightened sensitivity to operational continuity. While the same core principles apply from IT applications described above – such as vendor supportability, cybersecurity, obsolescence risk, and alignment with architectural standards – OT lifecycle decisions must also account for:

- **24/7 operational availability**, where upgrades or replacements often require carefully planned outages and coordinated execution with system operations;
- **Tight coupling to physical assets**, meaning application refreshes are frequently bundled with station, control room, or communications equipment investments rather than treated as standalone software initiatives;
- **Longer useful lives and slower refresh cycles**, reflecting the pace of change in grid infrastructure and the need for stability in operator environments;

- **Regulatory and reliability obligations**, where loss of visibility or control can have immediate system-wide consequences and is not acceptable as part of routine modernization activity.

As a result, OT application lifecycle actions tend to focus on sustainment, incremental modernization, and architectural simplification, rather than wholesale replacement with new technologies. The investments described in GSP Section 4.11 G-GP-16 illustrate this approach. The Energy Management System (EMS) platform is being modernized through incremental updates to SCADA applications, supporting infrastructure, and system interfaces. These upgrades rationalize functionality, consolidating capabilities, and renew underlying components. This approach reduces architectural complexity and improves long-term supportability while maintaining continuous real-time operations and compatibility with dependent systems and field assets.

While OT applications are governed using the same disciplined lifecycle management described for IT applications, their unique operational role within the power system requires additional considerations, with emphasis placed on sustaining critical functionality, managing obsolescence in step with physical asset lifecycles, and executing modernization in a manner that prioritizes safety, reliability, and compliance.

Common Operations Technology Infrastructure (COTI)

For COTI, the lifecycle varies for individual components and requires replacement at different intervals. While computing systems can provide acceptable services over their lifespan (up to 7 years with available manufacturer support), end of life systems are likely to exhibit slower processing capability when handling complex electric grid functions including state estimation and simulation exercises, which are fundamental to reliable and safe grid operations. In addition, the expiry of vendor support means that performance issues or failures that arise may not be readily resolvable. According to original equipment manufacturer recommendations, such complex systems and tools need to be replaced on a lifecycle approach to ensure the availability of critical spares. Further details on OT asset replacement can be found in GSP Section 4.11 G-GP-12.

As with IT Minor Fixed Assets (MFA), Hydro One considers a broad set of technical, operational, security, and risk-based factors when determining whether individual COTI assets should be sustained through maintenance or retired and replaced, including: asset condition, vendor supportability, cybersecurity risk, compliance obligations, the cost-risk trade-offs associated with deferral, and others as noted. These considerations are assessed collectively to ensure COTI assets remain reliable, secure, vendor supported, and fit for purpose over their expected service life.

However, lifecycle management for COTI differs from IT MFA in several important respects, reflecting the operational criticality in which OT infrastructure is deployed. COTI lifecycle management reflects the same OT-specific considerations described above for OT Applications, including operational criticality, NERC compliance, and coordinated execution requirements.

These factors mean that while COTI lifecycle management is aligned with the same disciplined framework used for IT MFA, renewal decisions place greater emphasis on operational continuity, regulatory compliance, and coordinated execution to preserve safe and reliable grid operations.

A summary of identified system application investments across OT that include new functionality, replace or upgrade end of life applications, and focus on meeting compliance needs can be found in the following Investment Summary Documents in GSP Section 4.11:

- G-GP-12 – Common Operations Technology Infrastructure
- G-GP-16 – Energy Management Systems
- G-GP-25 – Operations Projects
- G-GP-31 – Control Room Equipment

The capital and prepaid detailed in GSP Section 4.11, reflect the investments for the next rate period.

Security Systems Lifecycle Management

Hydro One manages security technologies through a structured lifecycle approach intended to maintain effective, supportable, and fit-for-purpose security capabilities. This approach applies to physical security, cybersecurity, personnel security, and supporting infrastructure, while recognizing that the lifecycle characteristics of individual asset classes differ.

Security technologies may require renewal or modernization because of declining physical or operational condition, end of manufacturer support, loss of security-update availability, changing operating requirements, reduced reliability or effectiveness, technology obsolescence, evolving cybersecurity threats, changes in regulatory requirements, or incompatibility with current platforms and architectures. An asset may therefore require intervention even where it remains partially functional if it can no longer be securely maintained, supported, integrated, or operated at the level required for the function it protects.

Lifecycle decisions are not based on asset age alone. Hydro One considers the following factors collectively:

- asset condition and demonstrated reliability
- vendor support status and the availability of replacement parts, software updates, firmware, and security patches
- criticality of the facility, system, information, or operational function protected
- likelihood and consequence of asset or control failure
- current and emerging cybersecurity and physical security risks
- applicable regulatory, legal, and corporate requirements
- system capacity, performance, interoperability, and integration requirements
- opportunities to maintain, repair, upgrade, consolidate, or otherwise extend useful life
- cost and operational risk of continued maintenance compared with renewal
- implementation dependencies, resource requirements, and coordination with other planned work

Where maintenance, repair, or component replacement can preserve required performance, supportability, and security at an acceptable lifecycle cost and risk, Hydro One may extend the asset's useful life. Renewal or modernization is considered where continued operation would result in unacceptable reliability, cybersecurity, compliance, operational, or cost exposure, or where the asset can no longer perform its required function effectively.

Physical security technologies are also affected by their deployment environments. Assets installed in outdoor or operational settings may experience environmental exposure, continuous use, physical wear, and changing integration requirements. Lifecycle planning for these assets therefore considers condition, failure history, supportability, maintenance requirements, and the criticality and risk profile of the function or facility protected.
Cybersecurity technologies operate in a rapidly changing technical and threat environment. Their effective service life may be determined less by physical deterioration and more by the continuing availability of vendor support, security updates, compatibility, scalability, and the ability to address evolving threats and requirements. Cloud-based and subscription services are subject to the same fundamental lifecycle considerations, although renewal decisions may take the form of service modernization, migration, reconfiguration, replacement, or changes to the operating model rather than physical asset replacement.

Hydro One sequences security lifecycle work based on assessed risk, operational criticality, regulatory requirements, asset condition and supportability, delivery capacity, and coordination opportunities. This helps direct available resources toward the highest-priority needs while minimizing operational disruption and avoiding unnecessary replacement of assets that remain supportable and fit for purpose.

Further information regarding planned security investments is provided in GSP Section 4.11:

- G-GP-10, Physical Security Upgrades, addresses risk-informed physical security enhancements and lifecycle renewal of end of life physical security technologies

- G-GP-11, Cybersecurity and Digital Protection, addresses lifecycle sustainment and modernization of cybersecurity capabilities supporting Hydro One's IT and OT environments
- G-GP-30, Enterprise Security Platforms and Controls, addresses security capabilities supporting cloud and hybrid environments, including protection, access and data governance, and security risk oversight

The public versions of these ISDs describe the investment needs, capability areas, and intended outcomes. Detailed facility assessments, identified vulnerabilities, technical architectures, configurations, implementation designs, control coverage, and other security-sensitive information are addressed in the associated confidential evidence.

OTHER CONSIDERATION FACTORS

Effective vendor support ensures that the systems can be fixed and/or upgraded expeditiously in the event of malfunction or failure. The serious risks of continuing to run applications after their vendor support expires include:

- disruptions to critical systems that support or directly interact with customers, adversely impacting customer service and satisfaction;
- interruptions to systems that facilitate compliance with regulatory requirements, potentially resulting in non-compliance;
- frequent and/or prolonged service outages that would directly impact the job performance and productivity of staff; and
- higher operating costs to support and service these applications internally.

As described in GSP Section 4.7.2.4.1, Hydro One assesses what technological capabilities are required to achieve specific business outcomes for its various departments. To ensure that these investments are prudent and maximize value to the company, DTS follows a set of architectural principles for all applications, which focus on functional and cost efficiency and factored into upgrade or replacement determinations. This includes:

- Rationalizing applications wherever possible to reduce the total number of applications supported and lower support costs.

- Exploring the potential of existing applications to be used for additional business needs, reducing the number of different technologies and increase speed that outcomes are achieved.
- Identifying areas of improvements in performance or over/under utilization that either need to be upgraded or potentially replaced with newer technologies.
- Minimizing customization by investing in commercial-off-the-shelf applications and maintaining applications within a vendor-supported lifecycle to ensure continued functionality and maximum longevity. Custom applications are migrated to commercial-off-the-shelf solutions wherever possible to minimize development, integration and maintenance costs.

An additional factor influencing technology lifecycle and risk management is the increasing integration and interdependence of modern technology systems. As IT, OT, and Security technologies become more interconnected - through shared platforms, AI access, data flows, interfaces, and network dependencies - the potential pathways through which vulnerabilities could be exploited also expand. This increased complexity means that weaknesses in one system, if not properly controlled, may expose connected systems to unintended risk. Accordingly, Hydro One's lifecycle management approach places emphasis on maintaining technology currency, vendor supportability, and alignment with modern security architectures, such as effective segmentation, access controls, and monitoring, so that increasing system integration does not introduce vulnerabilities or undermine the reliable and secure operation of critical systems.

4.2.6 SYSTEM OPERATIONS

4.2.6.1 ASSET DESCRIPTION / PURPOSE

Hydro One operates the assets of the transmission and distribution electric system and provides the dispatch and control functions from the Integrated System Operating Centre (ISOC). The ISOC is a shared facility which allows central operations of the distribution and transmission systems. The Back-Up Control Centre (BU-OGCC) is located at separate site and is activated in the event the ISOC or its computer systems are rendered unavailable.

Hydro One System Operations is responsible for the real-time monitoring, control, coordination, and restoration of Ontario's transmission and distribution electricity system. This function ensures that electricity is delivered safely, reliably, and in accordance with regulatory requirements, IESO Market Rules, and North American Electric Reliability Corporation (NERC) reliability standards administered by the IESO.

System Operations' two facilities collectively enable continuous situational awareness, system control, and emergency response across Hydro One's transmission and distribution systems. These assets are foundational to maintaining bulk electric system reliability, responding to contingencies, coordinating outage restoration, and ensuring compliance with licensing obligations.

System Operations supports Hydro One's customer-focused mandate by:

- Preventing and containing system disturbances;
- Coordinating planned and unplanned outages;
- Enabling prompt, safe restoration following storms, equipment failures, or cyber/physical events; and
- Preserving public safety and system integrity under all operating conditions.

System Operations assets are designated as critical infrastructure assets, as their failure or compromise would materially affect grid reliability, public safety, and could result in regulatory non-compliance. System Operations assets are governed through an integrated asset management framework ensuring that assets are added, classified, maintained, protected, and replaced over their lifecycle.

Control Centre Facilities and Infrastructure

Control Centre facilities provide the secure physical environment required for continuous, 24/7 electrical system operation. These facilities house mission-critical systems and staff responsible for real-time grid control, emergency response, and system planning in coordination with the IESO, generators, large Bulk Electric System (BES) connected customers, and local distribution companies.

These facilities are engineered to meet stringent requirements for physical security and access control, environmental resilience (power, cooling, fire protection), redundancy and geographic separation, and continuous availability under extreme conditions. Control Centre facilities are integral to Hydro One's bulk electric system and distribution system operations. Loss of functionality at these sites would severely impair Hydro One's ability to operate, coordinate restoration, and could result in regulatory non-compliance.

4.2.6.2 ASSET DEMOGRAPHICS AND PERFORMANCE DEMOGRAPHICS

Asset Demographics

System Operations assets span facilities, systems, and enabling infrastructure with varying ages, technologies, and levels of redundancy. Collectively, they form a layered operational environment designed to sustain continuous grid control. A summary of the two control centre facilities is provided below.

Asset Criticality

The majority of System Operations assets are classified as High-Criticality, meaning that failure would cause widespread service disruption; therefore, proactive replacement (instead of waiting until failure) is the selected strategy. As well, restoration times would be measured in hours or days rather than minutes, and regulatory reporting, public safety, and market operations would be directly affected.

Asset Condition

Maintaining the condition of System Operations assets is essential to minimizing the probability of failure and ensuring operational resilience. Condition is evaluated using a combination of system health monitoring and performance metrics; preventative maintenance records; vendor supportability and lifecycle status; obsolescence and end of life assessments; and resilience testing and failover exercises.

Asset condition is categorized in the System Operations context as follows:

- **Excellent** – Fully supported, resilient, and performing as intended.
- **Good** – Minor deficiencies; asset performs reliably with manageable risk.
- **Fair** – Increased likelihood of failure or service degradation; mitigation required.

- **Poor** – Asset is at or beyond supported life, with elevated risk of failure that could impact system operations.

Assets in Poor condition require prioritized investment, as they materially increase operational risk and reliance on manual workarounds, emergency interventions, or single points of failure.

Integrated System Operating Centre

The Integrated System Operations Centre (ISOC) is a purpose-built, mission-critical control centre facility designed to support continuous, 24/7 electricity system monitoring, control, and coordination.

The ISOC was opened in 2021 and serves as Hydro One's primary operating control centre. The facility provides for:

- A System Operating Division Control Centre;
- A Backup Integrated Telecommunications Management Centre;
- Facilities for Security Operations; and
- A shared integrated data centre and all critical support infrastructures.

Over the 2028-2032 period Hydro One has planned expenditures to address various components of the ISOC such as:

- Membrane leaks within the roof
- Faulty sprinkler system
- Additional Air handling units needed for the ISOC
- Additional backup generator
- Improved security fencing

These expenditures are addressed in greater detail in GSP Section 4.11 G-GP-13.

Back-Up Control Centre

The BU-OGCC is Hydro One's backup control facility for monitoring and control of the entire transmission and distribution electricity grids. The BU-OGCC building has been

operational, 24 hours a day, seven days a week, and 365 days a year since inception in 2003.

Now that the ISOC is fully operational as a primary control centre, the needed repairs at the BU-OGCC can be undertaken without impact on real-time operations. The BU-OGCC building has infrastructure problems, capacity constraints, and other site issues, which are impacting the viability of the BU-OGCC to provide critical service continuity and to maintain compliance with mandatory regulatory requirements. For example, the elevator needs refurbishment or replacement based on inspection reports by the contractors that maintain the elevator and associated equipment. This investment is required in order to ensure the accessibility of the site. As well, the roof will be over 25 years old and is in need of replacement due to several leaks. Further, Uninterruptible Power Supply (UPS) and batteries are replaced on 10- and 5-year lifecycles respectively, and standby generators require ongoing maintenance (based on the manufacturer recommended schedule).

The inability to affect upgrades or replacements would result in significant disruption in Hydro One's ability to manage the Bulk Electric System (BES). Therefore, it is critical all building systems are adequately maintained to ensure building performance, safety, and accessibility.

4.2.6.3 ASSET LIFECYCLE

System Operations applies a lifecycle-based asset management approach that integrates planning, operation, maintenance, renewal, and decommissioning activities. This ensures assets continue to meet reliability, resilience, and compliance requirements over time.

Inspection, Monitoring, and Preventative Maintenance

System Operations assets are subject to continuous monitoring and structured maintenance programs, including:

- 24/7 system performance monitoring and alerting;
- Redundancy validation and failover testing;
- Physical inspections of control rooms and infrastructure; and
- Cybersecurity and access control reviews.

Preventative maintenance is designed to detect degradation early, reduce unplanned outages, and maintain compliance with expectations for critical system availability.

Asset Renewal, Modernization, and Replacement

Candidate renewal or replacement investments are informed by:

- System performance trends and failure history;
- Vendor support and technology roadmaps;
- Capacity and functionality constraints;
- Cyber and physical resilience requirements; and
- Alignment with evolving regulatory standards.

Where possible, modernization initiatives are designed to improve automation and decision support; reduce operator workload and error risk; and increase resilience against extreme weather and other threats.

Assets with high consequence and high probability of failure are prioritized for investment, ensuring limited capital funding is applied where it delivers the greatest reliability and risk-reduction benefit.

Resilience and Continuity of Operations

System Operations under NERC compliance require Hydro One to maintain the reliable and secure operation of the Bulk Electric System by adhering to mandatory reliability standards. These obligations include operating within established system limits, maintaining real-time situational awareness, balancing supply and demand, coordinating with interconnected entities, and responding effectively to contingencies and emergencies. Hydro One must follow defined communication protocols, execute emergency and restoration plans, and ensure proper interchange scheduling and voltage control. Additionally, Hydro One must maintain trained and certified personnel, implement robust cybersecurity and physical security controls, and retain documentation to demonstrate compliance. Collectively, these requirements ensure grid stability, prevent cascading outages, and support coordinated, secure system operations across North America.

A core objective of System Operations asset management is to sustain operations under degraded or extreme conditions. This includes:

- Geographic and system redundancy between control centres;
- Backup power, communications, and data replication;
- Regular emergency drills and restoration exercises; and
- Integration with corporate emergency management frameworks.

Through disciplined lifecycle management, System Operations ensures that critical assets remain secure, reliable, and fit for purpose – supporting safe electricity delivery and upholding Hydro One's responsibilities as a major grid operator.

Further details on System Operations asset replacement plans can be found in GSP Section 4.11 G-GP-13, and G-GP-15.

SECTION 4.3 – GSP – BENCHMARKING AND OTHER STUDIES

Benchmarking and other studies help inform Hydro One about the condition of its assets and how to effectively and efficiently manage those assets. These studies also present Hydro One with the opportunity to assess and demonstrate continuous improvement by: comparison to self; comparison to others; and unit cost trending analysis.

To support the GSP, Hydro One commissioned the following third-party studies:

- 2024 Fleet Operations Benchmarking Report - Utilimarc
- Fleet Lifecycle Study - Utilimarc
- Helicopter Lifecycle Analysis - Utilimarc
- Fleet Investment Strategy Report - Analysis of Funding Outcomes - Utilimarc
- Building Condition Assessment Review - Jones Lang Lasalle (JLL)
- Enterprise IT Spending & Staffing Benchmark - Gartner
- Enterprise IT Maturity Assessment - Gartner

Details on the selected vendors are provided in SPF Section 1.3.

Additional third-party and internal studies, which correspond to other aspects of the Application, include the following:

- The Benchmarking, Productivity and Incentive Regulation Parameter Study for Hydro One Network's Joint Rate Application (Clearspring Energy Advisors) filed at Exhibit A-04-01 Attachment 1;
- the Capital Performance Reports (internal) are attachments to GSP Section 4.9;
- the benchmarking of corporate costs and administrative functions (E Source) is discussed in Exhibit E-04-02 Attachment 1;
- the assessment of Hydro One's Common Corporate Cost Allocation Methodology, Overhead Capitalization Methodology and the methodology used to allocate Shared Asset costs among regulated business units and affiliates (Atrium Economics) is discussed in Exhibit E-04-08 Attachment 1; and

- the Compensation Cost Benchmarking Studies (Mercer and Willis Towers Watson) are discussed in Exhibit E-06-01 Attachment 2 and 3.

4.3.1 2024 FLEET OPERATIONS BENCHMARKING STUDY – UTILIMARC

4.3.1.1 STUDY OVERVIEW

Hydro One engaged Utilimarc to benchmark various aspects of Fleet Services' operations (i.e., 2024 fleet costs, fleet unit information, fleet utilization and staffing) against a group of North American utilities. This study was performed to help Fleet Services assess its relative performance and gather additional information on industry standards and best practices.

Utilimarc employed a standardized methodology to compare Hydro One's performance to a group of comparators. This involved Utilimarc applying its defined cost categories to each company in the study, by creating a standard unit classification based on the vehicle identification number (VIN) decoded information, unit attachment/hydraulic information, and type of work performed. Within its benchmarking analysis, Utilimarc used a variety of metrics to compare Hydro One to its peers.

4.3.1.2 SUMMARY OF FINDINGS

The key study findings are summarized in Table 1 below. The values reported to one decimal place, further details found in report.

Table 1 - Key Utilimarc Study Findings

#	Key Study Findings	Study Reference
1	**Cost Per Vehicle Equivalency (VE):** This is a comparison of all units (on-road vehicles, power operated equipment, trailers, and misc. equipment) on a cost per VE basis for the 2024 calendar year (where VE is a weighting metric assigned to each individual asset in a fleet based on the expected repair hours of an asset). Hydro One's results scored in the second quartile, its cost being 5.1% lower than the participant average. This is an improvement from Hydro One's 3rd quartile position in 2022.	Section 2.1a – p. 7, 8
2	**Cost Per Unit:** This is a comparison of all units on a cost per unit basis for the 2024 calendar year. Hydro One scored in the second quartile, its cost being 14.9% lower than the participant average. This is an improvement from Hydro One's 3rd quartile position in 2022.	Section 2.1b – p. 9, 10
3	**Cost Per Litre:** This is a comparison of all units on cost per litre basis for the 2024 calendar year. Hydro One scored in the second quartile, its costs being 8.3% lower than the participant average. Hydro One has consistently been in the second quartile since 2022.	Section 2.1c – p. 11, 12
4	**Cost Per Vehicle Equivalency (VE) (On-Road Vehicles):** This is a comparison of all on-road vehicles on a cost per VE basis for 2024 (where VE is a weighting metric assigned to each individual asset in a fleet based on expected repair hours of an asset). Hydro One scored in the second quartile, its cost being 7.4% lower than the participant average. Hydro One has consistently been in the second quartile since 2022.	Section 2.2a - p. 14
5	**Cost Per Unit (On-Road Vehicles):** This is a comparison of all on-road vehicles on a cost per unit basis for 2024. Hydro One scored in the second quartile, its cost being 11.1% lower than the participant average. Hydro One has consistently been in the second quartile since 2022.	Section 2.2b - p. 16
6	**Cost Per Kilometer (On-Road Vehicles):** This is a comparison of all on-road vehicles on a cost per kilometer basis for 2024. Hydro One scored in the first quartile, its cost being 34.2% lower than the participant average. Hydro One has consistently been in the first quartile since 2022.	Section 2.2c - p. 18
7	**All Units - Average Age:** In comparing Hydro One to the other Utilimarc participants for 2024, Hydro One's fleet of vehicles is older than that of other participants (7.4 vs. 6.5). Hydro One's other equipment is also older than that of other participants (12.6 vs. 11.3). The relative age of Hydro One's vehicles and other equipment is in the third quartile on this metric.	Section 3.0 – p. 20, 21, 22

#	Key Study Findings	Study Reference
8	**All Vehicles - Low Mileage (Kilometer) Percentage:** This is a comparison of the percentage of all vehicles for the 2024 calendar year that are considered "low mileage" (i.e., a unit's annual mileage is less than 50% of the participant average annual mileage for the specific class of vehicles). Hydro One had the second lowest percentage of low mileage vehicles in the participant group: only 12.8% of Hydro One's vehicles are low mileage. This is 13.3% below the participant average. In addition, Hydro One drives its "Heavy" equipment 2,800 more kilometers on average than its peers and 4,000 more kilometers on average for its "Light" equipment type.	Section 4.1 p. 24
9	**Financial Breakout:** Hydro One's operations and repairs costs have increased from 52.9% of the total costs in 2022 to 58.6% in 2024. This is 13.9% higher than the 2024 participant average. In contrast, Hydro One's fuel and depreciation costs have decreased in 2024 relative to 2022.	Section 5.1 p. 25

As demonstrated by the above key findings, Table 1 the main conclusions of the Utilimarc study are that Hydro One: (i) is an above average performer in respect of cost control, with lower costs than the participant average on various metrics (ii) has an older than average fleet; and (iii) has a very low percentage of low mileage vehicles in its fleet. This shows that Hydro One has been able to effectively manage the cost of its fleet, despite the age of these assets and their high use relative to peers.

Although Hydro One currently performs well relative to industry, it is important to note that operating costs lag capital investments. The overall cost of ownership is highly dependent on capital expenditures. When vehicles are operated beyond their optimal lifespan, as they currently are at Hydro One, downtime and maintenance costs increase. Thus, with the proposed increase in capital investments, Hydro One will be able to replace the older and higher mileage equipment (particularly where they are highly utilized assets from year to year) and reduce pressure on operating costs. The relationship between asset age and the total cost of ownership is discussed in more detail in GSP Section 4.3.2.

4.3.2 FLEET LIFECYCLE STUDY – UTILIMARC

4.3.2.1 STUDY OVERVIEW

Utilimarc reviewed Hydro One's current lifecycle management and recommended the optimal time for replacing various classes of fleet assets. Using Hydro One's historical data and practices, Utilimarc modeled future ownership and maintenance costs to

determine the lifecycle approach that achieves the lowest total costs over the life of the assets by vehicle class. As part of this review, Utilimarc assessed the total cost of ownership associated with various program funding levels.

Utilimarc presented three funding scenarios that demonstrate the relationship between replacement pacing and overall cost of ownership:

- Full Funding Scenario: This represents the required capital to move the fleet towards all assets being within lifecycle. In this scenario, replacement numbers are limited by class to avoid a circumstance where there are too many assets at the same age within a class, as this would eventually become a problem when they all come due for replacement. Full funding is the fastest way to get every asset within lifecycle. It also has the largest CO2 offset of the three scenarios, as there is more capital to spend on electric vehicles, hybrids, and engines with improved fuel efficiency.
- Proposed Funding Scenario: This represents the amount of capital needed to reduce the average fleet age by one year by 2032, with lower maintenance costs and equipment downtime to better serve customers. It aligns with Hydro One's planned capital spending for the 2026-2032 period. The proposed funding scenario provides the second largest CO2 offset and has lower maintenance costs than the sustained funding scenario.
- Sustained Funding Scenario: This represents the amount of capital funding required to slow the increase in the average age of the fleet, while covering unit cost increases due to inflation. This will not get the entire fleet to within their lifecycle and will require additional technician staffing to maintain the older fleet. It has the highest maintenance costs as older assets require more maintenance. This scenario provides the lowest level of CO2 offset of the three scenarios.

The eight vehicle classes that Utilimarc assessed in the study are presented below in Table 2. These are the top eight classes for Hydro One and represent 70% of its annual fleet operating spend. An additional 5% of Hydro One's annual on-road spend could not be assessed due to the unique nature of certain pieces of equipment.

Table 2 - Vehicle Class Description

Utilimarc Vehicle Class	Description
Pickup - Class 2a	A ½ Ton Pickup
Pickup - Class 2b	A ¾ Ton Pickup
Pickup - Class 3	A 1 Ton Pickup
SUV - Compact	SUV and Sedans
Service Truck - Class 5	A truck with a service body, breaker trucks, gas construction Trucks.
Bucket Truck - Class 8	A truck with an insulated aerial lift attachment and side cabinets that is 55' in length.
Forestry Bucket	A bucket truck used for forestry work.
Digger Derrick – Class 8	A truck with a digger derrick.

Approximately 25% of Hydro One's total fleet spend is on other equipment, which includes:

- Track United – Mounted, which refer to vehicles that are larger than a Bobcat, with Mounted Equipment (Buckets, Diggers, Cranes, etc.)
- Trailers
- Miscellaneous Pieces or Equipment (Misc. – POE)
- Brush Chipper
- Track Unit – Unmounted, which refers to vehicles that are larger than a Bobcat, without Mounted Equipment
- Forklift
- Tensioner/Puller
- Utility Cart
- Excavator – Light
- Frontend Loader & Backhoe
- Backyard Mobile Equipment
- Dozer

Due to the inconsistent usage data for these types of assets, lifecycle could not be calculated for this category as a whole. Utilimarc created a funding model that does not change across the three scenarios for this equipment based on the depreciation and age of the equipment.

4.3.2.2 SUMMARY OF FINDINGS

The key study findings are summarized in Table 3 below. The values reported to one decimal place, further details found in report.

Table 3 - Key Study Findings

#	Key Study Findings	Study Reference
1	**Full Funding Scenario (On-Road Vehicle classes):** Over the 2028 to 2032 period, over 500 units are replaced per year which results in: • Maintenance costs decreasing from $68.4M in 2027 to $55.2M in 2032 • The average age of units decreasing from 9.3 years in 2027 to 5.7 years in 2032. • CO2 Offset(kg) increasing from 2.6Mkg in 2027 to 6.9Mkg in 2032	Projections p. 14, 15

Full Funding - On-Road	2026	2027	2028	2029	2030	2031	2032
Annual Capital	$37,232,620	$35,264,637	$100,533,352	$104,069,070	$108,648,482	$112,777,124	$116,657,201
Units Replaced	88	79	586	581	587	587	586
Annual Maintenance	$63,556,808	$68,449,670	$64,564,567	$61,272,863	$58,438,145	$56,304,679	$55,156,460
Annual Ownership	$42,612,009	$40,395,899	$49,212,833	$56,932,034	$63,909,181	$70,134,708	$75,614,418
Total	$106,168,817	$108,845,569	$113,777,400	$118,204,897	$122,347,326	$126,439,387	$130,770,878
Avg Age	8.66	9.31	8.29	7.46	6.72	6.12	5.68
EV %	2%	2%	3%	5%	6%	8%	10%
Hybrid %	3%	3%	4%	5%	6%	7%	7%
CO2 Emissions (kg)	48,895,911	48,809,937	48,119,340	47,365,259	46,457,905	45,524,822	44,509,692
CO2 Offset (kg)	2,502,163	2,588,137	3,278,734	4,032,815	4,940,169	5,873,252	6,888,382

#	Key Study Findings	Study Reference
2	**Proposed Funding Scenario (On-Road Vehicle classes):** Over the 2028 to 2032 period over 350 units are replaced per year which results in: • Maintenance costs increasing marginally from $68.4M in 2027 to $70.1M in 2032. • The average age of units decreasing from 9.3 years in 2027 to 7.9 years in 2032. • CO2 Offset(kg) increasing from 2.6Mkg in 2027 to 5.2Mkg in 2032	Projections p. 14, 15

Proposed Funding - On-Road	2026	2027	2028	2029	2030	2031	2032
Annual Capital	$37,232,620	$35,264,637	$75,282,229	$77,360,431	$78,018,559	$80,817,503	$84,551,768
Units Replaced	88	79	286	371	440	420	301
Annual Maintenance	$63,556,808	$68,449,670	$68,355,340	$68,333,865	$68,897,639	$69,382,832	$70,142,582
Annual Ownership	$42,612,009	$40,395,899	$44,675,870	$49,020,184	$53,002,610	$56,684,198	$59,791,338
Total	$106,168,817	$108,845,569	$113,031,210	$117,354,049	$121,900,249	$126,067,030	$129,933,920
Avg Age	8.66	9.31	9.22	8.9	8.4	7.96	7.94
EV %	2%	2%	3%	3%	4%	6%	6%
Hybrid %	3%	3%	4%	5%	6%	6%	7%
CO2 Emissions (kg)	48,895,911	48,809,937	48,402,050	47,959,967	47,367,306	46,739,942	46,159,794
CO2 Offset (kg)	2,502,163	2,588,137	2,996,024	3,438,107	4,030,768	4,658,132	5,238,280

#	Key Study Findings	Study Reference
3	**Sustained Funding Scenario (On-Road Vehicle classes):** Over the 2028 to 2032 period under 300 units are replaced per year which results in: • Maintenance costs increasing from $68.4M in 2027 to $83.9M in 2032. • The average age of units increasing from 9.3 years in 2027 to 9.8 years in 2032. • CO2 Offset(kg) increasing from 2.6Mkg in 2027 to 4.1Mkg in 2032	Projections p. 14, 15
4	**Other Equipment Funding:** Utilimarc included one scenario for all other equipment. Over the 2028 to 2032 period with historical funding levels over 200 units are replaced per year which results in: • Maintenance costs increasing from $27.5M in 2027 to $32.3M in 2032. • The average age of units decreasing from 13.4 years in 2027 to 12.9 years in 2032.	Projections p. 16

Sustained Funding - On-Road	2026	2027	2028	2029	2030	2031	2032
Annual Capital	$37,232,620	$35,264,637	$55,276,809	$56,591,597	$56,440,076	$58,425,095	$61,350,121
Units Replaced	88	79	153	199	246	287	308
Annual Maintenance	$63,556,808	$68,449,670	$70,957,603	$74,122,793	$77,279,348	$80,712,464	$83,885,070
Annual Ownership	$42,612,009	$40,395,899	$41,549,457	$42,984,836	$44,445,604	$46,114,109	$48,081,525
Total	$106,168,817	$108,845,569	$112,507,060	$117,107,628	$121,724,953	$126,826,573	$131,966,595
Avg Age	8.66	9.31	9.68	9.91	9.98	9.91	9.75
EV %	2%	2%	2%	3%	3%	3%	4%
Hybrid %	3%	3%	4%	4%	5%	5%	6%
CO2 Emissions (kg)	48,895,911	48,809,937	48,599,442	48,315,884	48,029,481	47,646,035	47,257,833
CO2 Offset (kg)	2,502,163	2,588,137	2,798,632	3,082,190	3,368,593	3,752,039	4,140,241

	2026	2027	2028	2029	2030	2031	2032
Annual Capital	$18,739,745	$21,720,131	$21,717,673	$23,307,017	$26,483,107	$27,638,559	$28,015,584
Units Replaced	180	191	194	187	212	216	215
Annual Maintenance	$26,695,989	$27,532,536	$28,460,572	$29,430,258	$30,366,064	$31,328,498	$32,344,766
Annual Ownership	$11,780,504	$13,200,065	$14,404,609	$15,657,810	$17,181,731	$18,651,023	$19,961,737
Total	$38,476,493	$40,732,602	$42,865,181	$45,088,068	$47,547,795	$49,979,520	$52,306,503
Avg Age	13.6	13.44	13.33	13.3	13.17	13.02	12.88
EV %	1%	1%	1%	1%	1%	1%	1%
Hybrid %	0%	0%	0%	0%	0%	0%	0%
CO2 Emissions (kg)	2,434,217	2,424,988	2,415,914	2,405,065	2,386,511	2,369,713	2,350,945
CO2 Offset (kg)	48,963,857	48,973,086	48,982,160	48,993,009	49,011,563	49,028,361	49,047,129

#	Key Study Findings	Study Reference
5	**Maintenance Labour Hours:** An older fleet requires more maintenance, which in turn requires additional staff or more outsourcing of that work. Assuming current outsourcing practices, the following table shows the increase in labour hours that would be required under the Sustained Funding scenario as compared to the Proposed Funding scenario: • Sustained Funding scenario requires 13% more technician labour hours or 17.8 more FTEs by 2032 than the Proposed Funding scenario	Projections p. 17

Labor Hour Increase (Sustained Funding vs. Proposed)	2028	2029	2030	2031	2032
Internal	4,969	11,054	16,005	21,635	26,242
External	8,834	19,652	28,454	38,462	46,653
Total	**13,803**	**30,706**	**44,460**	**60,096**	**72,895**
Estimated Technician Increase	3.38	7.51	10.87	14.70	17.83
Percent Technician Increase	2%	6%	8%	11%	13%

Based on the above scenarios, in order to keep the average age of the assets within the recommended lifecycle and to prevent significant escalations in maintenance costs, the Utilimarc study found that an increase in annual capital investment is needed to replace more units.

In particular, the Proposed Funding Scenario, which is Hydro One's fleet sustainment investment plan, results in the lowest total cost of ownership. By reducing the average age of the existing fleet by one year by 2032, the Proposed Funding Scenario lowers annual maintenance costs and avoids the need to hire new technicians to support additional maintenance work.

In addition, this Utilimarc study recommends optimal lifecycle ages for Hydro One's top 8 vehicle classes, as described in Table 4 below.

Table 4 - Recommendations from the Fleet Lifecycle Study

#	Recommendations	Study Reference
1	This table shows the lifecycle recommendations for Hydro One's top 8 vehicle classes, which represent around 70% of Hydro One's annual fleet spend. • Pickup - Class 2a - 8 years • Pickup - Class 2b – 7 years • Pickup – Class 3 – 7 years • SUV- Compact - 10 years • Service Truck – Class 5 – 7 years • Bucket Truck - Class 8 – 8 years • Forestry Bucket – 13 years • Digger Derrick – Class 8 – 12 years	Lifecycle Summary p. 12

Fleet Services has adopted Utilimarc's recommended lifecycle for the top 8 vehicle classes to minimize overall lifecycle costs for these classes (as reflected in GSP Section 4.2.2.2). Fleet Services will use the recommended lifecycle when allocating and prioritizing capital investments among its asset classes, along with the other criteria discussed in GSP Section 4.7.2.1.3.

Fleet Services is seeking the Proposed Funding level (as shown Table 3, Key Finding #2) for the planning period, as it is a balanced approach that maintains annual maintenance cost at a relatively flat level through to the end of 2032 and brings the fleet closer to the recommended lifecycle. Further details on the investments planned for 2028-2032 are provided in GSP Section 4.11 G-GP-01, Subsection 3.1.

4.3.3 HELICOPTER LIFECYCLE ANALYSIS – UTILIMARC

4.3.3.1 STUDY OVERVIEW

Utilimarc was also engaged to conduct an analysis to show the optimal age for replacing Hydro One's Airbus H125 helicopter based on economics of purchase price, residual value at sale, and maintenance costs by annual flight hours.

The study used maintenance costs sourced from Conklin and de Decker for the Airbus H125 and ownership costs (purchase price minus residual value, taking into account

certain assumptions). Utilimarc modeled future ownership and maintenance costs to determine the lifecycle approach that achieves the lowest total costs over the life of the assets based on the annual flight hours of 350, 400, 450, and 500. Varying annual flight hours were modelled to reflect different operational needs and their effect on the optimal replacement age.

4.3.3.2 SUMMARY OF FINDINGS

The key study findings are summarized in Table 5 below.

Table 5 - Key Study Findings

#	Key Study Findings	Study Reference
1	**Annual Hours 350:** Optimal Lifecycle is between 14-21 years with 16 years having a deviation of 0.0% between annualized Total Costs vs Lifecycle Years. The lifecycle range includes all years where the annualized cost is within 1% of the minimum (and this applies to the findings below as well).	p. 6 - 7
2	**Annual Hours 400:** Optimal Lifecycle is between 14-20 years with 15 and 16 years having a deviation of 0.0% between annualized Total Costs vs Lifecycle Years.	p. 10 - 11
3	**Annual Hours 450** Optimal Lifecycle is between 7-8 or 14-19 years with 15 years having a deviation of 0.0% between annualized Total Costs vs Lifecycle Years.	p. 14 - 15
4	**Annual Hours 500** Optimal Lifecycle is between 6-9 or 14-18 years with 15 years having a deviation of 0.0% between annualized Total Costs vs Lifecycle Years.	p. 18 -19

As Hydro One's helicopters fly on average between 350-400 annual hours a year, Aviation Services has adopted a lifecycle of 20 years, consistent with these study findings. This lifecycle represents a balanced approach between annual maintenance cost and capital expenditure, while being sensitive to customer affordability.

Consistent with this 20-year lifecycle, Aviation Services is proposing capital investment during the planning period to replace the three aircraft that will be beyond the optimal lifecycle during the planning period as described in GSP Section 4.11 G-GP-02, Subsection 2.1.

4.3.4 FLEET INVESTMENT STRATEGY REPORT – UTILIMARC

4.3.4.1 STUDY OVERVIEW

Utilimarc further conducted an independent review of Hydro One's fleet asset strategy, management, and costs, consistent with Hydro One's settlement commitments (refer to Exhibit A-02-04). This analysis and report draws from the above Fleet benchmarking study (refer to GSP Section 4.3.1), Fleet lifecycle study (GSP Section 4.3.2), and Helicopter lifecycle analysis (refer to GSP Section 4.3.3).

4.3.4.2 SUMMARY OF FINDINGS

The key study findings are summarized in Table 6 below. The values reported to one decimal place, further details found in report.

Table 6 - Key Study Findings

#	Key Study Findings	Study Reference
1	The proposed funding scenario, which represents the capital needed to reduce the average fleet age from 11.3 years in 2027 to 10.3 years in 2032, "delivers meaningful fleet age reduction and eases reliability concerns while managing capital expenditure constraints. The investment strategy reverses the increased fleet age that is set to occur through 2027. It also positions Hydro One to maintain total cost performance steadily below industry peer average. The conclusion of this assessment is that Hydro One's proposed funding scenario is reasonable and prudent. It is the best strategic option based on cost, risk and sustainability factors outlined in the report."	p. 6
2	On the following metrics, Hydro One's current performance is better than industry average: • First quartile cost per kilometer (C$1.48 vs. C$2.25 average, 34.2% below average) • Second quartile total cost per VE (C$640.65 vs. C$674.82 average, 5.1% below average) • Second-lowest low-mileage percentage among 48 participants (12.8% vs. 26.2% average) • Annual vehicle mileage 23% above peer average	p. 17
3	On the following metrics, Hydro One's current performance is below that of the industry average: • Third quartile fleet age position (vehicles 0.9 years older, other equipment 1.3 years older than average) • Heavy vehicles 3.6 years older than peer average • Off-road equipment 5.2 years older than peer average	p. 17

#	Key Study Findings	Study Reference
4	If Hydro One were to implement the proposed funding approach, Utilimarc expects that Hydro One would achieve the following outcomes: • Fleet average age decreases by 1 year • Electric and hybrid adoption: 3% to 8% of full fleet • No Additional Technician staffing required • Maintenance costs increase marginally and maintain second quartile costs performance • Lifecycle analysis recommends optimal helicopter replacement cycles of 14-21 years depending on annual flight hour utilization, providing guidance for long-term aviation asset planning separate from ground fleet scenarios	p. 17 - 18

Utilimarc has found that Hydro One's proposed investment strategy is "a reasonable and prudent" approach and is the "best strategic option" that appropriately balances rising costs, reducing the fleet age and ensuring that the fleet is reliable for the expected work programs.

4.3.5 FACILITIES & REAL ESTATE BUILDING CONDITION ASSESSMENT (BCA) REVIEW – JLL

4.3.5.1 STUDY OVERVIEW

Hydro One engaged Jones Lang Lasalle (JLL) to perform an independent, third-party review of the Building Condition Assessment (BCA) reports that are prepared for Hydro One's Facilities & Real Estate (FRE) portfolio, which includes 1,474 buildings in numerous asset classes across Ontario. The primary objective of this review was to assess the quality and completeness of the BCA reports, with a focus on evaluating the process and methodology of the assessments relative to established industry standards and determining whether the BCA framework provides a suitable technical foundation for Hydro One's asset management and strategic planning processes.

JLL's review assessed whether FRE's BCAs meet the core requirements established in ASTM E2018-24, which is recognized as the authoritative framework for conducting BCAs in North America. JLL performed an independent desktop review of a representative sample of 50 sites containing 151 buildings, constituting approximately 10% of the portfolio

of 1,474 buildings. The sample selection aimed to provide a general representation of the different assets within Hydro One's portfolio, and prioritized assets based on Hydro One's criticality ratings and Facility Condition Index scores, ensuring additional focus was directed at buildings with greater potential risk and strategic importance.

4.3.5.2 SUMMARY OF FINDINGS

JLL concluded that FRE's BCA program is professionally executed and provides Hydro One with consistent building condition data across the majority of the portfolio. Forty-four of the fifty sites reviewed were documented through full BCA reports that align with ASTM E2018-24 standards and support informed capital planning and regulatory review. Six BCA reports within the sample were issued as location summary reports and were more limited in presentation. However, JLL reviewed the BCA vendor's supporting documentation for these six sites, including folder structures, site photographs, underlying reports, and evidence of asset data review, and found that the same level of assessment rigor and background documentation was applied as in the full reports.

Based on the above, JLL concluded that the BCA program demonstrates a high standard of technical practice and provides a sound basis for Hydro One's asset management and capital planning processes.

Since the BCA process serves as a foundational input to Hydro One's FRE planning framework – including a broader suite of planning tools and processes that Hydro One employs to manage its FRE portfolio – JLL's conclusions provide assurance that the facility condition data that underpins the FRE capital plan is informed by professionally executed condition assessments that meet industry standards. Because BCAs provide Hydro One with comprehensive insight into a facility's condition and form the backbone of Hydro One's data-driven decision making, JLL's conclusions validate that this foundation is technically sound.

4.3.6 ENTERPRISE IT SPENDING AND STAFFING BENCHMARK AND ENTERPRISE IT MATURITY ASSESSMENT – GARTNER

4.3.6.1 STUDY OVERVIEW

Hydro One commissioned two Gartner Inc (Gartner) studies:

- Enterprise IT Spending and Staffing Benchmark, and
- Enterprise IT Maturity Assessment

These studies provide external, point-in-time assessments of Hydro One's IT cost structure, staffing profile, and capability maturity relative to peer utilities. These studies complement each other: the spending and staffing benchmark compares Hydro One's 2025 IT spending and staffing metrics with peer benchmarks, while the maturity assessment evaluates selected IT capabilities using Gartner's methodology and peer data. These studies' results provide contextual benchmark information relating to the proposed 2028-2032 Digital & Technology Solutions (DTS) expenditures.

4.3.6.2 ENTERPRISE IT SPENDING AND STAFFING BENCHMARK

This study provides an external point of reference for Hydro One's enterprise-level IT investment profile relative to a group of comparable electric utilities identified by Gartner in accordance with its benchmarking methodology. The study examines overall IT spending levels, staffing ratios, sourcing models, and the allocation of spend across run, grow, and transform activities[1].

For this study, Hydro One's data submission included actual revenue and operating expenses for the fiscal year ending December 31, 2024, as well as actual total employees, IT spending, and staffing for the fiscal year ending December 31, 2025. Operational Technology (OT) spending and staffing were excluded from the analysis for both Hydro One and the peer group, in accordance with Gartner's benchmarking methodology.

[1]Run, grow, and transform refer to the allocation of IT spending by business purpose: "run" supports essential, generally non-differentiated business processes; "grow" represents improvements within existing business models; and "transform" relates to new services or operating models.

4.3.6.3 SUMMARY OF FINDINGS

The study report is provided in GSP Section 4.3 Attachment 6. Table 7 below summarizes the key findings from the Enterprise IT Spending and Staffing Benchmark. The narrative following Table 7 discusses how the benchmark findings relate to the focus of DTS 2028–2032 investments.

Table 7 - Key Findings from the Gartner Enterprise IT Spending and Staffing Benchmark (2026)

#	Key Study Findings	Study Reference
1	Hydro One's 2025 IT spending as a percentage of revenue was 3.1%, which is aligned with the Peer Group average of 3.1%. IT spending as a percentage of operating expenses was 4.0%, compared to a Peer Group average of 3.7%.	p. 4, 15, 17
2	In 2025, Hydro One allocated 81% of IT spending to "run the business" activities, compared to 73% for the Peer Group, resulting in a lower relative allocation to growth and transformation investments (19% vs. 27%).	p. 4, 19
3	Application support spending represents a higher proportion of total IT spend compared to peers, while application development spending is broadly aligned with Peer Group averages.	p. 5, 21
4	Hydro One invested a higher proportion of IT spending in IT Security, relative to the Peer Group average.	p. 5, 21
5	IT staffing levels, measured as IT FTEs as a percentage of total enterprise employees (3.6%), are lower than the Peer Group average (10.2%).	p. 4, 25, 26
6	Hydro One's allocation to External Services - Traditional spending remains above the Peer Group average but has decreased over time as more service delivery has been brought back in house. Personnel costs are aligned with peers, while the higher external services allocation is primarily driven by large transformation projects.	p. 5, 20

This study provides analysis for Hydro One's 2025 IT spend profile against a peer group, determined by Gartner, and highlights areas of spending comparisons between Hydro One and that peer group. Gartner found that Hydro One's overall IT spending was broadly aligned with comparable utilities, while a higher proportion of spending was allocated to "run the business" activities, application support, and IT security, with a comparatively lower allocation to growth and transformation activities.

These findings are broadly consistent with the focus of DTS's proposed investments over the 2028-2032 rate period, which balances foundational sustainment with targeted

modernization initiatives intended to reduce complexity, maintain security and resiliency, and enable more scalable technology delivery. For example: investments in application rationalization and enterprise platforms are intended to consolidate, modernize, or retire applications while improving alignment with business capabilities and simplifying support models; ServiceNow investments are intended to standardize workflows, improve visibility into assets and work management, and support more integrated service-management processes across IT and OT (refer to GSP Section 4.11 G-GP-05); and data, analytics, and AI investments are intended to establish governed platforms, reusable data products, and analytics capabilities that support improved decision-making and operational efficiency (refer to GSP Section 4.11 G-GP-26). The plan also reflects continued investment in cybersecurity and infrastructure lifecycle work, including the renewal of core IT infrastructure, communication and networking systems, and security capabilities needed to keep Hydro One's technology environment reliable, secure, vendor-supported, and aligned with evolving cyber and regulatory expectations (refer to GSP Section 4.11 G-GP-11 and G-GP-28).

This study also provides context for Hydro One's sourcing profile, as the investment plan continues to balance internal delivery accountability with the targeted use of external partners for specialized implementation, sustainment, and transformation activities, particularly where external expertise or capacity is required to support complex platform, application, security, and infrastructure work. Together, these initiatives demonstrate that DTS's proposed expenditures are not solely directed at maintaining existing services, but also support a measured shift toward portfolio optimization, digital enablement, security, resiliency, and business enablement in areas reflected in the benchmark findings.

4.3.6.4 ENTERPRISE IT MATURITY ASSESSMENT

This study provides a point-in-time assessment of the maturity of selected Hydro One IT capabilities relative to peer benchmarks and Gartner's best-practice criteria. The study uses Gartner's IT Score methodology to assess Hydro One across five in-scope IT domains: Program and Portfolio Management; Infrastructure and Operations; Enterprise Applications; Enterprise Architecture; and Data and Analytics. Maturity was assessed on a five-point scale relative to Gartner's best practice research.

For this assessment, Hydro One completed domain-based self-assessments using Gartner's IT Score assessment tool. The assessment covered 118 functional activities across the five in-scope domains and compared Hydro One's results with peer benchmarks from the energy and utilities sector.

4.3.6.5 SUMMARY OF FINDINGS

The assessment found that Hydro One's overall IT maturity level was 2.4, compared to a peer average of 2.8, across the five in-scope domains. Gartner identified improvement opportunities in each domain, with the Top 25 Areas of Improvement concentrated in Enterprise Architecture (9) and Data & Analytics (7), followed by Infrastructure & Operations (5), Program & Portfolio Management (2), and Enterprise Applications (2). This maturity assessment is used to contextualize Hydro One's current capability maturity and to identify areas where Gartner observed comparatively lower maturity or higher improvement priority. The study report is provided in GSP Section 4.3 Attachment 7. Table 8 below summarizes the maturity results for each in-scope domain and provides brief explanatory context for those findings. The narrative following Table 8 discusses how the maturity assessment findings relate to DTS's 2028–2032 investments, governance practices, and operating model.

Table 8 - Domain-Level Findings from the Gartner Enterprise IT Maturity Assessment (2026)

#	In-Scope IT Domain	Hydro One Maturity	Peer Average	Study Reference	Hydro One Context
1	Program and Portfolio Management	2.7	2.9	p. 4, 34	Program and Portfolio Management was Hydro One's most mature assessed domain, indicating relatively stronger capability in governance frameworks and transformation management. However, the result remained slightly below the peer benchmark, and Gartner identified improvement priorities in areas such as portfolio prioritization, role definition, and stakeholder enablement. Overall, the result suggests a comparatively stronger foundation in this domain, with further

#	In-Scope IT Domain	Hydro One Maturity	Peer Average	Study Reference	Hydro One Context
					opportunity to improve consistency and role maturity.
2	Infrastructure & Operations	2.6	3.2	p. 4, 50	The Infrastructure & Operations (I&O) result reveals that Hydro One had a moderate level of maturity in this domain but remained below the peer benchmark. Gartner found relative strength in managing the function of I&O, while lower maturity was observed in transitioning and operating IT services. The assessment also identified improvement priorities in areas such as future service availability, employee skills, automation, and embedding security into solution delivery. These results suggest a comparatively stronger foundation in core I&O management practices, with further opportunity to strengthen service transition and operational execution capabilities.
3	Enterprise Applications	2.3	2.8	p. 4, 26	The Enterprise Applications result reveals that Hydro One's maturity in this domain was below the peer benchmark, with relative strength in partnering with stakeholders and lower maturity in managing the applications function. Improvement areas in this domain included applications strategy, functional strategic planning, capability road mapping, and communicating application value.
4	Enterprise Architecture	2.1	2.5	p. 4, 42	Enterprise Architecture was slightly below peer benchmarks. Gartner identified comparatively lower maturity in areas such as business architecture, future-state architecture, current-state architecture, and articulating business outcomes, while solution delivery activities were relatively strong. This result should be understood in the context of Gartner's broader enterprise architecture assessment, which places significant emphasis on business architecture, future-state planning, and enterprise-wide roadmap development, which expands beyond Hydro One's Enterprise Architecture core focus.

#	In-Scope IT Domain	Hydro One Maturity	Peer Average	Study Reference	Hydro One Context
5	Data and Analytics	2.1	2.4	p. 4, 19	Data & Analytics was also below peer benchmarks, with Gartner identifying comparatively lower maturity in creating and maintaining analytics content and managing the function, while governing data and analytics assets was relatively stronger. Gartner also identified Data & Analytics as one of the domains where improving maturity would add comparatively more value, with higher-priority activities including semantic layers, data ecosystem development, data quality, AI adoption, and operationalizing data. Overall, the result suggests that Hydro One's governance foundation was stronger than its analytics delivery and data-sharing capabilities at the time of assessment.

This assessment provides external context in respect of Hydro One's current capability maturity and highlights the domains and activities where Gartner identified the greatest opportunities for improvement. Hydro One conducted self assessments via surveys using Gartner's proprietary IT Score Assessment Tool to baseline current maturity and importance levels for each domain area in scope. The overall maturity is compared against peer groups, determined by Gartner, while the determination of capability importance is something identified solely by Hydro One. Gartner identified Data and Analytics and Enterprise Architecture as domains where further improvement would add comparatively more value to Hydro One. The findings are broadly consistent with capability-focused initiatives including investments in data platform and AI enablement, data management, strategic portfolio management, and operations maturity enhancements (refer to GSP Section 4.11 G-GP-26 and GSP Section 4.11 G-GP-05).

The findings are also consistent with DTS's broader execution strategy and operating model. Hydro One is strengthening these areas not only through investments, but also through its five-stage governance framework, integrated delivery and sustainment model, end-to-end lifecycle ownership, and continuous improvement practices (refer to GSP

Section 4.10.4.2). For example, DTS's governance framework embeds structured approval gates, risk and complexity-based governance, and early involvement of Enterprise Architecture, Security, Sustainment, and other governance functions into the way technology work is planned and delivered. Its operating model also assigns end-to-end lifecycle accountability for technology platforms and capabilities, supported by embedded architecture, operations, security, data, and continuous improvement practices. These practices help support several areas reflected in the maturity assessment, including future-state planning, portfolio prioritization, data enablement, transition to sustainment, operational reliability, security-by-design, and ongoing capability improvement.

Together, these initiatives and operating practices support the continued strengthening of foundational capabilities in areas where the assessment identified comparatively lower maturity or higher improvement priority.

4.3.7 ATTACHMENTS: BENCHMARKING STUDIES

Attachment	Study /Assessment Report
1	2024 Fleet Operations Benchmarking Report - Utilimarc
2	Fleet Lifecycle Study - Utilimarc
3	Helicopter Lifecycle Analysis – Utilimarc
4	Fleet Investment Strategy Report - Utilimarc
5	Building Condition Assessment Review - JLL
6	Enterprise IT Spending and Staffing Benchmark – Gartner
7	Enterprise IT Maturity Assessment - Gartner

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Utilimarc®

2024 Fleet Operations Benchmarking Report

Hydro One

November 25, 2025

Table of Contents

1.0 - General Report Methodology 4

2.0 - Hydro One High-Level Cost Comparison Results 5

2.1 - All Units Cost Comparison 6
- 2.1a - Cost per VE 7
- 2.1b - Cost per Unit 9
- 2.1c - Cost per Litre 11

2.2 - All Vehicles Cost Comparison 13
- 2.2a - Cost per VE 14
- 2.2b - Cost per Unit 16
- 2.2c - Cost per Kilometer 18

3.0 - Hydro One Fleet Age Comparison Results 20

3.1 - All Vehicles – Average Age Comparison 20

3.2 - All Other Equipment – Average Age Comparison 21

3.3 - All Units – Average Age Table 22

4.0 - Low Mileage Unit Comparisons 23

4.1 - All Vehicles – Low Mileage (Kilometers) Percentage Comparison 23

5.0 - Corporate Trends 25

5.1 - Financial Breakout 25

5.2 - Fleet Mix Breakout 25

6.0 - Glossary 26

6.1 - Definitions 26
- 6.1a - Utilimarc Definitions 26
- 6.1b - Hydro One Definitions 27

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6.2 - Utilimarc Class Codes 28

7.0 - Appendix *33*

7.1 – Cost per Kilometer Class Specific Comparison 33

7.1a - Bucket Truck – Class 8 34

7.1b - Pickup – Class 2b 36

7.1c - Digger Derrick – Class 8 38

7.1d - Pickup – Class 2a 40

7.1e - Pickup – Class 4+ 42

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1.0 - General Report Methodology

Utilimarc's Benchmarking application uses Hydro One Networks Inc.'s (Hydro One) fleet costs, fleet unit information, fleet utilization, and high-level fleet staffing information to compare its unique fleet to that of the other study participants. Each fleet of the participants listed below makes up the participant values and averages showcased in this report.

- AEP
- AES-Indiana
- Alliant
- Ameren-AIC
- Ameren-Missouri
- Arizona Public Service
- AVANGRID
- Avista
- Central Hudson
- Coned
- Consumers
- DTE
- Duke Energy-Carolinas East
- Duke Energy-Carolinas West
- Duke Energy-Florida
- Duke Energy-Midwest
- El Paso Electric
- ENMAX
- Entergy
- EPCOR
- Essential Utilities
- Exelon-BG&E
- Exelon-ComEd
- Exelon-PECO
- Exelon-PHI
- Indianapolis P&L
- FPL
- Hydro One
- Idaho Power
- JEA
- LGE-KU
- NationalGrid
- NiSource
- NV Energy
- OGE
- Pike
- Portland General
- Sempra Energy-SDGE
- SMUD
- SoCalEd
- SRP
- TECO
- TVA
- Xcel Energy

Utilimarc focuses on providing standardized comparisons to accurately showcase how a unique fleet compares to its peers. Below is a list of a few examples of the Utilimarc standardization methods:

- **Fleet Cost Breakouts:** For high-level comparisons, it is important to understand the full costs of a fleet and know what all the companies in the participant list are including. Utilimarc defines its own cost categories and applies its definition to each company in the benchmark study.
- **Fleet Cost Conversion:** For the US companies, the cost data in this report is converted utilizing an annual conversion rate for the data year from US dollars to Canadian dollars. The conversion rates used are: 2022 = 0.7685, 2023 = 0.7408, and 2024 = 0.729874.
- **Fleet Unit Classification:** Utilimarc has over 100 unique unit classifications that are used for each client to ensure that similar units are being compared for a class specific comparison. (See glossary for detailed class code information.). Each of the class codes is defined based on type of asset, VIN decoded information, unit attachment/hydraulic information, and type of work performed. Utilizing all these inputs allows Utilimarc to break out the same cab and chassis into different class codes like Bucket Trucks, Stake Trucks, and Service Trucks.

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2.0 - Hydro One High-Level Cost Comparison Results

Within the benchmark analysis, there are a variety of metrics to compare a company to its peers. The most popular way to compare fleets is through a cost comparison for all units and all vehicles (only on road). In section 2.1 and 2.2, there will be comparisons to showcase the full fleet data based on Per Vehicle Equivalency (VE), Per Unit, and Per Kilometer or Litre.

- **Cost per VE:** This is Utilimarc's preferred way to compare unique fleets at a high level. VE or Vehicle Equivalency is a weighting metric assigned to each individual asset in a fleet based on expected repair hours of an asset. For example, a Bucket Truck – Class 8 will have a higher VE value than a Sedan – Compact. The use of the VE allows for Utilimarc to remove some of the uniqueness of each fleet being compared by accounting for the makeup of each fleet.

- **Cost per Unit:** This cost comparison shows the average cost per unit in the fleet.

- **Cost per Kilometer or Litre:** This cost comparison is useful to factor in each fleet's unique utilization. The report compares all vehicles on a per kilometer basis and all units (vehicles, power operated equipment, trailers, etc.) on a per litre basis. The reason why per litre was chosen for all units was to try to account for the fuel consumption of the power operated equipment.

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2.1 - All Units Cost Comparison

Section 2.1 showcases the cost comparison results for all units (on-road vehicles, power operated equipment, trailers, and misc. equipment) on a cost per VE, cost per unit, and cost per litre basis. Below is the Hydro One quartile performance for each cost distribution in the 2024 calendar year.

- **Cost per VE:** 2nd Quartile
- **Cost per Unit:** 2nd Quartile
- **Cost per Litre:** 2nd Quartile

For additional information on each cost distribution, see sections 2.1a – 2.1c.

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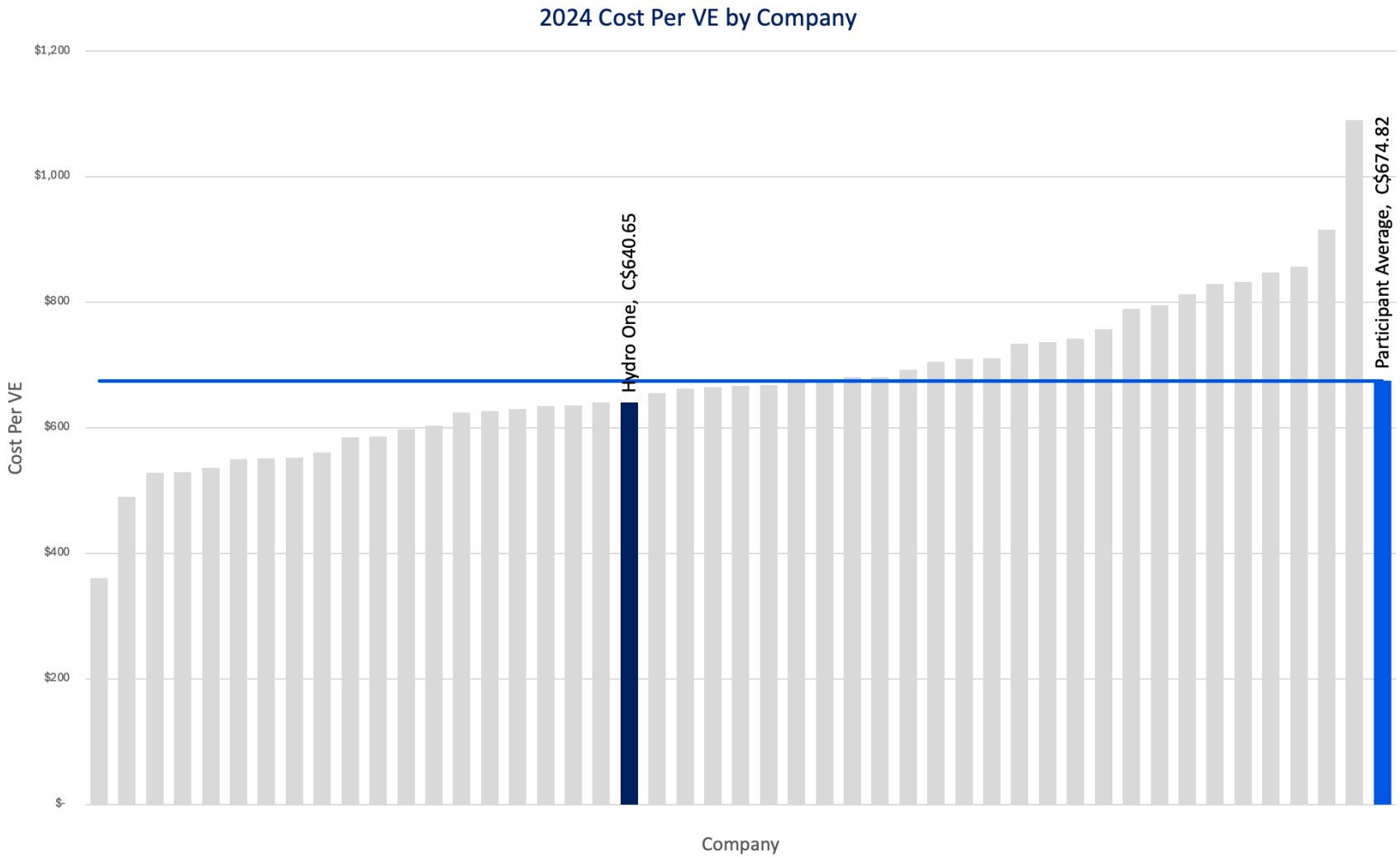
2.1a - Cost per VE



The above graph shows a comparison of all units on a cost per VE basis for the 2024 calendar year. Hydro One is 5.06% lower than the participant average for 2024 and is in the second quartile.

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2.1a - Cost per VE (Continued)

The table shown below shows the Hydro One cost trend over the past 3 calendar years on a cost per VE basis broken out into Utilimarc defined cost categories. The last column of the table shows the value for all the 2024 benchmark study participants.

Cost Per VE by Category	2022	2023	2024	2024 Participant Average
Ownership	$172.50	$164.70	$176.78	$302.64
Operating (Net Fuel)	$237.41	$258.24	$286.27	$215.15
Fuel	$130.14	$112.32	$105.24	$94.66
Support	$58.65	$65.03	$72.36	$62.36
Fleet Total Cost	**$598.65**	**$600.29**	**$640.65**	**$674.82**

By Year	2022	2023	2024
Hydro One Quartile Performance	3rd Quartile	2nd Quartile	2nd Quartile

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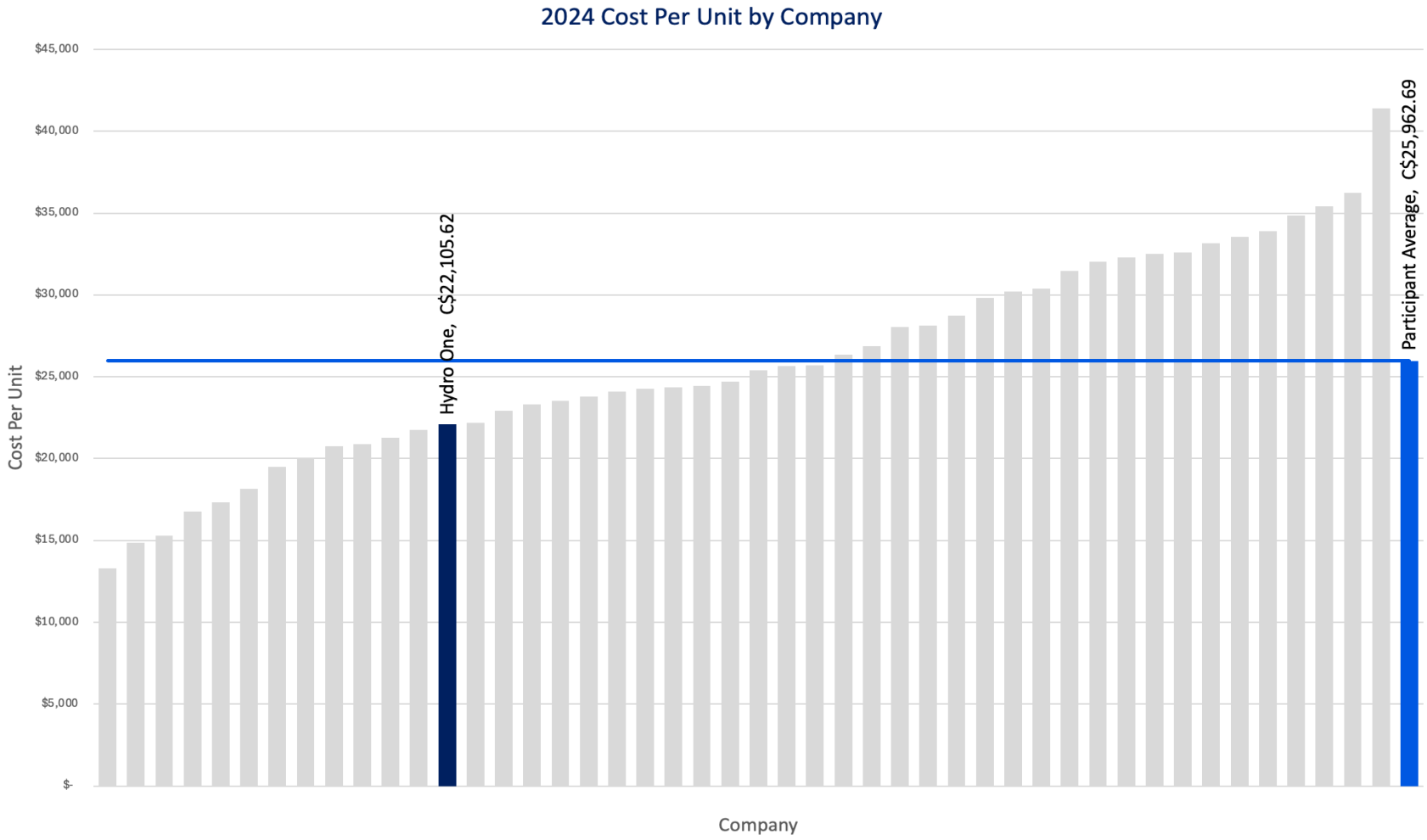
2.1b - Cost per Unit



The above graph shows a comparison of all units on a cost per unit basis for the 2024 calendar year. Hydro One is 14.9% lower than the participant average for 2024 and is in the second quartile.

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2.1b - Cost per Unit (Continued)

The table shown below shows the Hydro One cost trend over the past 3 calendar years on a cost per unit basis broken out into Utilimarc defined cost categories. The last column of the table shows the value for all the 2024 benchmark study participants.

Cost Per Unit by Category	2022	2023	2024	2024 Participant Average
Ownership	$6,131	$5,845	$6,546	$11,601
Operating (Net Fuel)	$8,439	$9,165	$9,432	$8,334
Fuel	$4,626	$3,986	$3,630	$3,589
Support	$2,083	$2,308	$2,497	$2,438
Fleet Total Cost	**$21,279**	**$21,304**	**$22,106**	**$25,963**

By Year	2022	2023	2024
Hydro One Quartile Performance	3rd Quartile	3rd Quartile	2nd Quartile

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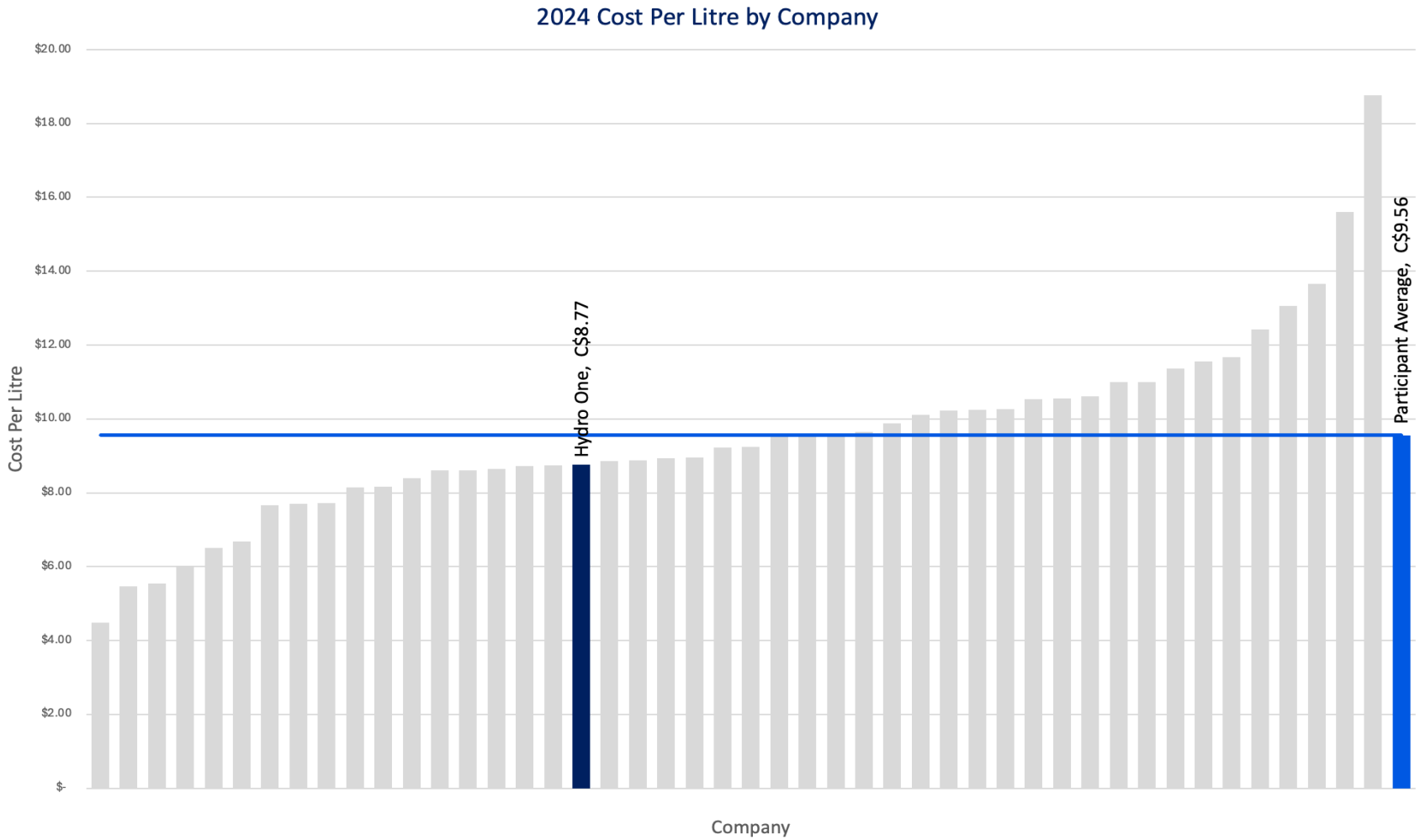
2.1c - Cost per Litre



The above graph shows a comparison of all units on a cost per litre basis for the 2024 calendar year. Hydro One is 8.26% lower than the participant average for 2024 and is in the second quartile.

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2.1c - Cost per Litre (Continued)

The table shown below shows the Hydro One cost trend over the past 3 calendar years on a cost per litre basis broken out into Utilimarc defined cost categories. The last column of the table shows the value for all the 2024 benchmark study participants.

Cost Per Litre by Category	2022	2023	2024	2024 Participant Average
Ownership	$2.17	$2.17	$2.60	$4.23
Operating (Net Fuel)	$2.98	$3.40	$3.74	$3.09
Fuel	$1.64	$1.48	$1.44	$1.32
Support	$0.74	$0.86	$0.99	$0.91
Fleet Total Cost	**$7.52**	**$7.89**	**$8.77**	**$9.56**

By Year	2022	2023	2024
Hydro One Quartile Performance	2nd Quartile	2nd Quartile	2nd Quartile

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2.2 - All Vehicles Cost Comparison

Section 2.2 showcases the cost comparison results for all on-road vehicles on a cost per VE, cost per unit, and cost per kilometer basis. Below is the Hydro One quartile performance for each cost distribution in the 2024 calendar year.

- **Cost per VE:** 2nd Quartile
- **Cost per Unit:** 2nd Quartile
- **Cost per Kilometer:** 1st Quartile

For additional information on each cost distribution, see sections 2.2a – 2.2c.

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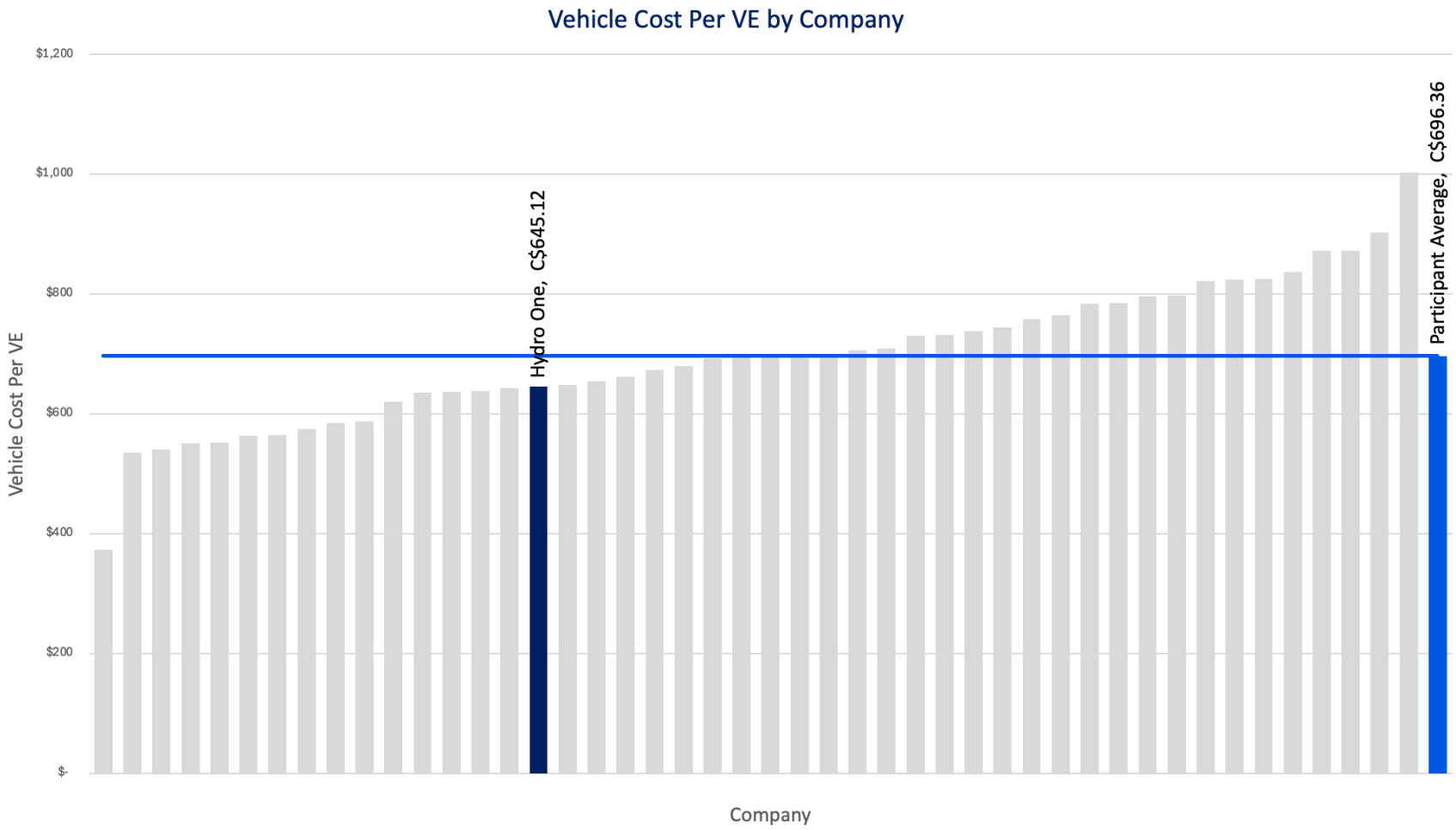
2.2a - Cost per VE



The above graph shows a comparison of all on-road vehicles on a cost per VE basis for the 2024 calendar year. Hydro One is 7.36% lower than the participant average for 2024 and is in the second quartile.

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2.2a - Cost per VE (Continued)

The table shown below shows the Hydro One cost trend over the past 3 calendar years on a cost per VE basis broken out into Utilimarc defined cost categories. The last column of the table shows the value for all the 2024 benchmark study participants.

Cost Per VE by Category	2022	2023	2024	2024 Participant Average
Ownership	$165.15	$157.58	$188.25	$305.50
Operating (Net Fuel)	$227.81	$237.79	$249.92	$217.87
Fuel	$169.42	$144.90	$134.62	$110.73
Support	$58.61	$65.94	$72.33	$62.26
Fleet Total Cost	**$620.98**	**$605.31**	**$644.12**	**$696.36**

By Year	2022	2023	2024
Hydro One Quartile Performance	2nd Quartile	2nd Quartile	2nd Quartile

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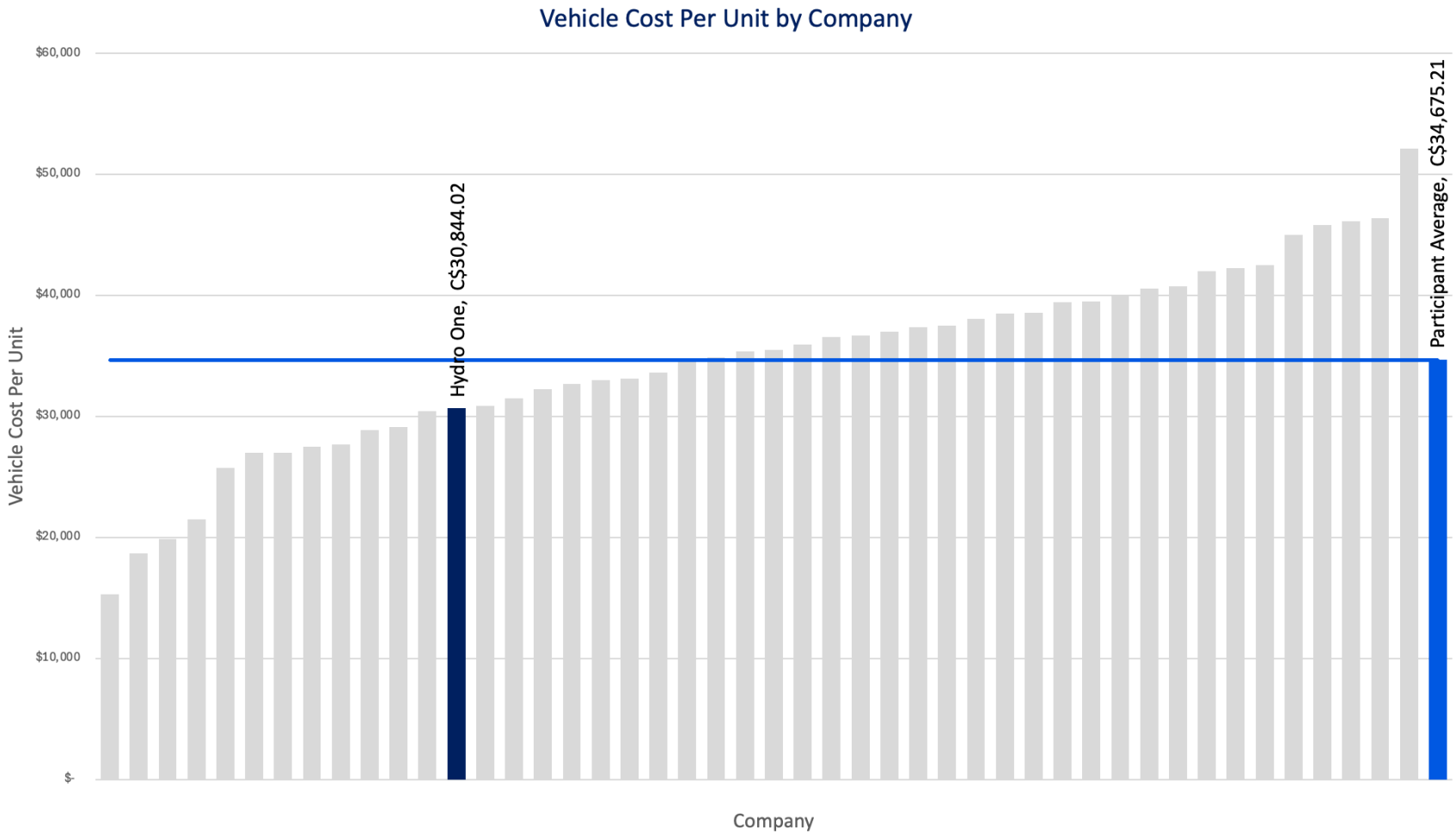
2.2b - Cost per Unit



The above graph shows a comparison of all on-road vehicles on a cost per unit basis for the 2024 calendar year. Hydro One is 11.05 lower than the participant average for 2024 and is in the second quartile.

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2.2b - Cost per Unit (Continued)

The table shown below shows the Hydro One cost trend over the past 3 calendar years on a cost per unit basis broken out into Utilimarc defined cost categories. The last column of the table shows the value for all the 2024 benchmark study participants.

Cost Per Unit by Category	2022	2023	2024	2024 Participant Average
Ownership	$8,509	$8,040	$9,000	$15,223
Operating (Net Fuel)	$11,738	$12,133	$11,949	$10,892
Fuel	$8,729	$7,394	$6,436	$5,435
Support	$3,020	$3,319	$3,458	$3,125
Fleet Total Cost	**$31,996**	**$30,886**	**$30,844**	**$34,675**

By Year	2022	2023	2024
Hydro One Quartile Performance	2nd Quartile	2nd Quartile	2nd Quartile

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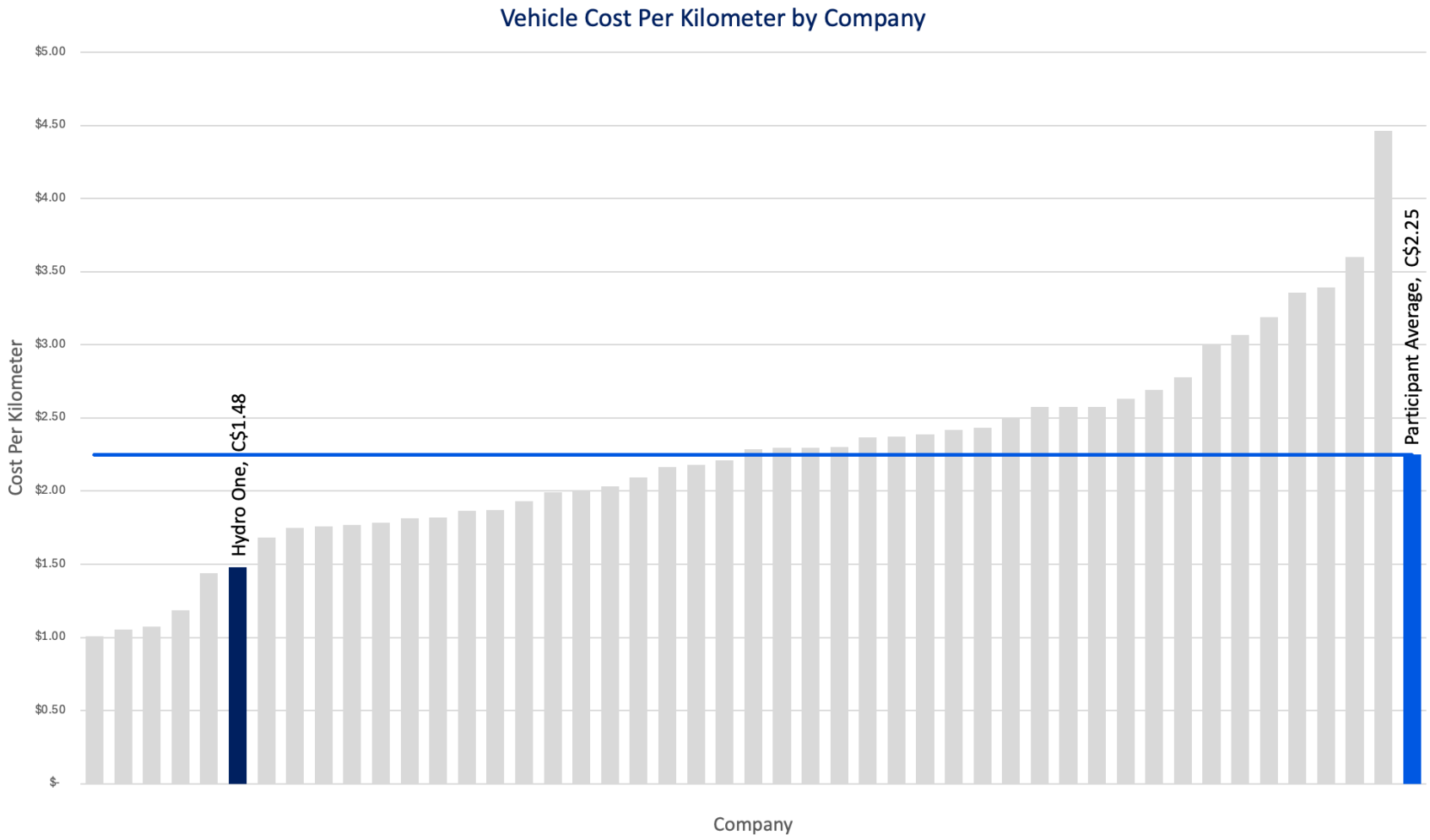
2.2c - Cost per Kilometer



The above graph shows a comparison of all on-road vehicles on a cost per kilometer basis for the 2024 calendar year. Hydro One is 34.22% lower than the participant average and is in the first quartile.

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2.2c - Cost per Kilometer (Continued)

The table shown below shows the Hydro One cost trend over the past 3 calendar years on a cost per kilometer basis broken out into Utilimarc defined cost categories. The last column of the table shows the value for all the 2024 benchmark study participants.

Cost Per Kilometer by Category	2022	2023	2024	2024 Participant Average
Ownership	$0.38	$0.36	$0.43	$0.97
Operating (Net Fuel)	$0.52	$0.55	$0.57	$0.73
Fuel	$0.39	$0.33	$0.31	$0.34
Support	$0.13	$0.15	$0.17	$0.22
Fleet Total Cost	**$1.43**	**$1.39**	**$1.48**	**$2.25**

By Year	2022	2023	2024
Hydro One Quartile Performance	1st Quartile	1st Quartile	1st Quartile

For class specific analysis on a cost per kilometer level, see the appendix (section 7) of this report.

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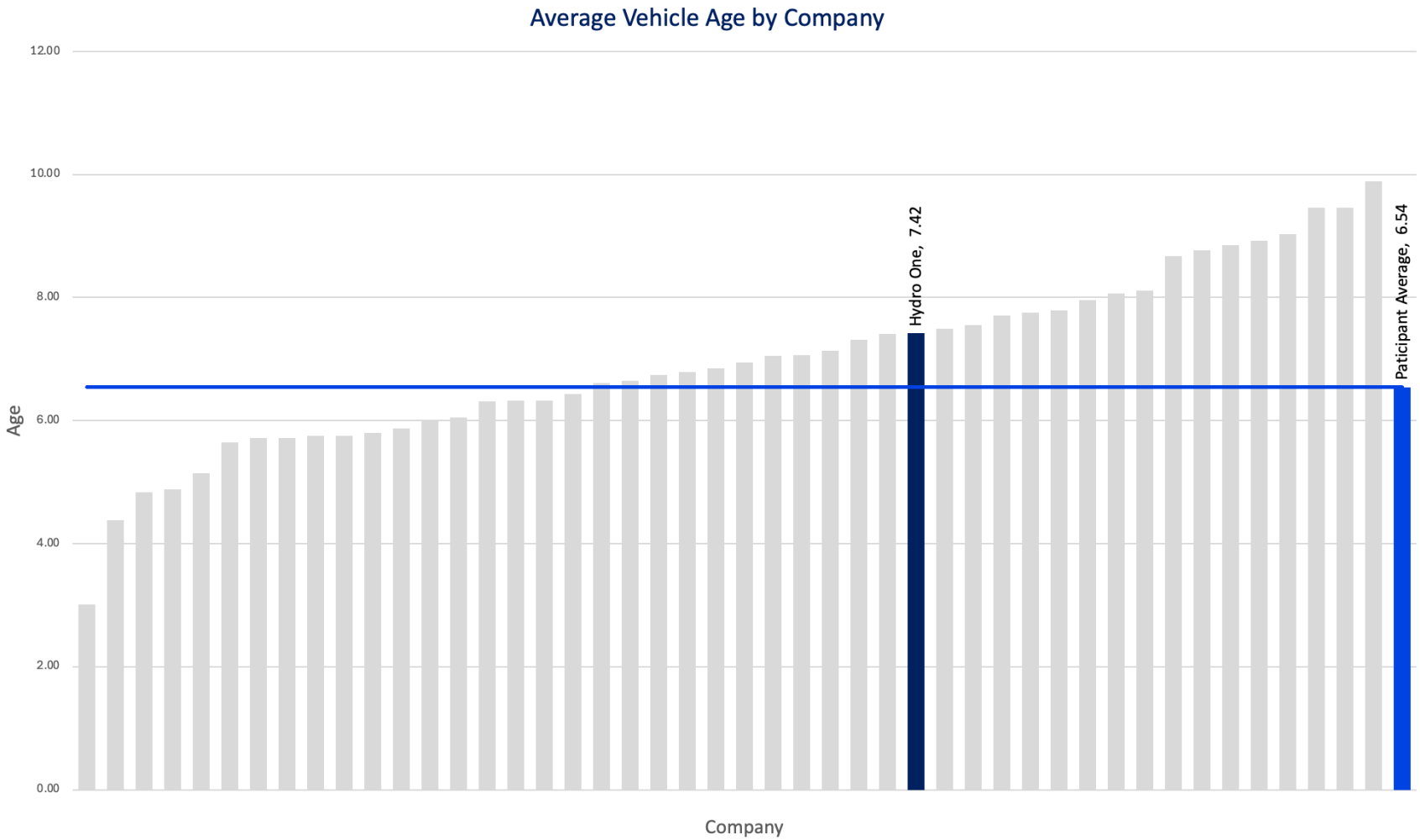
3.0 - Hydro One Fleet Age Comparison Results

3.1 - All Vehicles – Average Age Comparison



The above graph shows a comparison of the average age of vehicles for the 2024 calendar year. Hydro One is 13.5% older than the participant average and is in the third quartile.

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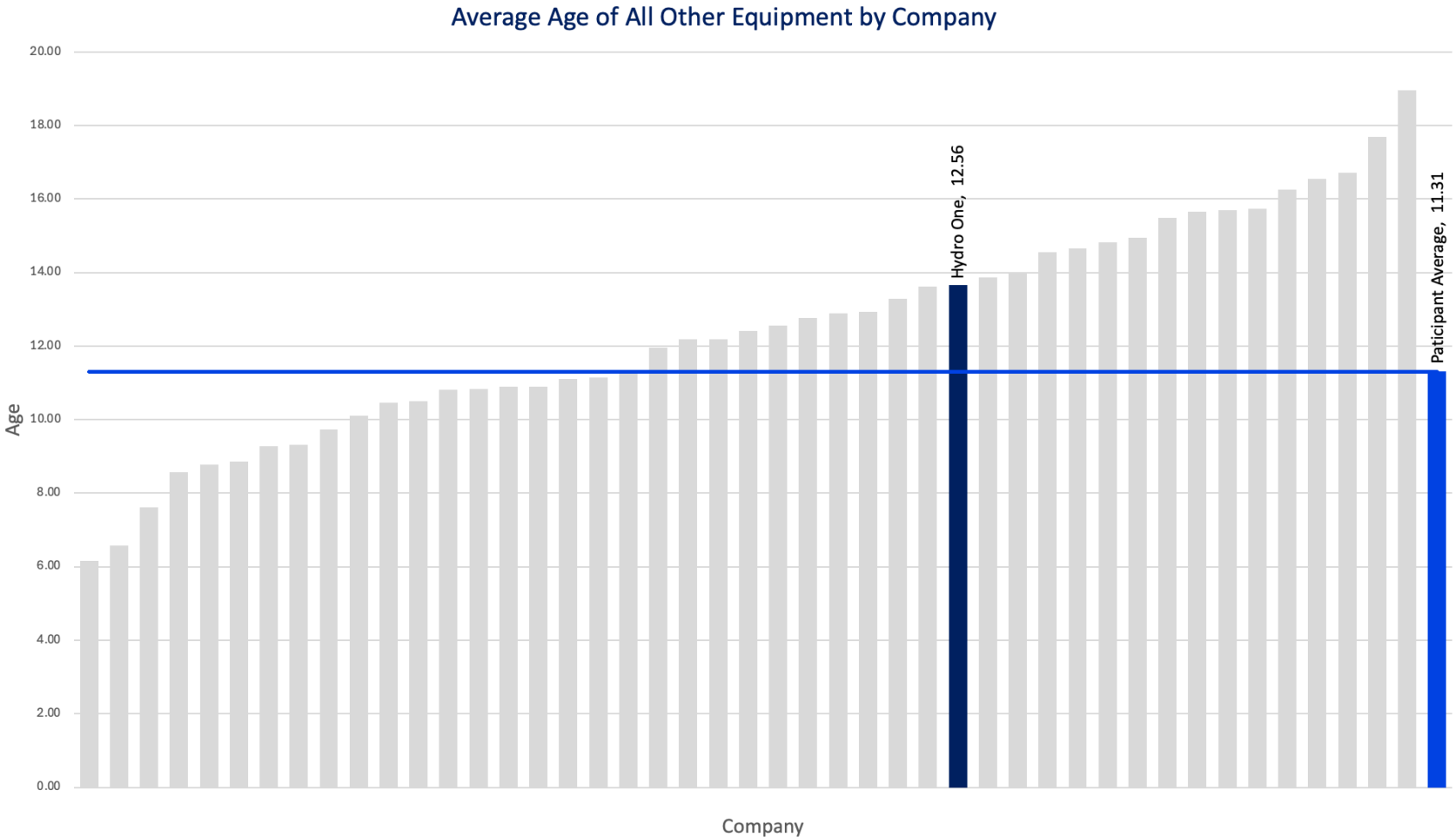
3.2 - All Other Equipment – Average Age Comparison



The above graph shows a comparison of the average age of all other equipment for the 2024 calendar year. Hydro One is 11.1% older than the participant average and is in the third quartile.

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3.3 - All Units – Average Age Comparison (Continued)

The table below shows certain fleet statistics by Hydro One equipment types. To standardize the analysis across the participant list, each Utilimarc class code was first assigned to a Hydro One equipment type then applied to all the units of the Utilimarc benchmark participants. (See glossary for class code mapping.)

2024	Hydro One			Utilimarc Participants		
Equipment Type	**Quantity of Fleet (%)**	**Average Age (Years)**	**Average Annual Mileage (KM)**	**Quantity of Fleet (%)**	**Average Age (Years)**	**Average Annual Mileage (KM)**
ALL VEHICLES	**53.97%**	**7.42**	**21,549**	**62.89**	**6.54**	**17,516**
LIGHT	38.28%	6.13	23,062	37.49%	6.22	19,034
HEAVY	15.69%	10.57	18,317	25.4%	7.02	15,433
ALL OTHER EQUIPMENT	46.02	12.56	N/A	37.1	11.31	N/A
OFF ROADS	4.08%	13.81	N/A	6.1%	8.58	N/A
MISC POE and TRAILERS	41.94%	12.44	N/A	29.11%	11.27	N/A
OTHER	0.0%	0	N/A	1.89%	20.7	N/A

In comparing the 2024 Hydro One data above to that of the Utilimarc participants, it can be seen that Hydro One is younger for the “LIGHT” equipment type but older for the “HEAVY”, “OFF ROADS”, and “MISC POE and TRAILERS” equipment types. For the “LIGHT” equipment type, Hydro One’s annual mileage averages 4,000 kilometers higher than the participant average. For the “HEAVY” equipment type, Hydro One’s annual mileage averages over 2,800 kilometers higher than the participant average.

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4.0 - Low Mileage Unit Comparisons

This section focuses on the percentage of on-road vehicles that are considered “low mileage” units. There are a variety of ways to quantify the utilization of a unit, including annual mileage, annual litre consumption, annual engine hours, and annual days used. This section uses the annual mileage for on-road vehicles for the benchmark utilization comparison. Though engine hours and days used are considered more accurate, these measurements require telematics data to accurately capture, something that is not widely provided within the benchmark analysis.

4.1 - All Vehicles – Low Mileage (Kilometers) Percentage Comparison

Utilimarc defines a low mileage unit as a unit that had an annual mileage of less than 50% of the internal average annual mileage for the specific class of vehicles. For example, take a class of vehicles that run on average 10,000 kilometers annually. A low mileage unit in this class would be a unit running less than 5,000 kilometers in a year (10,000 * 50%).

Each company within the participant list will have their own unique low mileage threshold (50% *Average Annual Mileage) based on the average annual mileage of their internal on-road vehicles. Thus, each unit counted as a low mileage unit is only a low mileage unit for that company. A company with a higher average annual mileage will need to meet a higher utilization threshold than the industry.

Though we are counting the number of individual units that are considered under-utilized in the industry, Utilimarc has decided to focus on the percentage of units within a class of vehicles that are considered low mileage units to improve comparisons by accounting for the size of a fleet.

See the next page for the Hydro One 2024 all vehicles low mileage (kilometers) percentage comparison.

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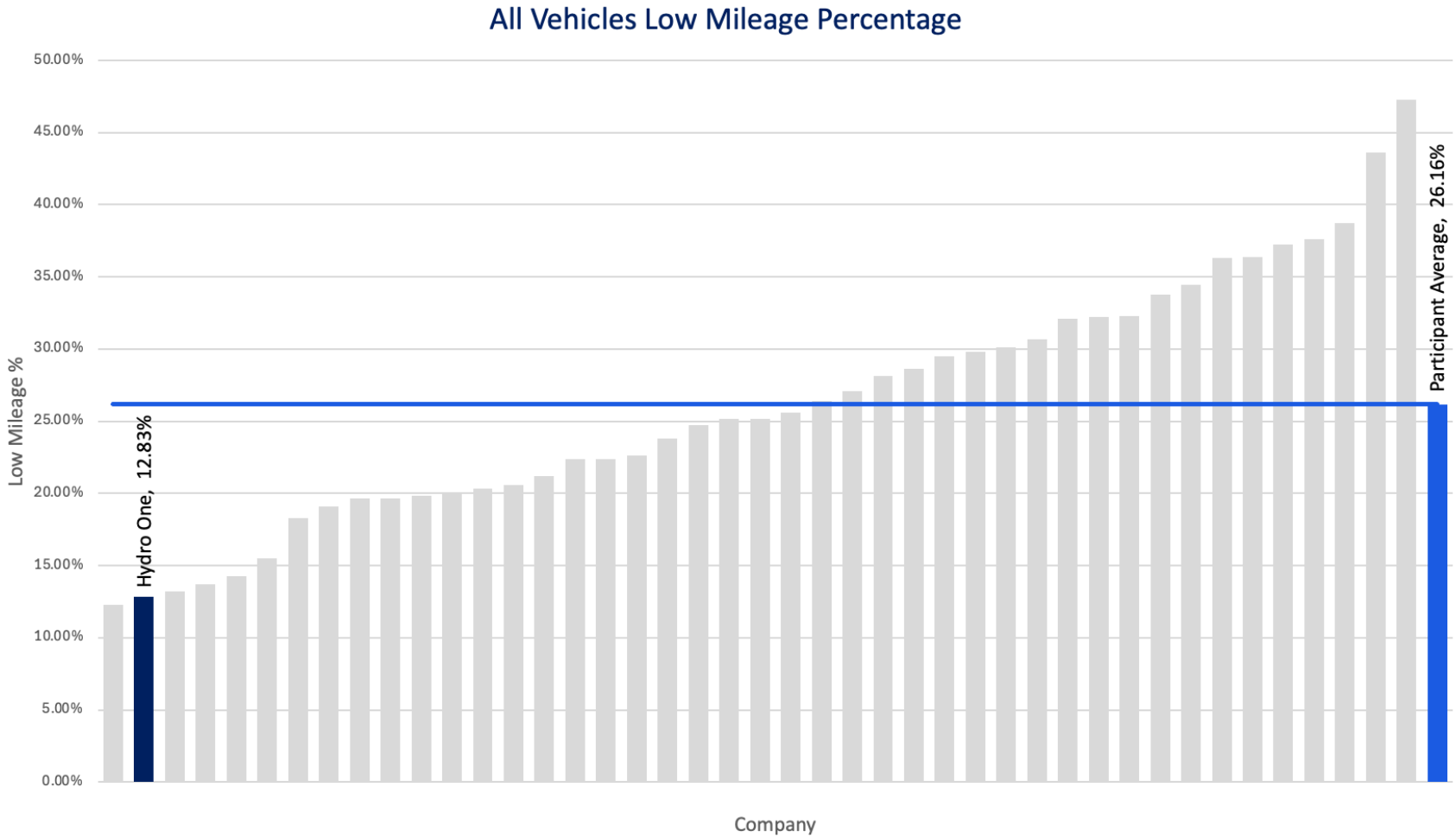
4.1 - All Vehicles – Low Mileage (Kilometers) Percentage Comparison (Continued)



The above graph shows a comparison of the low mileage percentage of all vehicles for the 2024 calendar year. Hydro One is the second bar in the comparison at only 12.83% of the vehicles being low mileage units which is 13.33% below the participant average. In addition to having the second lowest percentage in this graph, Hydro One runs 2,800 more kilometers on average than its peers.

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5.0 - Corporate Trends

This section focuses on high-level fleet trends around fleet costs and fleet mix. For each of the following charts, the Hydro One's information is listed for the past 3 years as a percent of total while the participant information is the most recent calendar year data (2024).

5.1 - Financial Breakout

The chart below shows cost information by Hydro One requested cost categories. (See the glossary for the mappings of Utilimarc cost categories into the Hydro One defined categories.) In comparing the Depreciation % of Hydro One to that of the participants, it is noteworthy that Hydro One has a higher ratio of owned versus leased/rental units compared to its peers.

Description	2022 %	2023 %	2024 %	2024 Participant %
Operations & Repairs	52.9%	57.1%	58.6%	44.7%
Fuel Costs	22.3%	18.2%	16.42%	14.5%
Depreciation	22.5%	21.5%	21.9%	18.7%
External Fleet Rentals/Leased	2.3%	3.2%	3.0%	22.0%
Total	**100.0%**	**100.0%**	**100.0%**	**100.0%**

5.2 - Fleet Mix Breakout

The chart below shows the fleet mix make-up by the Hydro One requested unit types. (See the glossary for the mappings of Utilimarc class codes into the Hydro One defined unit types.) Hydro One has a smaller percentage of LIGHT, HEAVY, and OFF ROADS equipment than the participants but more MISC POE and Trailers.

By Type	2022 %	2023 %	2024 %	2024 Participant %
LIGHT	36.2%	37.9%	38.3%	37.5%
HEAVY	16.4%	16.2%	15.7%	25.4%
OFF ROADS	4.2%	4.0%	4.1%	6.1%
MISC POE and Trailers	43.2%	41.9%	41.9%	29.1%
OTHER	0.0%	0.0%	0.0%	1.89%
Total	**100.0%**	**100.0%**	**100.0%**	**100.0%**

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6.0 - Glossary

6.1 - Definitions

Throughout this report there are a variety of terms used. Some of these terms are defined by Utilimarc while others were defined by Hydro One. Section 6.1a provides definition on Utilimarc terms and 6.1b provides definitions on Hydro One defined terms. Hydro One definition was used in conjunction with a Utilimarc definition to ensure standardization in the comparisons.

6.1a - Utilimarc Definitions

- **Units:** A general term for a vehicle, trailer or piece of power operated equipment. It is the object for which data is collected and attributed.
- **Vehicle:** A unit that operates over the road.
- **Power Operated Equipment (POE):** A unit that operates off road, including backhoes, skid steers, generators, etc.
- **Other:** A unit other than a vehicle, trailer or POE. (Ex. Misc. attachments not that are not attached to a parent unit.)

- **Total Cost:** The sum of ownership, operating (net fuel), fuel, and support cost (each defined below).
- **Ownership Cost:** The sum of all leasing, rental, interest, licensing, and depreciation expenses.
- **Operating Cost (Net Fuel):** The sum of all company mechanic labor, contract mechanic labor, and parts.
- **Fuel Cost:** The sum of all company fuel expenses.
- **Support Cost:** The sum of all expenses related to management and support staff, facilities cost, and shop supplies.

- **Quartile:** Utilimarc uses the quartile value to compare each company to the industry in a variety of metrics. Each annual comparison of the industry will have 4 quartiles. In the 1st quartile are the best performing companies in the comparison and in the 4th quartile are the worst performing companies in the comparison.
- **Vehicle Equivalency (VE):** A weighting factor based on expected labor hour requirements.

- **Low Mileage Units:** A low mileage unit ran less than 50% of the internal average mileage for the calendar year.

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6.1b - Hydro One Definitions

- **LIGHT:** Light duty on-road vehicles. See section 6.2 for more information.
- **HEAVY:** Heavy duty on-road vehicles. See section 6.2 for more information.
- **OFF ROADS:** Off-road equipment that are driven. See section 6.2 for more information.
- **MISC POE and Trailers:** Power operated equipment not included in the OFF ROADS group plus trailers. See section 6.2 for more information.
- **OTHER:** General catch all for misc. Utilimarc class codes that are not typically tracked or utilized by Hydro One. See section 6.2 for more information.
- **Operations & Repairs:** Contains the Utilimarc cost categories of Licensing, Mechanic, Support Labor, Parts, Vendor, Interest, and Other Costs.
- **Fuel Costs:** Contains the Utilimarc cost category of fuel expense.
- **Depreciation:** Contains the Utilimarc cost category of depreciation expense.
- **External Fleet Rentals/Leased:** Contains the Utilimarc cost category of lease expense.

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6.2 - Utilimarc Class Codes

In the table below is a list of all the Utilimarc class codes utilized in the benchmark analysis. For this report, Hydro One requested that some of the Utilimarc class codes be grouped into Hydro one-specific categories. These groupings are used throughout the report and are listed below.

Utilimarc Class Code	Utilimarc Class Name	Utilimarc Category	Hydro One Type
3	Sedan - Unassigned	Vehicle	Light
3.1	Sedan - Compact	Vehicle	Light
3.2	Sedan - Midsize	Vehicle	Light
3.3	Sedan - Full-size	Vehicle	Light
3.4	Sedan - Hybrid	Vehicle	Light
3.5	Sedan - Electric	Vehicle	Light
4	Police	Vehicle	Light
4.1	Police - Marked Squad Sedan	Vehicle	Light
4.2	Police - Marked Squad SUV	Vehicle	Light
4.3	Police - Unmarked Sedan	Vehicle	Light
4.4	Police - Unmarked SUV	Vehicle	Light
4.5	Police - Light Vans	Vehicle	Light
4.6	Police - Heavy Vans	Vehicle	Heavy
4.7	Police - Motorcycles	Vehicle	Light
5	Passenger Van	Vehicle	Heavy
6	Pickup - Unassigned	Vehicle	Light
6.1	Pickup - Class 1	Vehicle	Light
6.21	Pickup - Class 2a	Vehicle	Light
6.22	Pickup - Class 2b	Vehicle	Light
6.3	Pickup - Class 3	Vehicle	Light
6.4	Pickup - Class 4+	Vehicle	Heavy
10	SUV - Unassigned	Vehicle	Light
10.1	SUV - Compact	Vehicle	Light

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Utilimarc Class Code	Utilimarc Class Name	Utilimarc Category	Hydro One Type
10.2	SUV - Midsize	Vehicle	Light
10.3	SUV - Full-size	Vehicle	Light
11	Van - Unassigned	Vehicle	Light
11.1	Van - Class 1	Vehicle	Light
11.21	Van - Class 2a	Vehicle	Light
11.22	Van - Class 2b	Vehicle	Light
11.3	Van - Class 3	Vehicle	Light
11.4	Van - Class 4+	Vehicle	Heavy
12	Cube/Step Van	Vehicle	Heavy
12.1	Cube Van	Vehicle	Heavy
12.2	Step Van	Vehicle	Heavy
13	Dump Truck - Unassigned	Vehicle	Heavy
13.4	Dump Truck - Class 4	Vehicle	Heavy
13.5	Dump Truck - Class 5	Vehicle	Heavy
13.6	Dump Truck - Class 6	Vehicle	Heavy
13.7	Dump Truck - Class 7	Vehicle	Heavy
13.8	Dump Truck - Class 8	Vehicle	Heavy
14	Service Truck - Unassigned	Vehicle	Heavy
14.2	Service Truck - Class 2	Vehicle	Light
14.3	Service Truck - Class 3	Vehicle	Light
14.4	Service Truck - Class 4	Vehicle	Heavy
14.5	Service Truck - Class 5	Vehicle	Heavy
14.6	Service Truck Class 6+	Vehicle	Heavy
15	Stake Truck	Vehicle	Heavy
16	Bucket Truck - Unassigned	Vehicle	Heavy
16.5	Bucket Truck - Class 5	Vehicle	Heavy
16.6	Bucket Truck - Class 6	Vehicle	Heavy
16.7	Bucket Truck - Class 7	Vehicle	Heavy
16.8	Bucket Truck - Class 8	Vehicle	Heavy
17	Non-Insulated Bucket Truck	Vehicle	Heavy
18	Transmission Bucket Truck	Vehicle	Heavy

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Utilimarc Class Code	Utilimarc Class Name	Utilimarc Category	Hydro One Type
19	Digger Derrick - Unassigned	Vehicle	Heavy
19.7	Digger Derrick - Class 7	Vehicle	Heavy
19.8	Digger Derrick - Class 8	Vehicle	Heavy
20	Tanker	Vehicle	Heavy
21	Semi-Tractor	Vehicle	Heavy
22	Crane - Unassigned	Vehicle	Heavy
22.1	Crane - On Road	Vehicle	Heavy
22.2	Crane - On Road, Articulating	Vehicle	Heavy
24	Pressure Digger (Legacy)	Vehicle	Heavy
25	Track Unit - Unmounted	POE	Off-Roads
26	Track Unit - Mounted	POE	Off-Roads
27	Directional (Horizontal) Drill Unit	POE	Misc POE And Trailers
28	Crane - Off Road	POE	Off-Roads
30	Frontend Loader & Backhoe	POE	Off-Roads
31	Skid-steer - Unassigned	POE	Off-Roads
31.1	Skid-steer - Light	POE	Off-Roads
31.2	Skid-steer - Heavy	POE	Off-Roads
32	Dozer	POE	Off-Roads
33	Trencher - Unassigned	POE	Off-Roads
33.1	Trencher - Walk-Behind	POE	Off-Roads
33.2	Trencher - Light	POE	Off-Roads
33.3	Trencher - Medium	POE	Off-Roads
33.4	Trencher - Heavy	POE	Off-Roads
34	Loader - Unassigned	POE	Off-Roads
34.1	Loader - Light	POE	Off-Roads
34.2	Loader - Medium	POE	Off-Roads
34.3	Loader - Heavy	POE	Off-Roads
35	Excavator - Unassigned	POE	Off-Roads
35.1	Excavator - Mini	POE	Off-Roads
35.2	Excavator - Light	POE	Off-Roads
35.3	Excavator - Medium	POE	Off-Roads

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Utilimarc Class Code	Utilimarc Class Name	Utilimarc Category	Hydro One Type
35.4	Excavator - Heavy	POE	Off-Roads
38	Compactor Equipment	POE	Off-Roads
39	Tensioner/Puller	POE	Misc POE And Trailers
40	Brush Chipper	POE	Misc POE And Trailers
41	Welder	POE	Misc POE And Trailers
42	Air Compressor	POE	Misc POE And Trailers
43	ATV/Utility Cart	POE	Misc POE And Trailers
43.1	ATV	POE	Misc POE And Trailers
43.2	Utility Cart	POE	Misc POE And Trailers
44	Backyard Mobile Equipment	POE	Off-Roads
45	Generators	POE	Misc POE And Trailers
48	Mobile Aerial Platform	POE	Misc POE And Trailers
49	Forklift	POE	Misc POE And Trailers
50	Motor Grader	POE	Off-Roads
51	Pressure Washer	POE	Misc POE And Trailers
52	Off Road Tractor with Equipment	POE	Off-Roads
53	Mower - Unassigned	POE	Off-Roads
53.1	Mower - Push	POE	Off-Roads
53.2	Mower - Riding Reel	POE	Off-Roads
53.3	Mower - Riding Deck	POE	Off-Roads
54	Sweeper - Unassigned	POE	Off-Roads
54.1	Sweeper - Sidewalk	POE	Off-Roads
54.2	Sweeper - Street	POE	Off-Roads
55	Mobile Substation	Other	Other
99	Misc. - Unassigned	Other	Other
99.1	Misc. - Vehicle	Vehicle	Heavy
99.2	Misc. - POE	POE	Misc POE And Trailers
99.3	Misc. - Attachments	Other	Other
99.4	Misc. - Tools	Other	Other
100	Trailers	Trailer	Misc POE And Trailers
101	Scraper	POE	Off-Roads

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Utilimarc Class Code	Utilimarc Class Name	Utilimarc Category	Hydro One Type
102	Bus	Vehicle	Heavy
102.1	Bus - Passenger	Vehicle	Heavy
102.2	Bus - Articulating	Vehicle	Heavy
102.3	Bus - Paratransit	Vehicle	Heavy
103	Fire Truck - Unassigned	Vehicle	Heavy
103.1	Fire Truck - Ladder	Vehicle	Heavy
103.2	Fire Truck - Platform	Vehicle	Heavy
103.3	Fire Truck - Pumper	Vehicle	Heavy
103.4	Fire Truck - Quint	Vehicle	Heavy
103.5	Fire Truck - Support Vehicle	Vehicle	Heavy
103.6	Fire Truck - Boat	Vehicle	Misc POE And Trailers
103.7	Fire Truck - Rescue	Vehicle	Heavy
104	Tow Truck	Vehicle	Heavy
105	Vacuum Truck	Vehicle	Heavy
106	Cable Pulling Truck	Vehicle	Heavy
107	Washer Truck (Legacy)	Vehicle	Heavy
108	Refuse Truck - Unassigned	Vehicle	Heavy
108.1	Refuse Truck - Front Loader	Vehicle	Heavy
108.2	Refuse Truck - Side Loader	Vehicle	Heavy
108.3	Refuse Truck - Rear Loader	Vehicle	Heavy
108.4	Refuse Truck - Recycle	Vehicle	Heavy
108.5	Refuse Truck - Roll-Off	Vehicle	Heavy
109	Aerial Cable Placer	Vehicle	Heavy
110	Ambulance	Vehicle	Heavy
111	Delivery Truck (Legacy)	Vehicle	Heavy
112	Plow Truck	Vehicle	Heavy

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7.0 - Appendix

In addition to the high-level fleet to fleet comparisons, the benchmark includes the comparison of specific classes of vehicles to one another. This section focuses on the top 5 vehicle classes that were the most expensive for Hydro One in the 2024 calendar year.

7.1 – Cost per Kilometer Class Specific Comparison

Below is a list of the 5 vehicle class codes that are highlighted and the quartile performance on a cost per kilometer basis:

- **Bucket Truck – Class 8:** 1st Quartile
- **Pickup – Class 2b:** 2nd Quartile
- **Digger Derrick – Class 8:** 1st Quartile
- **Pickup – Class 2a:** 1st Quartile
- **Pickup – Class 3:** 1st Quartile

For additional information on each cost distribution, see sections 7.1a – 7.1e. The format of these sections 7.1a – 7.1e will be similar to that of the high-level comparison results in section 2 but will be filtered down to one Utilimarc class code per graph and table.

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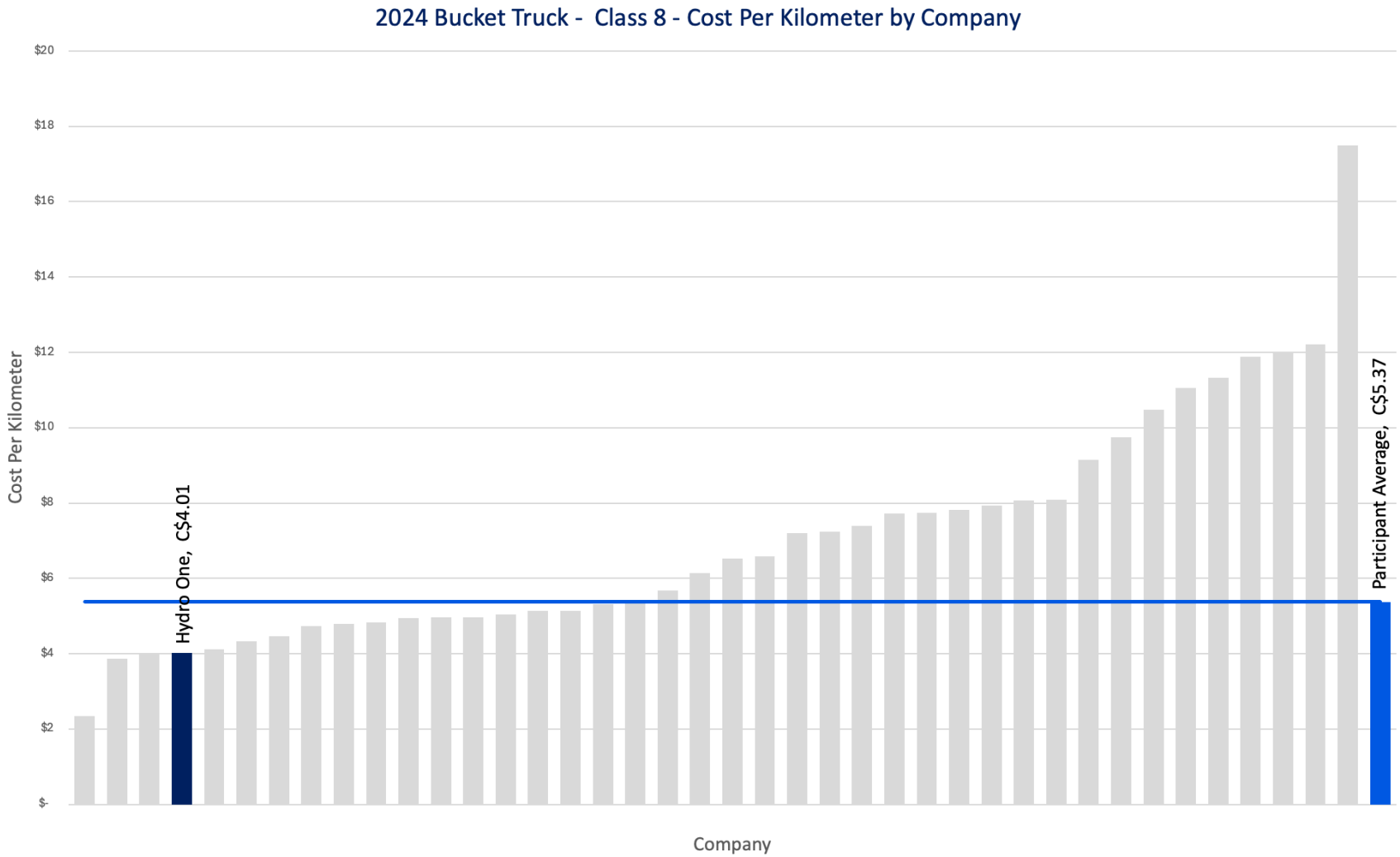
7.1a - Bucket Truck – Class 8



The above graph shows a comparison of the bucket truck – class 8 vehicles on a cost per kilometer basis for the 2024 calendar year. Hydro One is 25.33% lower than the participant average for 2024 and in the first quartile.

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7.1a - Bucket Truck – Class 8 (Continued)

The table shown below shows the Hydro One cost trend over the past 3 calendar years on a cost per kilometer basis broken out into Utilimarc defined cost categories. The last column of the table shows the value for all the 2024 benchmark study participants.

Cost Per Kilometer by Category	2022	2023	2024	2024 Participant Average
Ownership	$1.17	$1.03	$1.05	$2.21
Operating (Net Fuel)	$1.91	$1.61	$1.88	$1.91
Fuel	$0.80	$0.63	$0.56	$0.67
Support	$0.49	$0.49	$0.53	$0.59
Fleet Total Cost	**$4.37**	**$3.77**	**$4.01**	**$5.37**

By Year	2022	2023	2024
Hydro One Quartile Performance	1st Quartile	1st Quartile	1st Quartile

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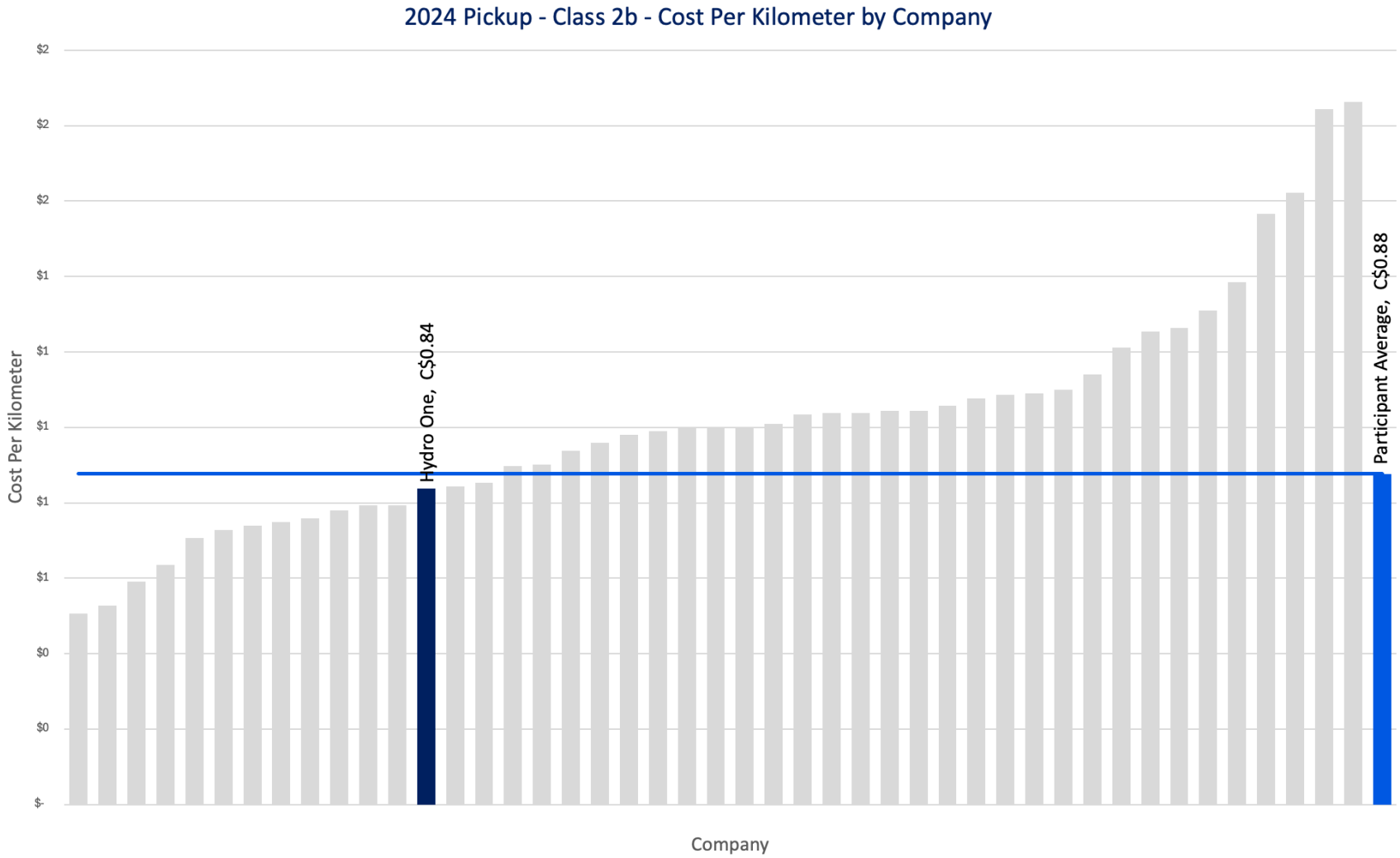
7.1b - Pickup – Class 2b



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The above graph shows a comparison of the pickup – class 2b vehicles on a cost per kilometer basis for the 2024 calendar year. Hydro One is 4.55% lower than the participant average for 2024 and in the first quartile.

7.1b - Pickup – Class 2b (Continued)

The table shown below shows the Hydro One cost trend over the past 3 calendar years on a cost per kilometer basis broken out into Utilimarc defined cost categories. The last column of the table shows the value for all the 2024 benchmark study participants.

Cost Per Kilometer by Category	2022	2023	2024	2024 Participant Average
Ownership	$0.20	$0.19	$0.23	$0.31
Operating (Net Fuel)	$0.19	$0.24	$0.24	$0.22
Fuel	$0.35	$0.30	$0.30	$0.29
Support	$0.06	$0.06	$0.07	$0.06
Fleet Total Cost	**$0.79**	**$0.79**	**$0.84**	**$0.88**

By Year	2022	2023	2024
Hydro One Quartile Performance	2nd Quartile	1st Quartile	2nd Quartile

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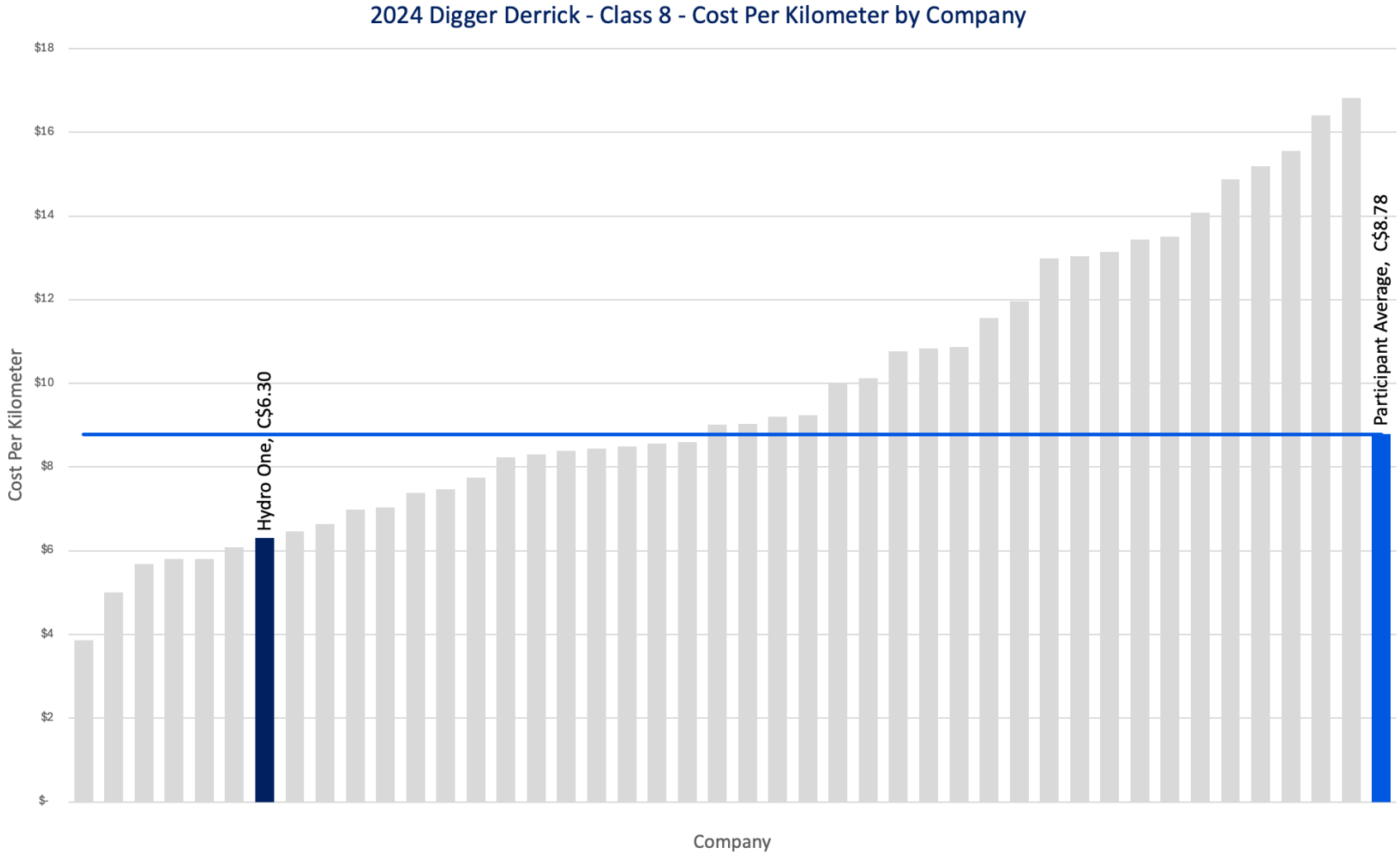
7.1c - Digger Derrick – Class 8



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The above graph shows a comparison of the digger derrick – class 8 vehicles on a cost per kilometer basis for the 2024 calendar year. Hydro One is 28.24% lower than the participant average for 2024 and is in the first quartile.

7.1c - Digger Derrick – Class 8 (Continued)

The table shown below shows the Hydro One cost trend over the past 3 calendar years on a cost per kilometer basis broken out into Utilimarc defined cost categories. The last column of the table shows the value for all the 2024 benchmark study participants.

Cost Per Kilometer by Category	2022	2023	2024	2024 Participant Average
Ownership	$1.57	$1.53	$1.51	$4.14
Operating (Net Fuel)	$2.75	$2.67	$3.33	$3.12
Fuel	$0.88	$0.77	$0.77	$0.78
Support	$0.60	$0.63	$0.69	$0.74
Fleet Total Cost	**$5.79**	**$5.61**	**$6.30**	**$8.78**

By Year	2022	2023	2024
Hydro One Quartile Performance	1st Quartile	1st Quartile	1st Quartile

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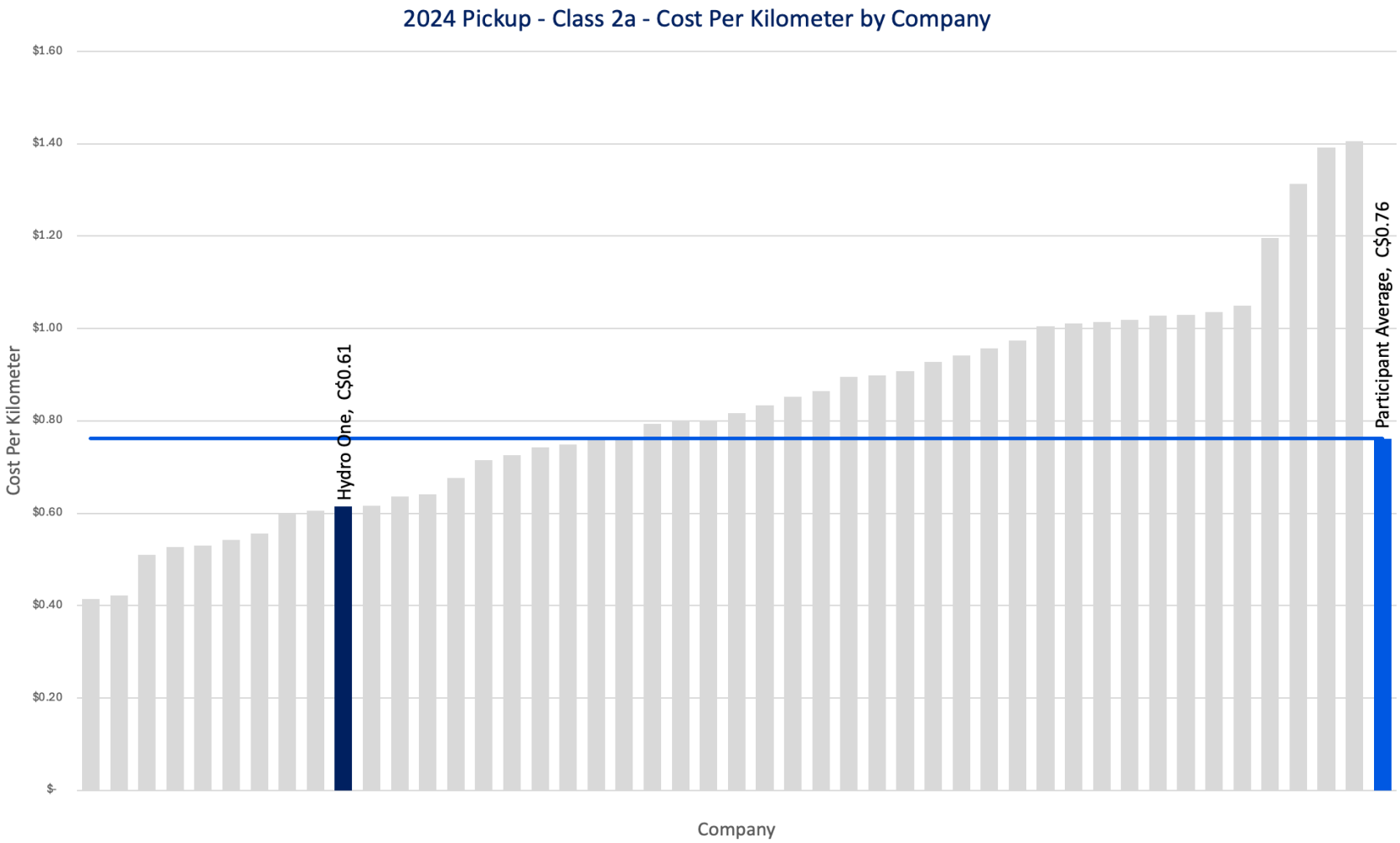
7.1d - Pickup – Class 2a



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The above graph shows a comparison of the pickup – class 2a vehicles on a cost per kilometer basis for the 2024 calendar year. Hydro One is 19.74% lower than the participant average for 2024 and is in the first quartile.

7.1d - Pickup – Class 2a (Continued)

The table shown below shows the Hydro One cost trend over the past 3 calendar years on a cost per kilometer basis broken out into Utilimarc defined cost categories. The last column of the table shows the value for all the 2024 benchmark study participants.

Cost Per Kilometer by Category	2022	2023	2024	2024 Participant Average
Ownership	$0.18	$0.16	$0.22	$0.31
Operating (Net Fuel)	$0.16	$0.19	$0.15	$0.20
Fuel	$0.23	$0.20	$0.18	$0.20
Support	$0.04	$0.05	$0.06	$0.06
Fleet Total Cost	**$0.61**	**$0.60**	**$0.61**	**$0.76**

By Year	2022	2023	2024
Hydro One Quartile Performance	1st Quartile	1st Quartile	1st Quartile

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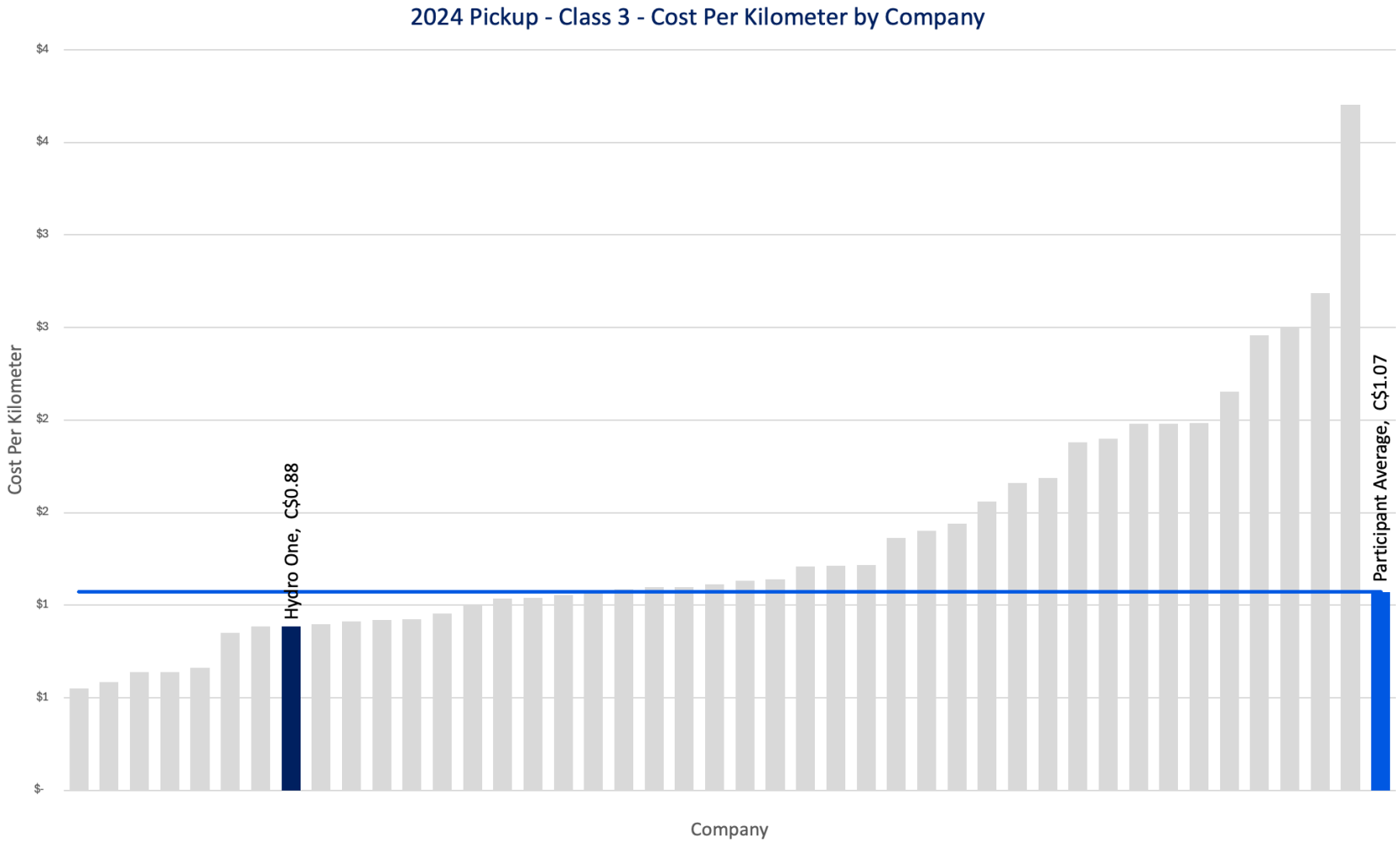
7.1e - Pickup – Class 3



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The above graph shows a comparison of the pickup – class 3 vehicles on a cost per kilometer basis for the 2024 calendar year. Hydro One is 19.0% lower than the participant average for 2024 and is in the second quartile.

7.1e - Pickup – Class 3 (Continued)

The table shown below shows the Hydro One cost trend over the past 3 calendar years on a cost per kilometer basis broken out into Utilimarc defined cost categories. The last column of the table shows the value for all the 2024 benchmark study participants.

Cost Per Kilometer by Category	2022	2023	2024	2024 Participant Average
Ownership	$0.23	$0.20	$0.21	$0.38
Operating (Net Fuel)	$0.19	$0.24	$0.28	$0.30
Fuel	$0.38	$0.32	$0.33	$0.31
Support	$0.05	$0.06	$0.07	$0.08
Fleet Total Cost	**$0.85**	**$0.83**	**$0.88**	**$1.07**

By Year	2022	2023	2024
Hydro One Quartile Performance	1st Quartile	1st Quartile	1st Quartile

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Hydro One Fleet Lifecycle Study

August 27, 2026

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Table of Contents

Lifecycle Study Summary ***4***

Lifecycle Methodology Industry Example ***4***

Annualized Total Cost **4**

Modeling Ownership Cost **7**

Modeling Maintenance Cost **8**

Modeling Annualized Total Cost **10**

Assumptions ***11***

Asset Aging 11

Emissions 11

Inflation and Depreciation 11

Purchase Prices 11

Results Summary ***12***

Lifecycle Summary **12**

Projections **14**

Electrification **17**

Class Lifecycle Results ***21***

Sedan - Midsize **21**

Pickup - Class 2a **24**

Pickup - Class 2b **26**

Pickup - Class 3 ..... **28**

SUV - Compact **30**

Van - Class 1 ..... **32**

Van - Class 2b **34**

Service Truck - Class 4 ..... **36**

Service Truck - Class 5 ..... **38**

Bucket Truck - Class 5 ..... **40**

Bucket Truck - Class 8 ..... **42**

Forestry Bucket **44**

Digger Derrick - Class 8 ..... **46**

Appendix ***48***

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A – CO_2 Emissions Per Liter by Fuel Type.....48

B – Inflation 48

C – Maintenance Cost per Kilometer by Age 49

D – Class Level Information 49

E – Utilimarc Class Codes 52

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Lifecycle Study Summary

This lifecycle study has two main parts: Lifecycle Analysis and Projections.

The Lifecycle Analysis shows the optimal economic replacement ages for Hydro One's largest classes based on their purchase prices, residual value at sale, usage, and maintenance cost.

The Projections detail the outcomes of following different investment scenarios from 2028-2032. The outcomes include cost, sustainability, staffing, and aging elements that differentiate the results of the investment scenarios. The projections use the calculated lifecycles from the analysis portion along with lifecycles provided by Hydro One to determine replacement eligibility for assets.

Lifecycle Methodology Industry Example

Annualized Total Cost

For each class, Utilimarc's Vehicle Replacement Module (VRM) determines what lifecycle achieves the lowest cost to own and maintain an average asset over its lifetime. This is done by calculating the *annualized total cost* for each potential lifecycle. Annualized total cost is the estimated sum of all ownership and maintenance cost a unit obtains over the course of its life, divided by the number of years the unit is in service. Minimizing annualized total cost guarantees the lowest total cost over the life of the asset. As an example, the table below shows the annualized cost for the possible lifecycles of an Industry light duty pickup truck.

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Replacement Age	Annualized Total Cost	Deviation
1	$5,946	11.9%
2	$5,759	8.4%
3	$5,598	5.4%
4	$5,476	3.1%
5	$5,390	1.5%
6	$5,337	0.5%
7	$5,313	0.0%
8	$5,316	0.1%
9	$5,345	0.6%
10	$5,397	1.6%
11	$5,472	3.0%
12	$5,567	4.8%
13	$5,682	7.0%
14	$5,816	9.5%

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Consider the following three replacement scenarios over a 14-year financial period:

Scenario 1: A fleet manager plans to replace this vehicle every year. The annualized cost of this replacement strategy is $5,946. Over the 14-year period, this replacement strategy will cost fleet 14 x $5,946 = $83,244.

Scenario 2: A fleet manager plans to replace this vehicle every seven years. The annualized cost of this replacement strategy is $5,313. Over the 14-year period, this replacement strategy will cost fleet 14 x $5,313 = $74,382.

Scenario 3: A fleet manager plans to replace this vehicle every fourteen years. The annualized cost of this replacement strategy is $5,816. Over the 14-year period, this strategy will cost fleet 14 x $5,816 = $81,424

The table below summarizes the calculations in the previous example.

	Chosen Replacement Age	**Financial Period (Years)**	**Annualized Cost**	**Total Cost for Financial Period**
Scenario 1	1	14	$5,946	$83,244
Scenario 2	7	14	$5,313	$74,382
Scenario 3	14	14	$5,816	$81,424

This example illustrates that by minimizing annualized total cost achieves the lowest total cost of ownership over the life of the vehicle. Utilimarc recommends replacing units within 1.0% of the true lowest cost of ownership. This generally provides a three-year range for replacement, which allows for flexibility when planning replacement without dramatically effecting overall cost.

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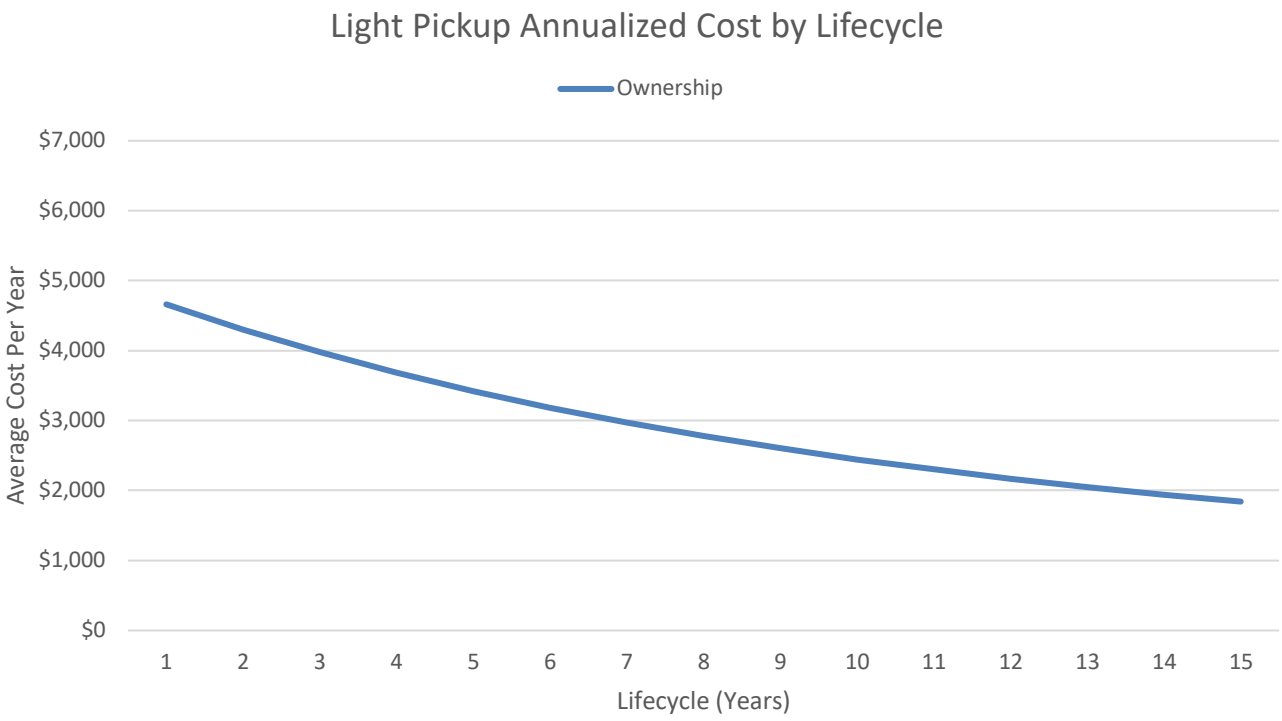
Modeling Ownership Cost

The Vehicle Replacement Model uses an exponential decay model to project the ownership cost of an asset over its lifetime. Each asset is assumed to lose 18.0-25.5% of its current book value every year as a cost of depreciation. This decay rate is established based on historical auction information. *Annualized Ownership Cost* is calculated by taking the cumulative sum of each year of depreciation for the asset and dividing by the number of years the asset is in service. Continuing the example from the previous section, the graph below shows the annualized ownership cost for an Industry light pickup truck for each potential lifecycle.



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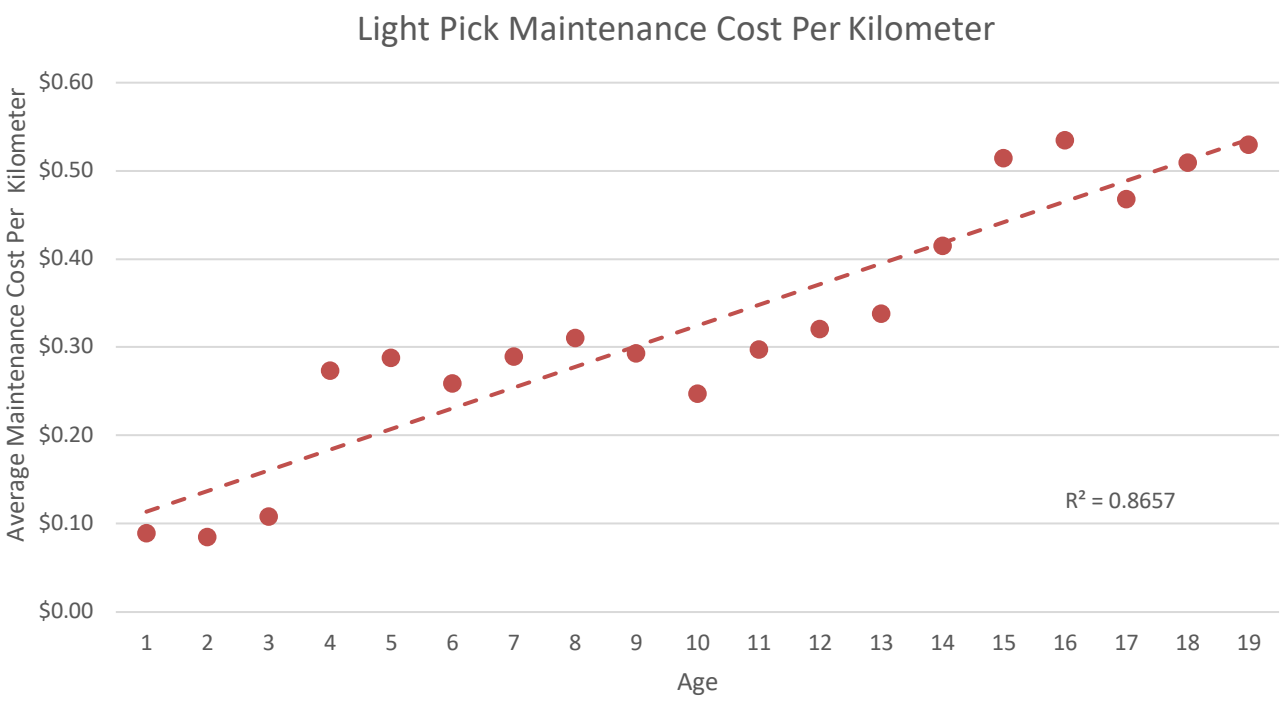
Modeling Maintenance Cost

The Vehicle Replacement Model uses a linear regression model to project the maintenance cost of an asset over its lifetime. These class specific models are built using historical, maintenance cost per mile data taken from the Utilimarc data. In the graph below, the red dots represent the average historical maintenance cost per kilometer for a light pickup truck of each age. The red, dashed line represents the linear regression model used to estimate the maintenance cost of an average pickup. The linear regression model helps predict the increase cost of maintenance associated with running older vehicles.



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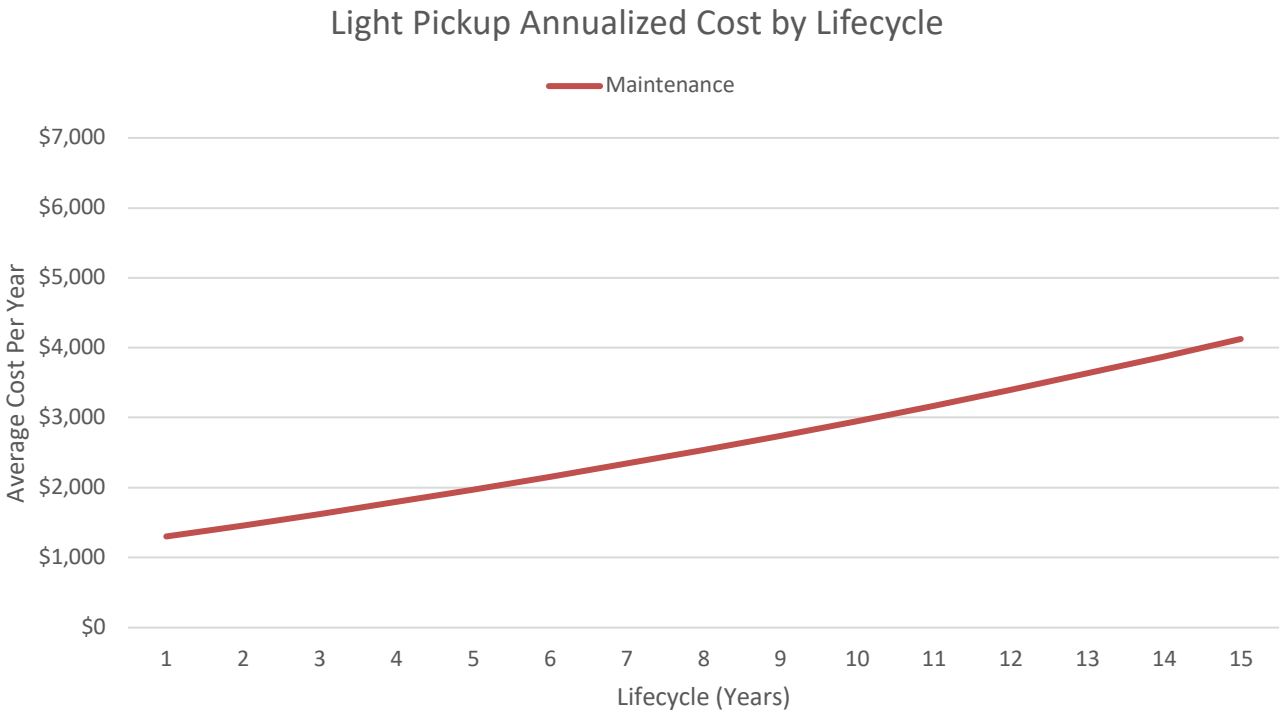
Annualized Maintenance Cost is calculated by taking the cumulative sum of each year of maintenance cost for the asset and dividing by the number of years the asset is in service. The graph below shows the annualized maintenance cost for an Industry light pickup truck, based on the linear regression model and a calculated average annual mileage.



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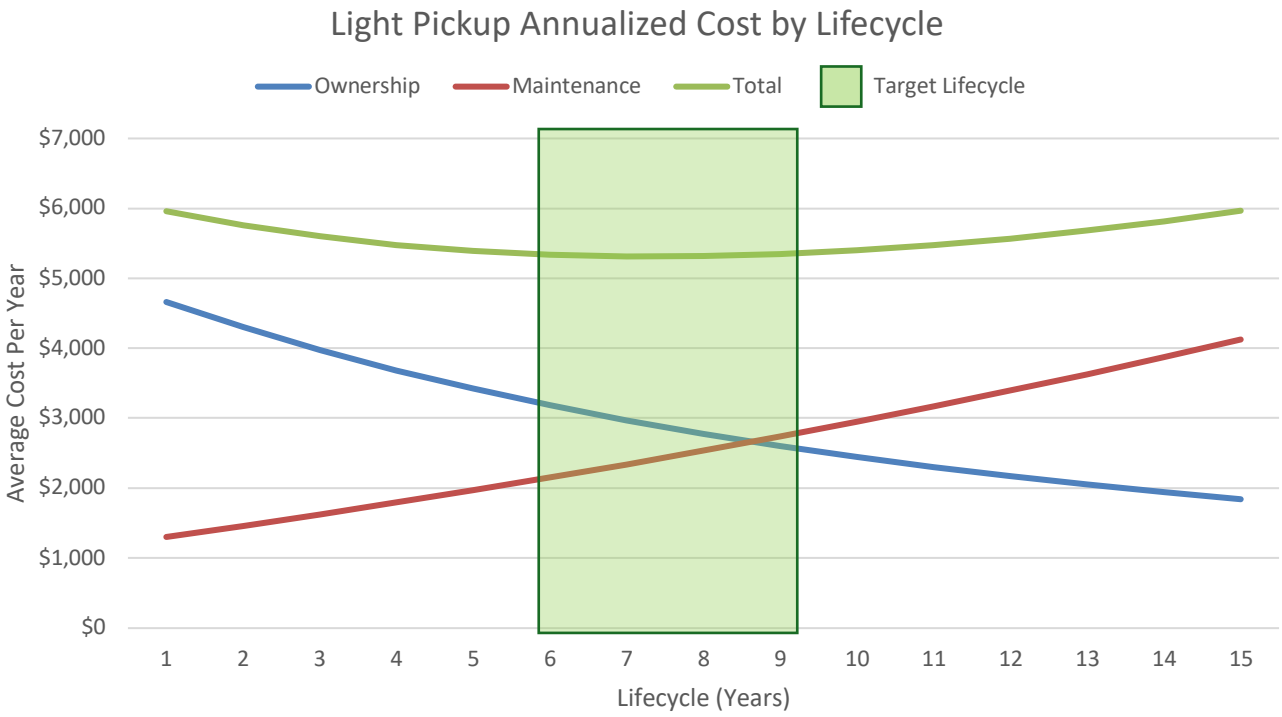
Modeling Annualized Total Cost

Annualized total cost is calculated by taking the sum of annualized maintenance and ownership cost. The graph below shows the annualized total cost for a light duty pickup truck. The target lifecycle is indicated by a green shaded zone. This is a visual representation of the table from pg. 5 and demonstrates how the model identifies each lifecycle.



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Assumptions

Asset Aging

- Unit ages start at 2026 - unit year + 1 (e.g., an asset with unit year 2018 will have a starting age of 2026 – 2018 + 1 = 9 for the first year of the replacement plan.)
- Units currently on order were set to unit year 2025 and therefore started with age set to 2 years.
- No adjustments are made to anticipate future increases or decreases in fleet size.

Emissions

- CO_2 emissions are calculated from historic unit fuel consumption and fuel type coefficients (Appendix A)
- Electric vehicles have no CO_2 emissions
- Internal combustion engine (ICE) assets replaced by hybrids have a 40.0% reduction in annual fuel liter consumption.
- To account for improved fuel efficiency of newer vehicles, replaced assets receive a 0.5% reduction in annual fuel liters consumed per year of age difference (e.g., a 20-year-old vehicle getting replaced will have a 20 * 0.5% = 10.0% reduction in fuel liter consumption.)
- CO_2 offsets are calculated from the reductions in fuel consumption by new EVs, hybrids, and updated engine efficiencies compared to the baseline consumption from 2024.

Inflation and Depreciation

- Historic costs were translated into 2024 dollars based on Inflation rates from the Statistique Canada Consumer Price Index.
- Hydro One auction data was used to create depreciation rates for Hydro One's largest classes.
- An industry supported 3.8% annual inflation rate is applied to all future costs (Appendix B).

Purchase Prices

- Purchase prices by class are set by multiple methods (Appendix D)

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Results Summary

Lifecycle Summary

This table shows the lifecycle recommendations for Hydro One's top 8 vehicles classes, which represent 70% of Hydro One's total annual fleet spend and 92% of Hydro One's on-road vehicle spend. These Lifecycles are based on current purchase prices and future projections can shift the optimal economic replacement age.

Class	Count	Average Km	Purchase Price	Lifecycle
Pickup - Class 2a	1,040	24,706	$63,644	8
Pickup - Class 2b	1,006	26,382	$79,339	7
Pickup - Class 3	187	30,832	$81,498	7
SUV - Compact	284	21,534	$55,014	10
Service Truck - Class 5	177	17,323	$144,222	7
Bucket Truck - Class 8	393	21,292	$515,148	8
Forestry Bucket	254	12,154	$519,826	13
Digger Derrick – Class 8	245	13,062	$528,517	12

These calculated lifecycles, along with the lifecycle provided by Hydro One for smaller classes in Appendix D, are the age at which the vehicles become eligible for replacement during the outcome projections.

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24.7% of Hydro One's total fleet spend goes toward other equipment including trailers and miscellaneous pieces or equipment (POE). Below are the largest classes in this group, sorted by total cost. Due to inconsistent usage data for off-road assets, lifecycles are not calculated for these classes. However, the age eligibility can be found in Appendix D.

Class	Count
Track Unit - Mounted	147
Trailers	1,935
Misc. - POE	700
Brush Chipper	204
Track Unit - Unmounted	92
Forklift	271
Tensioner/Puller	91
Utility Cart	688
Excavator - Light	22
Frontend Loader & Backhoe	48
Backyard Mobile Equipment	14
Dozer	13

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Projections

The amount of capital available dictates how closely the lifecycles will be adhered to. A fleet that replaces assets at an even rate, exactly at the end of their lifecycle, will result in an average age of one half of the average lifecycle length of the fleet. Eventually, this would lead to a perfectly uniform age distribution within each asset class.

Three capital funding scenarios are outlined and summarized below. The first two years (2026-2027) in each scenario are locked based on currently expected funding levels. Funding levels and outcomes in the remaining five years (2028-2032) are determined as follows:

- The Full Funding scenario represents the capital requirement to move the fleet towards all assets being within lifecycle. Replacement numbers are limited by class to avoid aging bubbles where there are too many assets at the same age within a class and will eventually become a problem when they all come due for replacement. Full funding is the fastest way to get every asset within lifecycle without creating aging bubbles. Full funding also allows for the largest CO_2 offset of the three scenarios as there is more capital to spend on electric vehicles, hybrids, and engines with improved fuel efficiency.

- The Proposed Funding scenario represents the amount of capital needed to reduce the average fleet age by one year by 2032. This funding level, increasing with inflation, would take significantly longer to get the average fleet age down to half of the average lifecycle and would never result in a uniform age distribution. Proposed funding provides the second largest CO_2 offset and has lower maintenance costs than the sustained funding.

- The Sustained Funding scenario represents capital funding to hold the average age of the fleet steady while costs rise due to inflation. This will not get the entire fleet within their lifecycle and will require additional technician staffing to maintain the older fleet. Sustained funding has the lowest ownership cost of the three scenarios as it holds assets for the longest time before replacement. It matches this with the highest maintenance cost as older assets require more maintenance to be used.

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Below are the results for the on-road vehicle classes.

Full Funding - On-Road	2026	2027	2028	2029	2030	2031	2032
Annual Capital	$37,232,620	$35,264,637	$100,533,352	$104,069,070	$108,648,482	$112,777,124	$116,657,201
Units Replaced	88	79	586	581	587	587	586
Annual Maintenance	$63,556,808	$68,449,670	$64,564,567	$61,272,863	$58,438,145	$56,304,679	$55,156,460
Annual Ownership	$42,612,009	$40,395,899	$49,212,833	$56,932,034	$63,909,181	$70,134,708	$75,614,418
Total	$106,168,817	$108,845,569	$113,777,400	$118,204,897	$122,347,326	$126,439,387	$130,770,878
Avg Age	8.66	9.31	8.29	7.46	6.72	6.12	5.68
EV %	2%	2%	3%	5%	6%	8%	10%
Hybrid %	3%	3%	4%	5%	6%	7%	7%
CO2 Emissions (kg)	48,895,911	48,809,937	48,119,340	47,365,259	46,457,905	45,524,822	44,509,692
CO2 Offset (kg)	2,502,163	2,588,137	3,278,734	4,032,815	4,940,169	5,873,252	6,888,382

Proposed Funding - On-Road	2026	2027	2028	2029	2030	2031	2032
Annual Capital	$37,232,620	$35,264,637	$75,282,229	$77,360,431	$78,018,559	$80,817,503	$84,551,768
Units Replaced	88	79	286	371	440	420	301
Annual Maintenance	$63,556,808	$68,449,670	$68,355,340	$68,333,865	$68,897,639	$69,382,832	$70,142,582
Annual Ownership	$42,612,009	$40,395,899	$44,675,870	$49,020,184	$53,002,610	$56,684,198	$59,791,338
Total	$106,168,817	$108,845,569	$113,031,210	$117,354,049	$121,900,249	$126,067,030	$129,933,920
Avg Age	8.66	9.31	9.22	8.9	8.4	7.96	7.94
EV %	2%	2%	3%	3%	4%	6%	6%
Hybrid %	3%	3%	4%	5%	6%	6%	7%
CO2 Emissions (kg)	48,895,911	48,809,937	48,402,050	47,959,967	47,367,306	46,739,942	46,159,794
CO2 Offset (kg)	2,502,163	2,588,137	2,996,024	3,438,107	4,030,768	4,658,132	5,238,280

Sustained Funding - On-Road	2026	2027	2028	2029	2030	2031	2032
Annual Capital	$37,232,620	$35,264,637	$55,276,809	$56,591,597	$56,440,076	$58,425,095	$61,350,121
Units Replaced	88	79	153	199	246	287	308
Annual Maintenance	$63,556,808	$68,449,670	$70,957,603	$74,122,793	$77,279,348	$80,712,464	$83,885,070
Annual Ownership	$42,612,009	$40,395,899	$41,549,457	$42,984,836	$44,445,604	$46,114,109	$48,081,525
Total	$106,168,817	$108,845,569	$112,507,060	$117,107,628	$121,724,953	$126,826,573	$131,966,595
Avg Age	8.66	9.31	9.68	9.91	9.98	9.91	9.75
EV %	2%	2%	2%	3%	3%	3%	4%
Hybrid %	3%	3%	4%	4%	5%	5%	6%
CO2 Emissions (kg)	48,895,911	48,809,937	48,599,442	48,315,884	48,029,481	47,646,035	47,257,833
CO2 Offset (kg)	2,502,163	2,588,137	2,798,632	3,082,190	3,368,593	3,752,039	4,140,241

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Below are the results for the other equipment.

Full Funding - Other Eq.	2026	2027	2028	2029	2030	2031	2032
Annual Capital	$18,739,745	$21,720,131	$21,717,673	$23,307,017	$26,483,107	$27,638,559	$28,015,584
Units Replaced	180	191	194	187	212	216	215
Annual Maintenance	$26,695,989	$27,532,536	$28,460,572	$29,430,258	$30,366,064	$31,328,498	$32,344,766
Annual Ownership	$11,780,504	$13,200,065	$14,404,609	$15,657,810	$17,181,731	$18,651,023	$19,961,737
Total	$38,476,493	$40,732,602	$42,865,181	$45,088,068	$47,547,795	$49,979,520	$52,306,503
Avg Age	13.6	13.44	13.33	13.3	13.17	13.02	12.88
EV %	1%	1%	1%	1%	1%	1%	1%
Hybrid %	0%	0%	0%	0%	0%	0%	0%
CO2 Emissions (kg)	2,434,217	2,424,988	2,415,914	2,405,065	2,386,511	2,369,713	2,350,945
CO2 Offset (kg)	48,963,857	48,973,086	48,982,160	48,993,009	49,011,563	49,028,361	49,047,129

Proposed Funding - Other Eq.	2026	2027	2028	2029	2030	2031	2032
Annual Capital	$18,739,745	$21,720,131	$21,717,673	$23,307,017	$26,483,107	$27,638,559	$28,015,584
Units Replaced	180	191	194	187	212	216	215
Annual Maintenance	$26,695,989	$27,532,536	$28,460,572	$29,430,258	$30,366,064	$31,328,498	$32,344,766
Annual Ownership	$11,780,504	$13,200,065	$14,404,609	$15,657,810	$17,181,731	$18,651,023	$19,961,737
Total	$38,476,493	$40,732,602	$42,865,181	$45,088,068	$47,547,795	$49,979,520	$52,306,503
Avg Age	13.6	13.44	13.33	13.3	13.17	13.02	12.88
EV %	1%	1%	1%	1%	1%	1%	1%
Hybrid %	0%	0%	0%	0%	0%	0%	0%
CO2 Emissions (kg)	2,434,217	2,424,988	2,415,914	2,405,065	2,386,511	2,369,713	2,350,945
CO2 Offset (kg)	48,963,857	48,973,086	48,982,160	48,993,009	49,011,563	49,028,361	49,047,129

Sustained Funding - Other Eq.	2026	2027	2028	2029	2030	2031	2032
Annual Capital	$18,739,745	$21,720,131	$21,717,673	$23,307,017	$26,483,107	$27,638,559	$28,015,584
Units Replaced	180	191	194	187	212	216	215
Annual Maintenance	$26,695,989	$27,532,536	$28,460,572	$29,430,258	$30,366,064	$31,328,498	$32,344,766
Annual Ownership	$11,780,504	$13,200,065	$14,404,609	$15,657,810	$17,181,731	$18,651,023	$19,961,737
Total	$38,476,493	$40,732,602	$42,865,181	$45,088,068	$47,547,795	$49,979,520	$52,306,503
Avg Age	13.6	13.44	13.33	13.3	13.17	13.02	12.88
EV %	1%	1%	1%	1%	1%	1%	1%
Hybrid %	0%	0%	0%	0%	0%	0%	0%
CO2 Emissions (kg)	2,434,217	2,424,988	2,415,914	2,405,065	2,386,511	2,369,713	2,350,945
CO2 Offset (kg)	48,963,857	48,973,086	48,982,160	48,993,009	49,011,563	49,028,361	49,047,129

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Changes in maintenance cost occur in line with changes in staffing or outsourcing. Assuming current outsourcing practices (64% average) for the fleet, the following table shows the increase in labor demand that would be required under the Sustained Funding scenario compared to the Proposed Funding scenario.

Labor Hour Increase (Sustained Funding vs. Proposed)	2028	2029	2030	2031	2032
Internal	4,969	11,054	16,005	21,635	26,242
External	8,834	19,652	28,454	38,462	46,653
Total	**13,803**	**30,706**	**44,460**	**60,096**	**72,895**
Estimated Technician Increase	3.38	7.51	10.87	14.70	17.83
Percent Technician Increase	2%	6%	8%	11%	13%

Electrification

The electric and hybrid fleet percentages from the summary above can be broken down further into major Hydro One categories and Utilimarc classes.

Below are the percentages of electric vehicles by major Hydro One category for each funding scenario.

Full Funding	2026	2027	2028	2029	2030	2031	2032
Heavy PTO	0%	0%	0%	0%	0%	0%	0%
Light and Heavy Non-PTO	2%	2%	4%	6%	8%	10%	12%
Miscellaneous	1%	1%	1%	1%	1%	1%	1%
Off Roads	0%	0%	0%	0%	0%	0%	0%
Small Off-Road	0%	0%	0%	0%	0%	0%	0%

Proposed Funding	2026	2027	2028	2029	2030	2031	2032
Heavy PTO	0%	0%	0%	0%	0%	0%	0%
Light and Heavy Non-PTO	2%	2%	3%	4%	6%	7%	8%
Miscellaneous	1%	1%	1%	1%	1%	1%	1%
Off Roads	0%	0%	0%	0%	0%	0%	0%
Small Off-Road	0%	0%	0%	0%	0%	0%	0%

Sustained Funding	2026	2027	2028	2029	2030	2031	2032
Heavy PTO	0%	0%	0%	0%	0%	0%	0%
Light and Heavy Non-PTO	2%	2%	3%	3%	4%	4%	5%
Miscellaneous	1%	1%	1%	1%	1%	1%	1%
Off Roads	0%	0%	0%	0%	0%	0%	0%
Small Off-Road	0%	0%	0%	0%	0%	0%	0%

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Below are the percentages of hybrid vehicles by major Hydro One category for each funding scenario.

Full Funding	2026	2027	2028	2029	2030	2031	2032
Heavy PTO	0%	0%	0%	0%	0%	0%	0%
Light and Heavy Non-PTO	4%	5%	6%	6%	7%	8%	9%
Miscellaneous	0%	0%	0%	0%	0%	0%	0%
Off Roads	0%	0%	0%	0%	0%	0%	0%
Small Off-Road	0%	0%	0%	0%	0%	0%	0%

Proposed Funding	2026	2027	2028	2029	2030	2031	2032
Heavy PTO	0%	0%	0%	0%	0%	0%	0%
Light and Heavy Non-PTO	4%	5%	5%	6%	7%	8%	9%
Miscellaneous	0%	0%	0%	0%	0%	0%	0%
Off Roads	0%	0%	0%	0%	0%	0%	0%
Small Off-Road	0%	0%	0%	0%	0%	0%	0%

Sustained Funding	2026	2027	2028	2029	2030	2031	2032
Heavy PTO	0%	0%	0%	0%	0%	0%	0%
Light and Heavy Non-PTO	4%	5%	5%	6%	6%	7%	8%
Miscellaneous	0%	0%	0%	0%	0%	0%	0%
Off Roads	0%	0%	0%	0%	0%	0%	0%
Small Off-Road	0%	0%	0%	0%	0%	0%	0%

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Below are the percentages of electric vehicles by Utilimarc class for each funding scenario.

Full Funding	2026	2027	2028	2029	2030	2031	2032
Sedan - Compact	94%	94%	100%	100%	100%	100%	100%
Sedan - Midsize	0%	0%	11%	23%	34%	46%	57%
Pickup - Class 1	0%	0%	12%	12%	29%	47%	65%
Pickup - Class 2a	2%	2%	5%	8%	10%	13%	15%
SUV - Compact	0%	0%	10%	20%	30%	40%	50%
SUV - Midsize	5%	5%	14%	14%	27%	41%	55%

Proposed Funding	2026	2027	2028	2029	2030	2031	2032
Sedan - Compact	94%	94%	94%	100%	100%	100%	100%
Sedan - Midsize	0%	0%	11%	23%	34%	46%	57%
Pickup - Class 1	0%	0%	12%	12%	12%	12%	12%
Pickup - Class 2a	2%	2%	4%	6%	8%	9%	11%
SUV - Compact	0%	0%	2%	3%	13%	23%	25%
SUV - Midsize	5%	5%	5%	5%	14%	14%	14%

Sustained Funding	2026	2027	2028	2029	2030	2031	2032
Sedan - Compact	94%	94%	94%	94%	100%	100%	100%
Sedan - Midsize	0%	0%	3%	14%	26%	37%	49%
Pickup - Class 1	0%	0%	12%	12%	12%	12%	12%
Pickup - Class 2a	2%	2%	3%	4%	5%	6%	6%
SUV - Compact	0%	0%	0%	2%	3%	6%	9%
SUV - Midsize	5%	5%	5%	5%	5%	9%	9%

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Below are the percentages of hybrid vehicles by Utilimarc class for each funding scenario.

Full Funding	2026	2027	2028	2029	2030	2031	2032
Sedan - Compact	6%	6%	0%	0%	0%	0%	0%
Sedan - Midsize	43%	43%	43%	31%	26%	20%	9%
Pickup - Class 2a	0%	0%	2%	4%	7%	9%	11%
SUV - Compact	44%	44%	44%	44%	44%	44%	38%
Van - Class 1	0%	0%	6%	12%	18%	23%	29%
Van - Class 2a	0%	0%	5%	11%	16%	21%	26%
Van - Class 2b	0%	0%	5%	10%	15%	20%	25%
Van - Class 3	0%	8%	15%	23%	31%	38%	46%

Proposed Funding	2026	2027	2028	2029	2030	2031	2032
Sedan - Compact	6%	6%	6%	0%	0%	0%	0%
Sedan - Midsize	43%	43%	43%	31%	26%	20%	9%
Pickup - Class 2a	0%	0%	2%	4%	6%	8%	11%
Van - Class 1	0%	0%	6%	12%	18%	23%	29%
Van - Class 2a	0%	0%	5%	11%	16%	21%	21%
Van - Class 2b	0%	0%	5%	9%	14%	19%	19%
Van - Class 3	0%	8%	15%	23%	31%	38%	46%

Sustained Funding	2026	2027	2028	2029	2030	2031	2032
Sedan - Compact	6%	6%	6%	6%	0%	0%	0%
Sedan - Midsize	43%	43%	43%	40%	29%	26%	17%
Pickup - Class 2a	0%	0%	0%	2%	4%	5%	7%
Van - Class 1	0%	0%	3%	9%	15%	21%	27%
Van - Class 2a	0%	0%	0%	5%	11%	16%	21%
Van - Class 2b	0%	0%	3%	5%	9%	9%	9%
Van - Class 3	0%	8%	15%	23%	31%	38%	46%

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Class Lifecycle Results

Sedan - Midsize

	Value
Lifecycle	10
Purchase Price	$49,267
Average Salvage at Sale	$6,771
Market Depreciation Rate	18%
Inflation Rate	3.8%
Average Annual Km	18,358

Lifecycle	Maintenance	Ownership	Total	Deviation
1	$697.38	$7,333.01	$8,030.39	26.67%
2	$852.83	$6,787.29	$7,640.12	20.51%
3	$1,015.82	$6,295.72	$7,311.54	15.33%
4	$1,186.68	$5,852.25	$7,038.93	11.03%
5	$1,365.72	$5,451.56	$6,817.28	7.53%
6	$1,553.29	$5,088.96	$6,642.25	4.77%
7	$1,749.75	$4,760.31	$6,510.05	2.69%
8	$1,955.47	$4,461.94	$6,417.41	1.22%
9	$2,170.84	$4,190.62	$6,361.46	0.34%
10	$2,396.26	$3,943.50	$6,339.76	0.00%
11	$2,632.15	$3,718.05	$6,350.20	0.16%
12	$2,878.94	$3,512.02	$6,390.96	0.81%
13	$3,137.09	$3,323.42	$6,460.51	1.90%
14	$3,407.07	$3,150.49	$6,557.56	3.44%
15	$3,689.36	$2,991.67	$6,681.03	5.38%
16	$3,984.48	$2,845.55	$6,830.03	7.73%
17	$4,292.94	$2,710.90	$7,003.85	10.47%
18	$4,615.32	$2,586.61	$7,201.93	13.60%

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Lifecycle	Maintenance	Ownership	Total	Deviation
19	$4,952.17	$2,471.69	$7,423.86	17.10%
20	$5,304.09	$2,365.27	$7,669.36	20.97%

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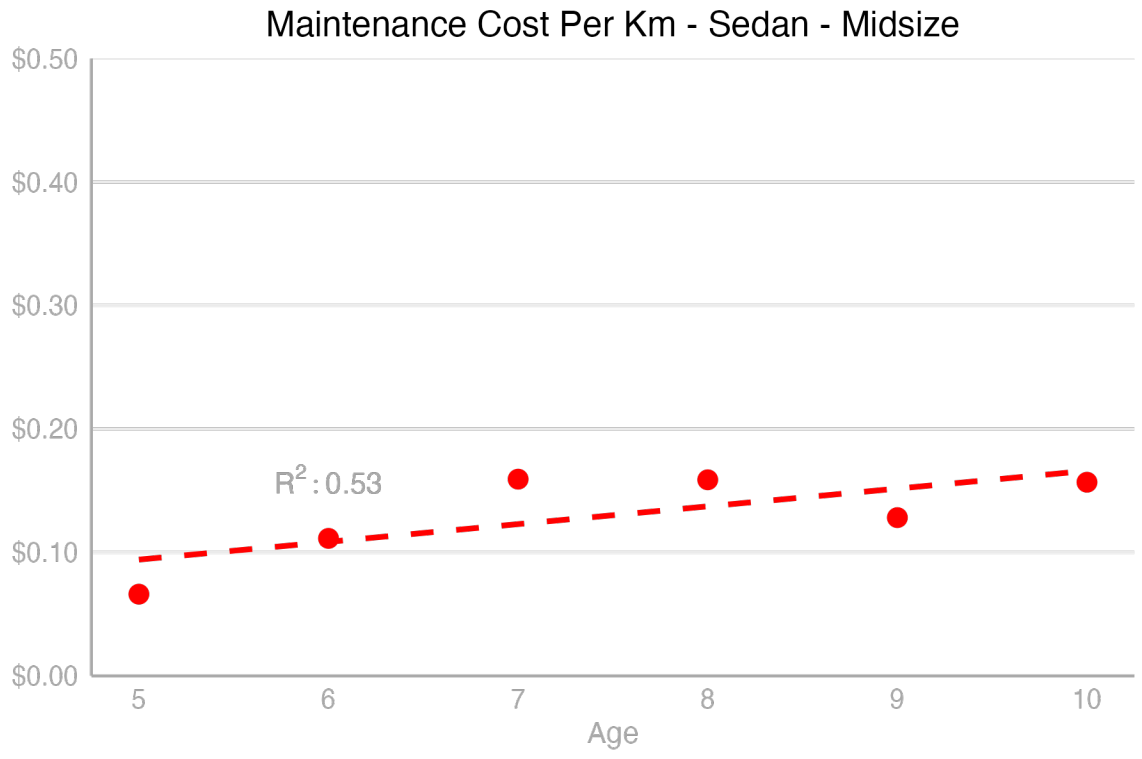

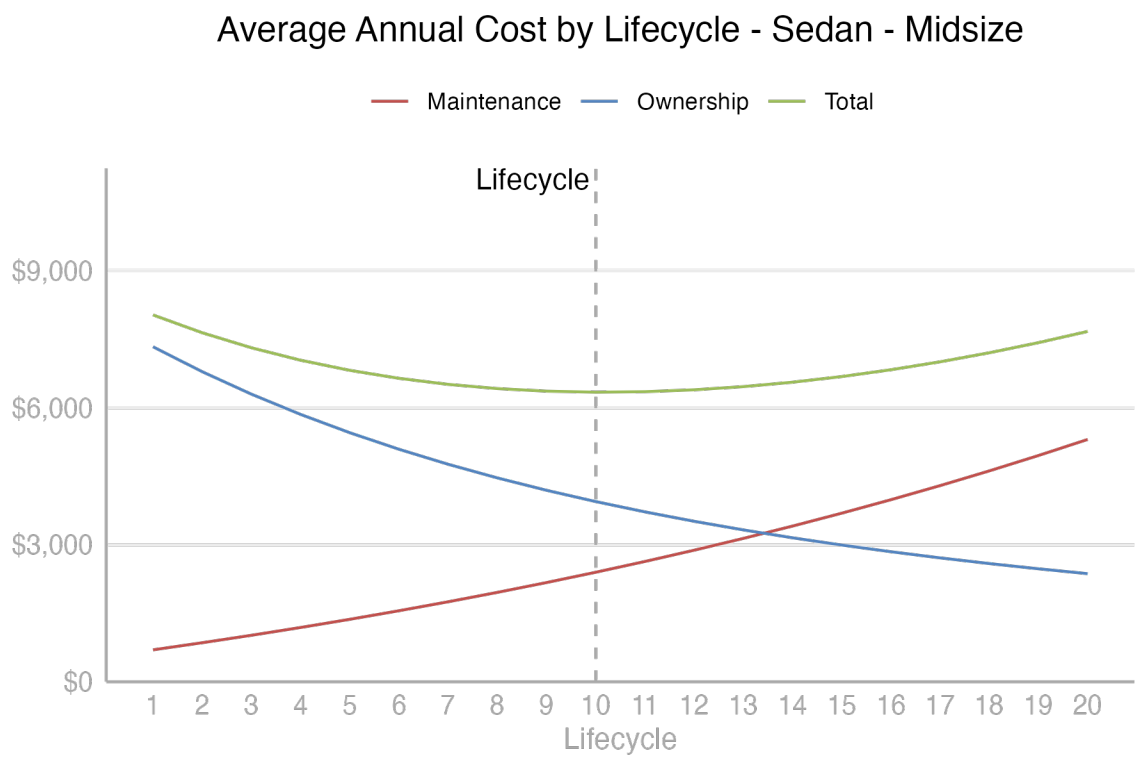

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Pickup - Class 2a

	Value
Lifecycle	8
Purchase Price	$63,644
Average Salvage at Sale	$8,315
Market Depreciation Rate	22%
Inflation Rate	3.8%
Average Annual Km	24,706

Lifecycle	Maintenance	Ownership	Total	Deviation
1	$241.57	$12,420.07	$12,661.64	27.55%
2	$626.33	$11,208.20	$11,834.52	19.22%
3	$1,030.46	$10,153.99	$11,184.44	12.67%
4	$1,454.80	$9,234.36	$10,689.16	7.68%
5	$1,900.20	$8,429.86	$10,330.05	4.06%
6	$2,367.56	$7,724.00	$10,091.56	1.66%
7	$2,857.81	$7,102.88	$9,960.70	0.34%
8	$3,371.93	$6,554.69	$9,926.61	0.00%
9	$3,910.91	$6,069.39	$9,980.30	0.54%
10	$4,475.81	$5,638.48	$10,114.28	1.89%
11	$5,067.71	$5,254.68	$10,322.39	3.99%
12	$5,687.76	$4,911.81	$10,599.57	6.78%
13	$6,337.13	$4,604.58	$10,941.70	10.23%
14	$7,017.05	$4,328.44	$11,345.48	14.29%
15	$7,728.79	$4,079.51	$11,808.30	18.96%
16	$8,473.69	$3,854.45	$12,328.14	24.19%
17	$9,253.13	$3,650.37	$12,903.50	29.99%
18	$10,068.54	$3,464.79	$13,533.33	36.33%
19	$10,921.43	$3,295.56	$14,216.99	43.22%
20	$11,813.33	$3,140.82	$14,954.15	50.65%

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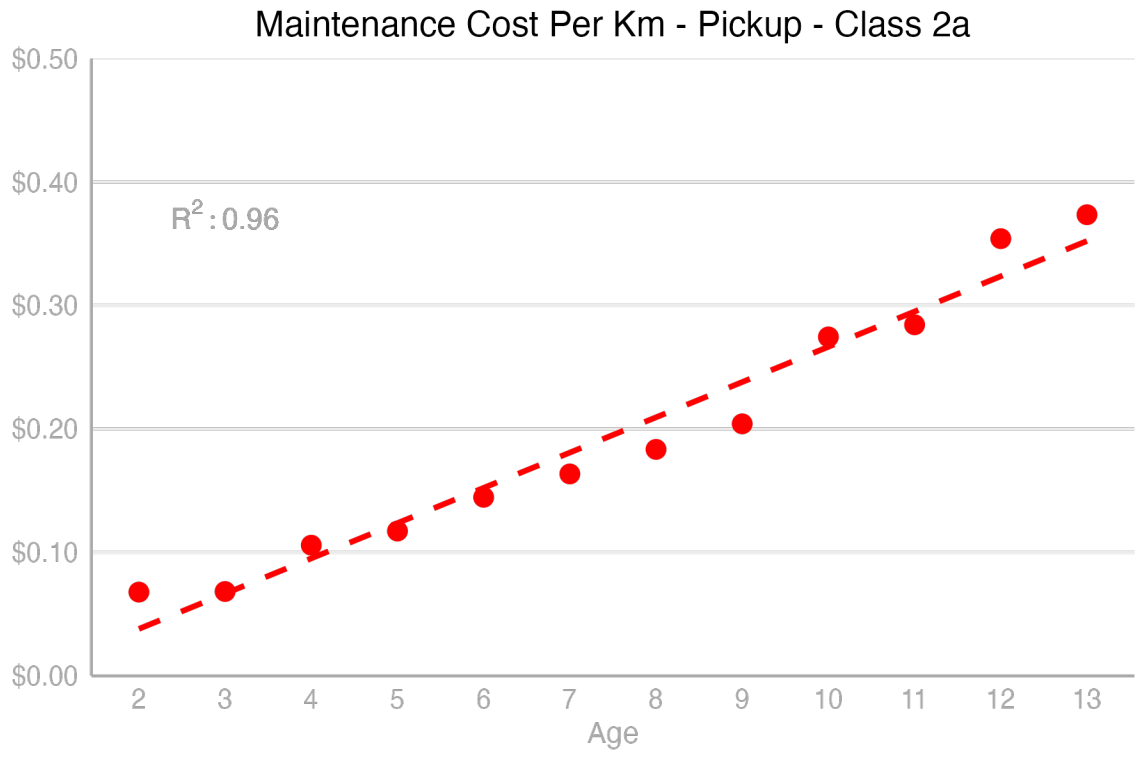

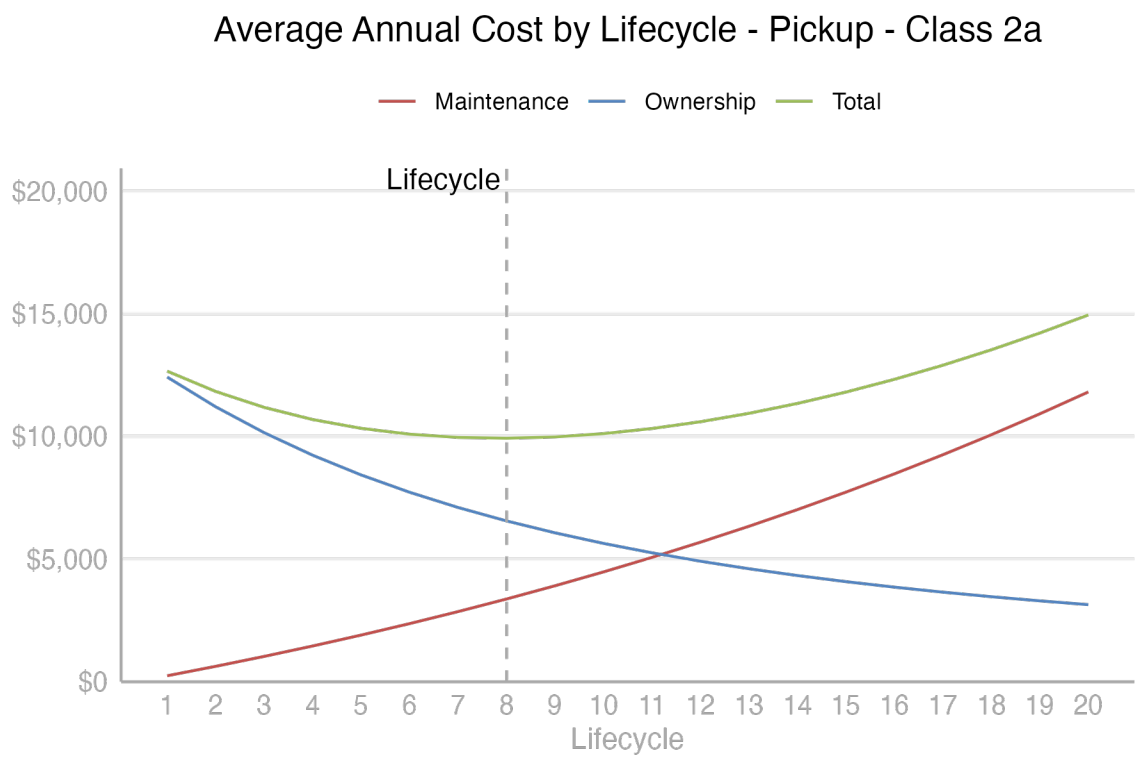

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Pickup - Class 2b

	Value
Lifecycle	7
Purchase Price	$79,339
Average Salvage at Sale	$13,977
Market Depreciation Rate	22%
Inflation Rate	3.8%
Average Annual Km	26,382

Lifecycle	Maintenance	Ownership	Total	Deviation
1	$1,167.35	$15,076.30	$16,243.64	21.42%
2	$1,678.41	$13,643.88	$15,322.29	14.54%
3	$2,214.81	$12,392.93	$14,607.73	9.19%
4	$2,777.61	$11,297.57	$14,075.18	5.21%
5	$3,367.94	$10,335.88	$13,703.83	2.44%
6	$3,986.96	$9,489.25	$13,476.21	0.74%
7	$4,635.88	$8,741.82	$13,377.70	0.00%
8	$5,315.95	$8,080.13	$13,396.09	0.14%
9	$6,028.50	$7,492.68	$13,521.18	1.07%
10	$6,774.87	$6,969.64	$13,744.51	2.74%
11	$7,556.49	$6,502.62	$14,059.12	5.09%
12	$8,374.84	$6,084.42	$14,459.26	8.08%
13	$9,231.44	$5,708.87	$14,940.30	11.68%
14	$10,127.89	$5,370.64	$15,498.53	15.85%
15	$11,065.85	$5,065.18	$16,131.03	20.58%
16	$12,047.04	$4,788.53	$16,835.57	25.85%
17	$13,073.26	$4,537.29	$17,610.55	31.64%
18	$14,146.37	$4,308.51	$18,454.88	37.95%
19	$15,268.32	$4,099.61	$19,367.93	44.78%
20	$16,441.12	$3,908.38	$20,349.50	52.12%

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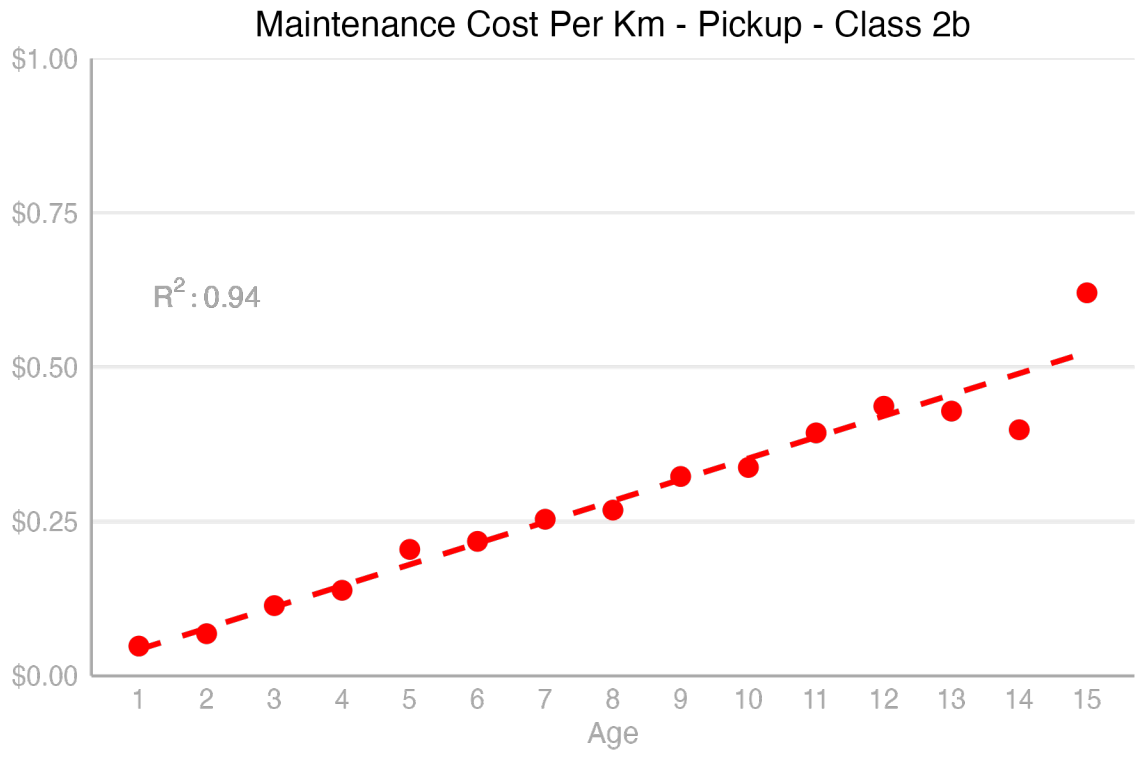

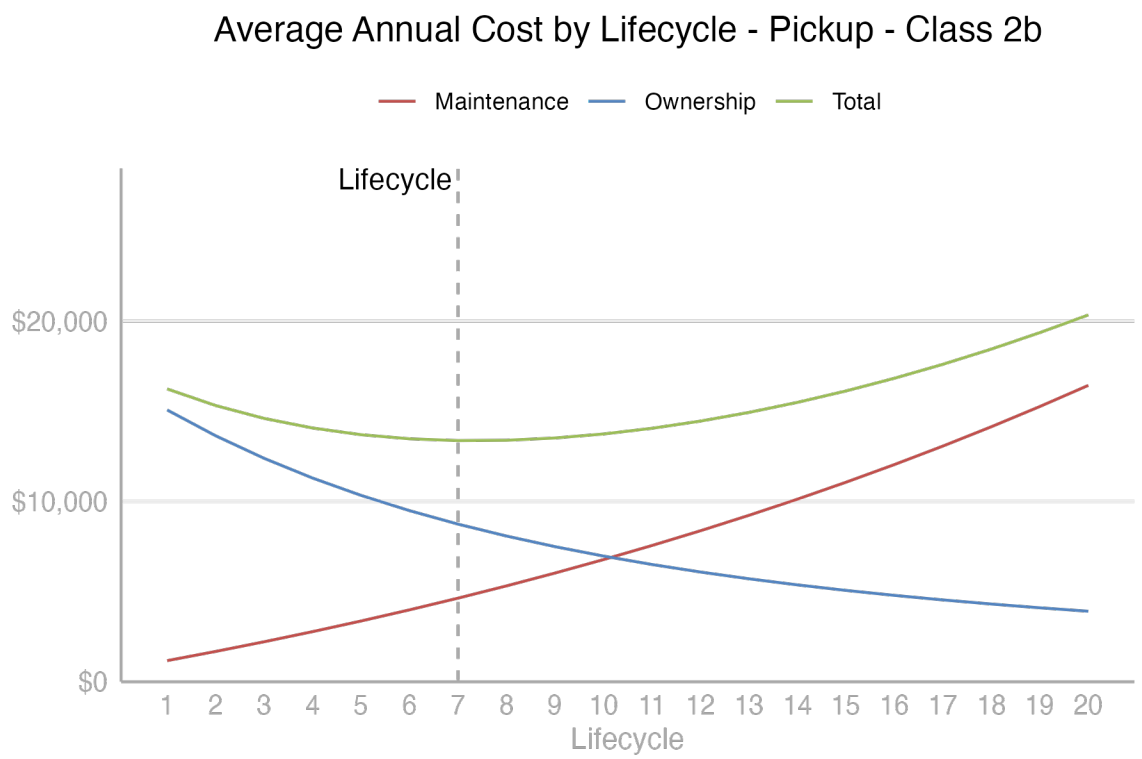

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Pickup - Class 3

	Value
Lifecycle	7
Purchase Price	$81,498
Average Salvage at Sale	$11,927
Market Depreciation Rate	24%
Inflation Rate	3.8%
Average Annual Km	30,832

Lifecycle	Maintenance	Ownership	Total	Deviation
1	$1,375.33	$17,211.94	$18,587.27	23.20%
2	$2,006.02	$15,394.42	$17,400.44	15.34%
3	$2,668.01	$13,832.79	$16,500.80	9.37%
4	$3,362.62	$12,486.53	$15,849.15	5.05%
5	$4,091.23	$11,321.95	$15,413.18	2.16%
6	$4,855.28	$10,311.02	$15,166.30	0.53%
7	$5,656.27	$9,430.33	$15,086.60	0.00%
8	$6,495.75	$8,660.36	$15,156.11	0.46%
9	$7,375.35	$7,984.75	$15,360.10	1.81%
10	$8,296.74	$7,389.77	$15,686.51	3.98%
11	$9,261.67	$6,863.90	$16,125.58	6.89%
12	$10,271.98	$6,397.43	$16,669.41	10.49%
13	$11,329.55	$5,982.15	$17,311.70	14.75%
14	$12,436.35	$5,611.13	$18,047.48	19.63%
15	$13,594.44	$5,278.48	$18,872.92	25.10%
16	$14,805.94	$4,979.22	$19,785.16	31.14%
17	$16,073.08	$4,709.07	$20,782.15	37.75%
18	$17,398.15	$4,464.40	$21,862.55	44.91%
19	$18,783.57	$4,242.09	$23,025.66	52.62%
20	$20,231.81	$4,039.48	$24,271.29	60.88%

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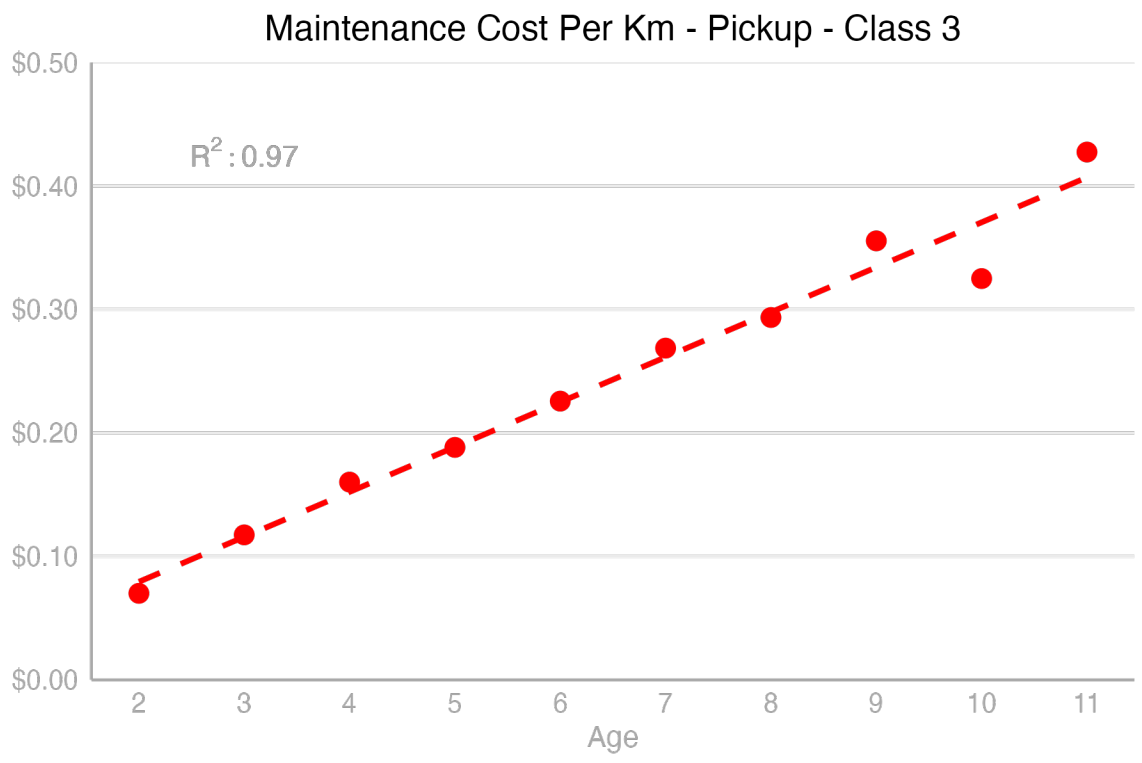

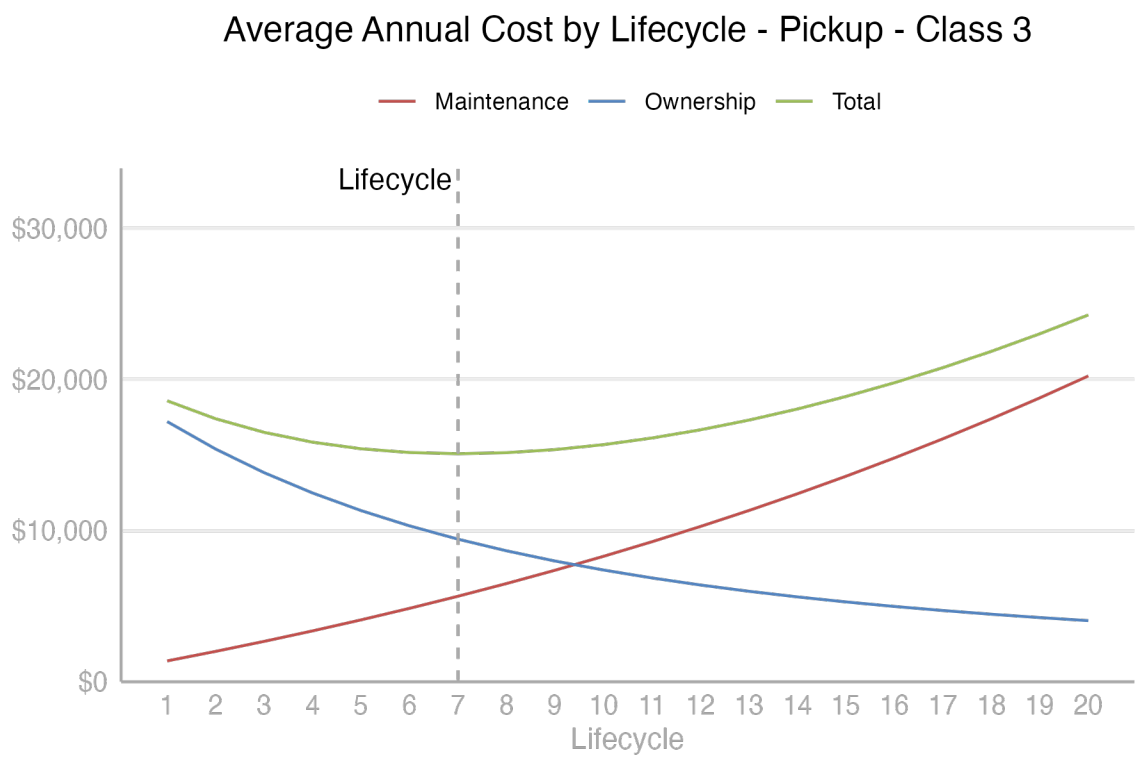

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SUV - Compact

	Value
Lifecycle	10
Purchase Price	$55,014
Average Salvage at Sale	$2,893
Market Depreciation Rate	26%
Inflation Rate	3.8%
Average Annual Km	21,534

Lifecycle	Maintenance	Ownership	Total	Deviation
1	$523.67	$12,476.74	$13,000.41	48.59%
2	$809.98	$11,061.94	$11,871.93	35.70%
3	$1,110.55	$9,861.05	$10,971.60	25.40%
4	$1,425.97	$8,837.69	$10,263.65	17.31%
5	$1,756.88	$7,962.06	$9,718.94	11.09%
6	$2,103.94	$7,209.75	$9,313.69	6.45%
7	$2,467.83	$6,560.66	$9,028.49	3.20%
8	$2,849.25	$5,998.27	$8,847.52	1.13%
9	$3,248.96	$5,508.90	$8,757.86	0.10%
10	$3,667.70	$5,081.26	$8,748.96	0.00%
11	$4,106.29	$4,705.96	$8,812.25	0.72%
12	$4,565.55	$4,375.20	$8,940.75	2.19%
13	$5,046.35	$4,082.47	$9,128.83	4.34%
14	$5,549.59	$3,822.33	$9,371.92	7.12%
15	$6,076.20	$3,590.22	$9,666.42	10.49%
16	$6,627.15	$3,382.29	$10,009.44	14.41%
17	$7,203.46	$3,195.31	$10,398.78	18.86%
18	$7,806.18	$3,026.54	$10,832.72	23.82%
19	$8,436.40	$2,873.66	$11,310.06	29.27%
20	$9,095.26	$2,734.68	$11,829.94	35.22%

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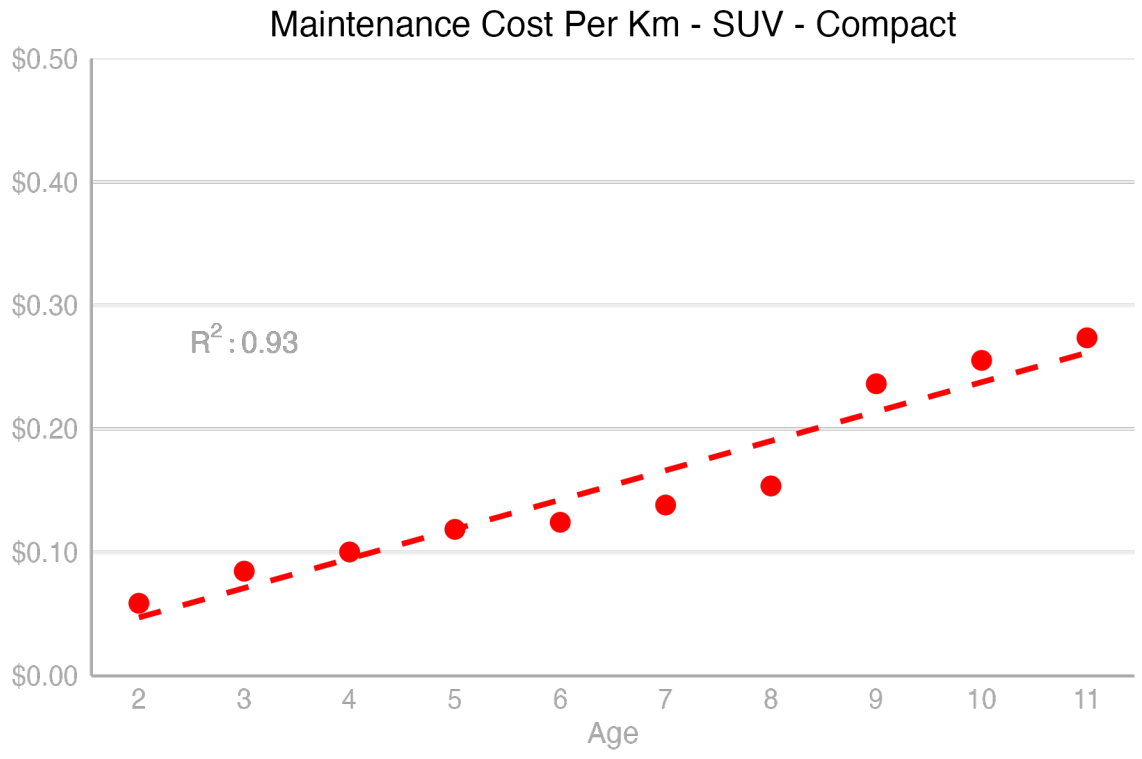

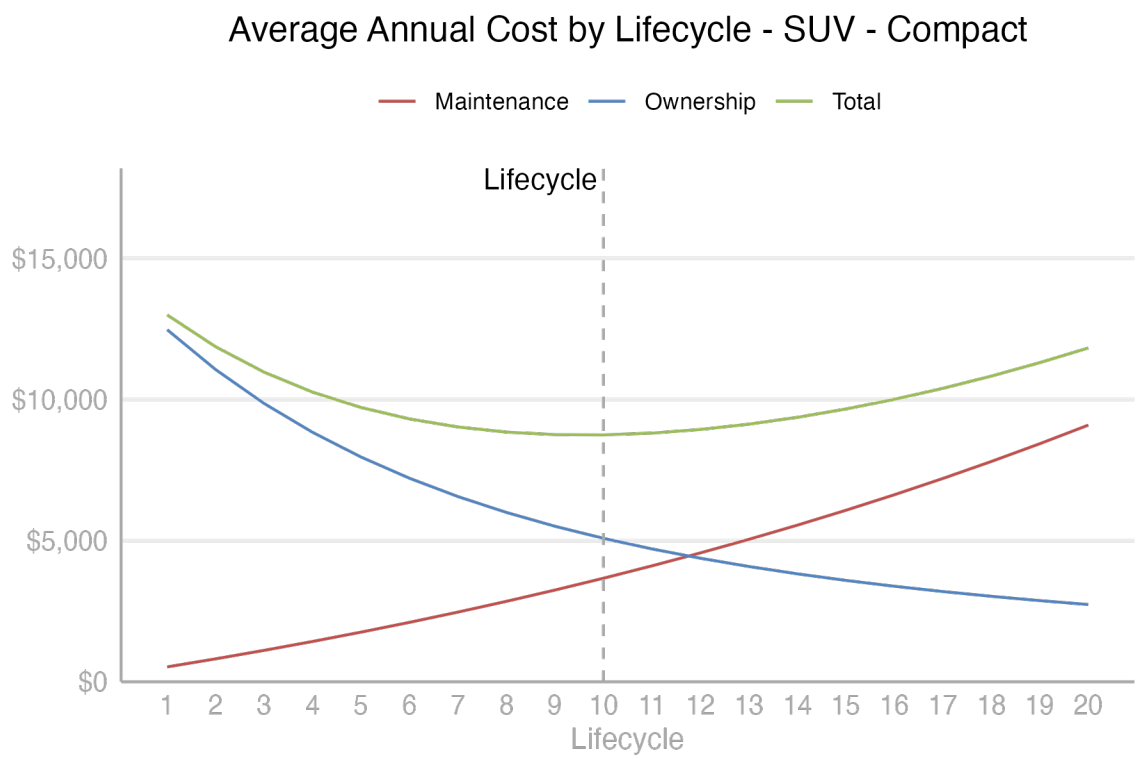

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Van - Class 1

	Value
Lifecycle	9
Purchase Price	$60,191
Average Salvage at Sale	$10,089
Market Depreciation Rate	18%
Inflation Rate	3.8%
Average Annual Km	13,234

Lifecycle	Maintenance	Ownership	Total	Deviation
1	$313.42	$8,958.94	$9,272.36	24.99%
2	$521.86	$8,292.22	$8,814.07	18.82%
3	$740.71	$7,691.65	$8,432.35	13.67%
4	$970.41	$7,149.85	$8,120.26	9.46%
5	$1,211.43	$6,660.32	$7,871.75	6.11%
6	$1,464.24	$6,217.32	$7,681.56	3.55%
7	$1,729.34	$5,815.79	$7,545.13	1.71%
8	$2,007.25	$5,451.27	$7,458.52	0.54%
9	$2,298.51	$5,119.79	$7,418.31	0.00%
10	$2,603.69	$4,817.88	$7,421.57	0.04%
11	$2,923.36	$4,542.44	$7,465.80	0.64%
12	$3,258.13	$4,290.73	$7,548.86	1.76%
13	$3,608.65	$4,060.31	$7,668.96	3.38%
14	$3,975.55	$3,849.04	$7,824.59	5.48%
15	$4,359.53	$3,655.01	$8,014.54	8.04%
16	$4,761.30	$3,476.49	$8,237.79	11.05%
17	$5,181.60	$3,311.98	$8,493.58	14.49%
18	$5,621.19	$3,160.14	$8,781.33	18.37%
19	$6,080.88	$3,019.74	$9,100.62	22.68%
20	$6,561.50	$2,889.71	$9,451.21	27.40%

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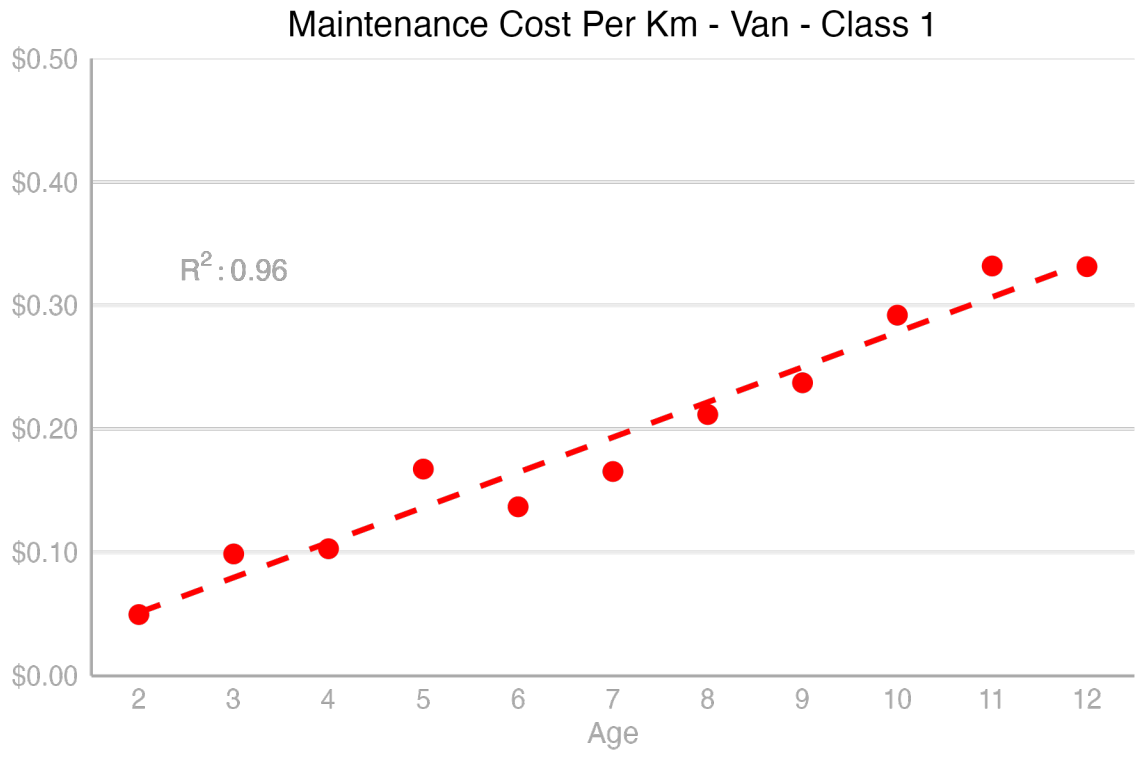

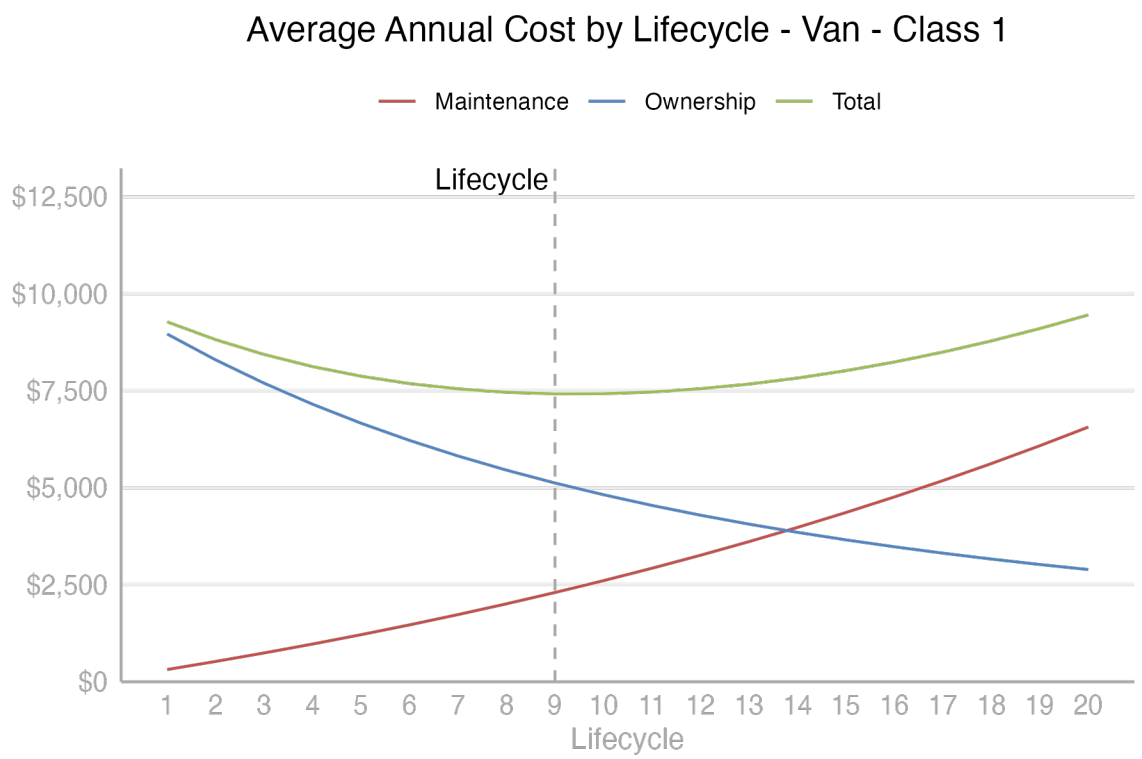

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Van - Class 2b

	Value
Lifecycle	5
Purchase Price	$53,895
Average Salvage at Sale	$19,981
Market Depreciation Rate	18%
Inflation Rate	3.8%
Average Annual Km	20,479

Lifecycle	Maintenance	Ownership	Total	Deviation
1	$221.21	$8,021.73	$8,242.94	6.73%
2	$578.02	$7,424.75	$8,002.78	3.62%
3	$952.81	$6,887.01	$7,839.82	1.51%
4	$1,346.34	$6,401.90	$7,748.23	0.33%
5	$1,759.40	$5,963.58	$7,722.97	0.00%
6	$2,192.83	$5,566.92	$7,759.75	0.48%
7	$2,647.49	$5,207.40	$7,854.89	1.71%
8	$3,124.28	$4,881.00	$8,005.28	3.66%
9	$3,624.13	$4,584.20	$8,208.34	6.28%
10	$4,148.02	$4,313.88	$8,461.90	9.57%
11	$4,696.96	$4,067.25	$8,764.21	13.48%
12	$5,272.00	$3,841.87	$9,113.87	18.01%
13	$5,874.24	$3,635.56	$9,509.79	23.14%
14	$6,504.80	$3,446.39	$9,951.19	28.85%
15	$7,164.89	$3,272.65	$10,437.54	35.15%
16	$7,855.73	$3,112.81	$10,968.54	42.02%
17	$8,578.60	$2,965.51	$11,544.11	49.48%
18	$9,334.83	$2,829.55	$12,164.38	57.51%
19	$10,125.82	$2,703.84	$12,829.65	66.12%
20	$10,952.99	$2,587.41	$13,540.41	75.33%

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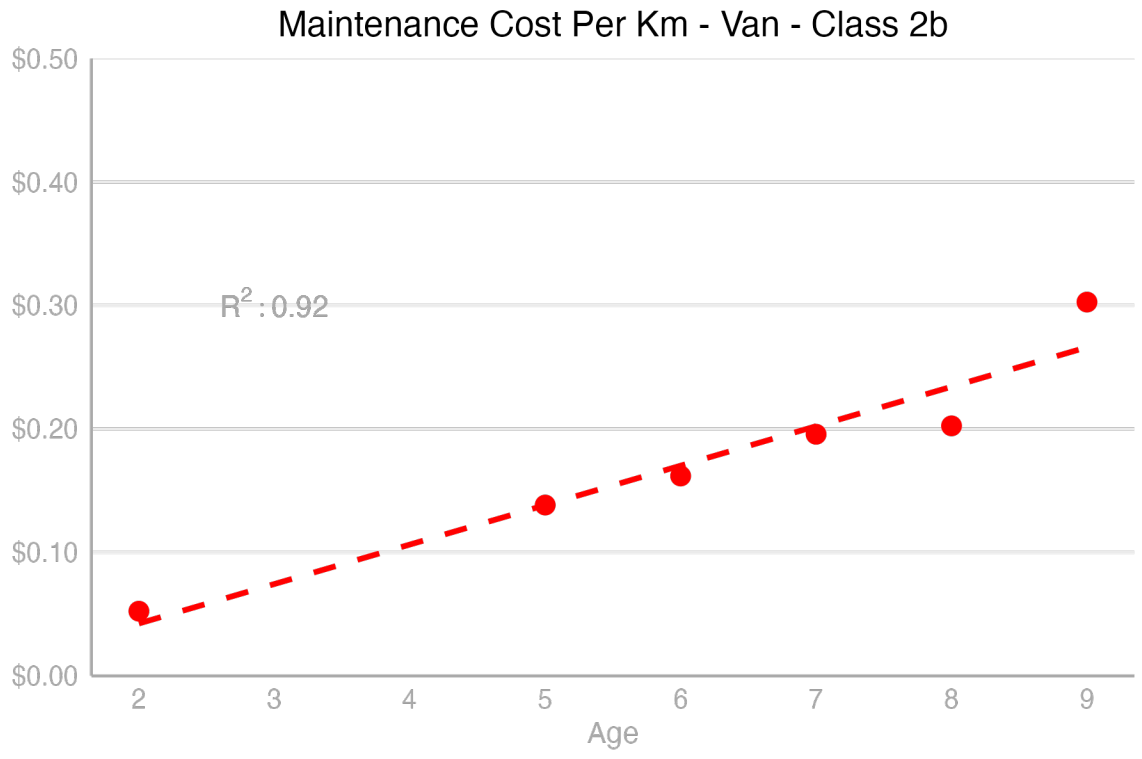

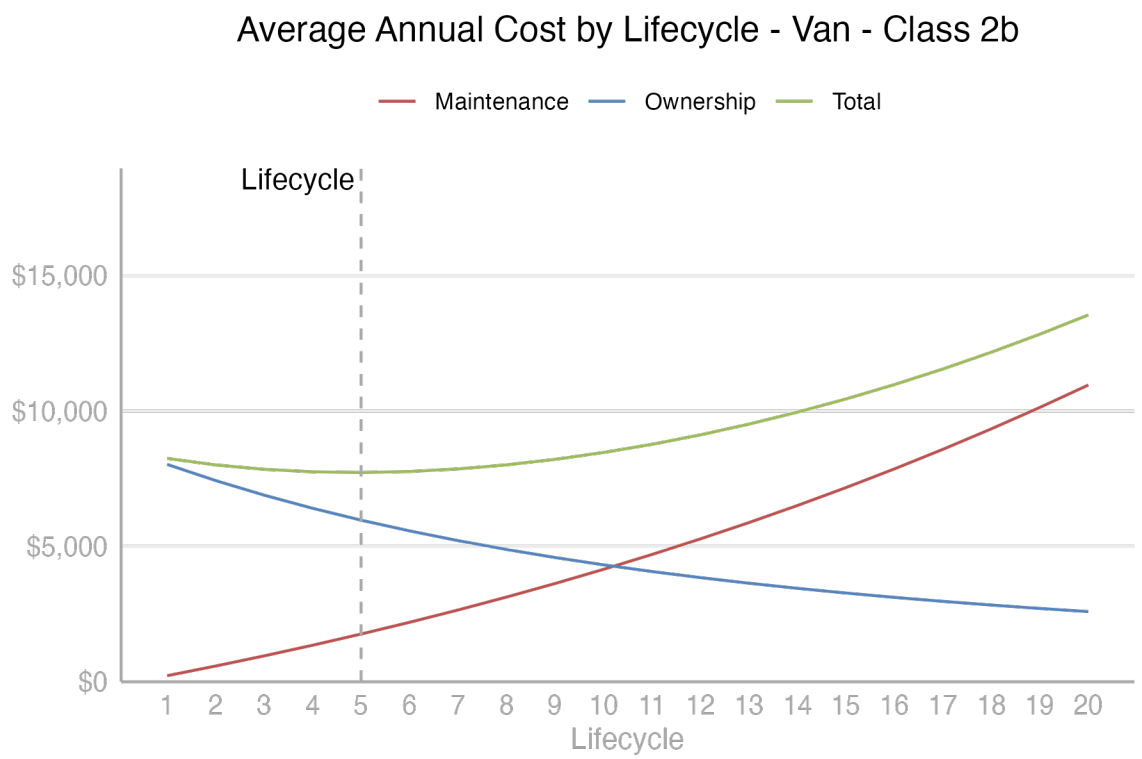

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Service Truck - Class 4

	Value
Lifecycle	6
Purchase Price	$151,187
Average Salvage at Sale	$45,962
Market Depreciation Rate	18%
Inflation Rate	3.8%
Average Annual Km	18,800

Lifecycle	Maintenance	Ownership	Total	Deviation
1	-$804.50	$22,502.77	$21,698.27	12.23%
2	$12.64	$20,828.11	$20,840.76	7.79%
3	$871.58	$19,319.63	$20,191.21	4.43%
4	$1,774.10	$17,958.76	$19,732.86	2.06%
5	$2,722.06	$16,729.18	$19,451.24	0.61%
6	$3,717.41	$15,616.47	$19,333.88	0.00%
7	$4,762.16	$14,607.92	$19,370.08	0.19%
8	$5,858.42	$13,692.32	$19,550.74	1.12%
9	$7,008.38	$12,859.73	$19,868.11	2.76%
10	$8,214.29	$12,101.40	$20,315.69	5.08%
11	$9,478.54	$11,409.55	$20,888.09	8.04%
12	$10,803.59	$10,777.30	$21,580.89	11.62%
13	$12,191.99	$10,198.56	$22,390.54	15.81%
14	$13,646.40	$9,667.90	$23,314.30	20.59%
15	$15,169.60	$9,180.52	$24,350.13	25.95%
16	$16,764.48	$8,732.14	$25,496.61	31.88%
17	$18,434.02	$8,318.93	$26,752.95	38.37%
18	$20,181.35	$7,937.52	$28,118.87	45.44%
19	$22,009.71	$7,584.87	$29,594.58	53.07%
20	$23,922.48	$7,258.28	$31,180.76	61.28%

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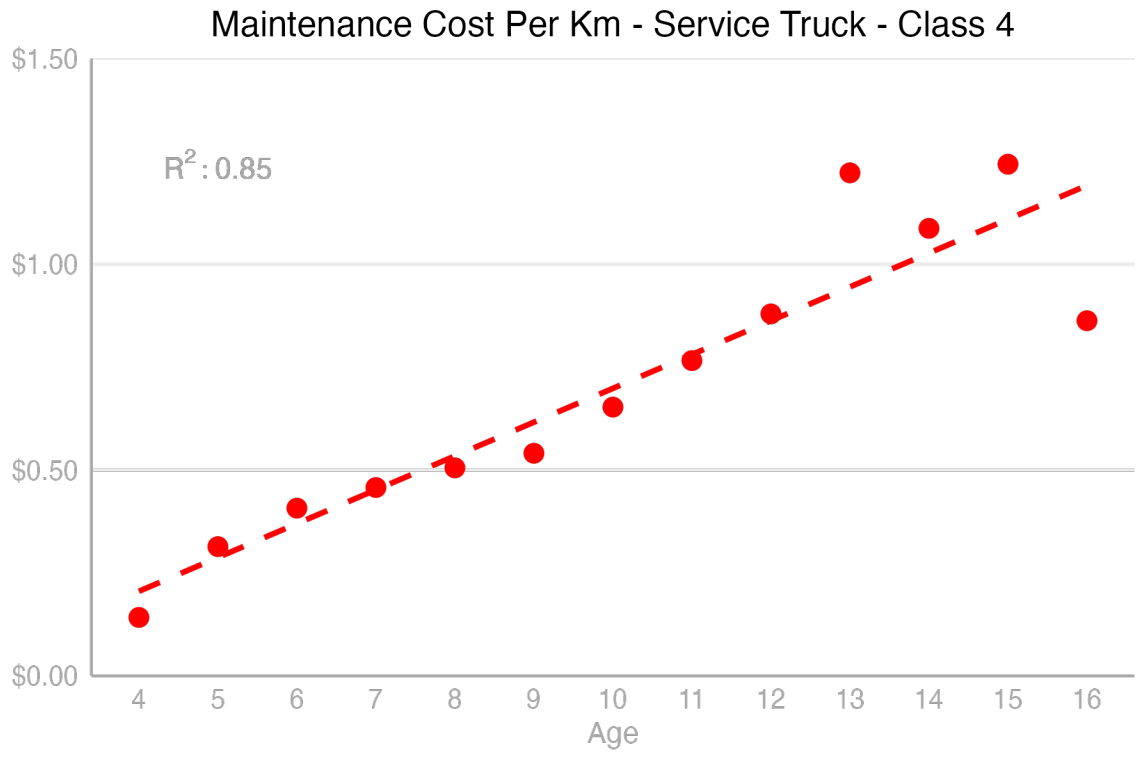

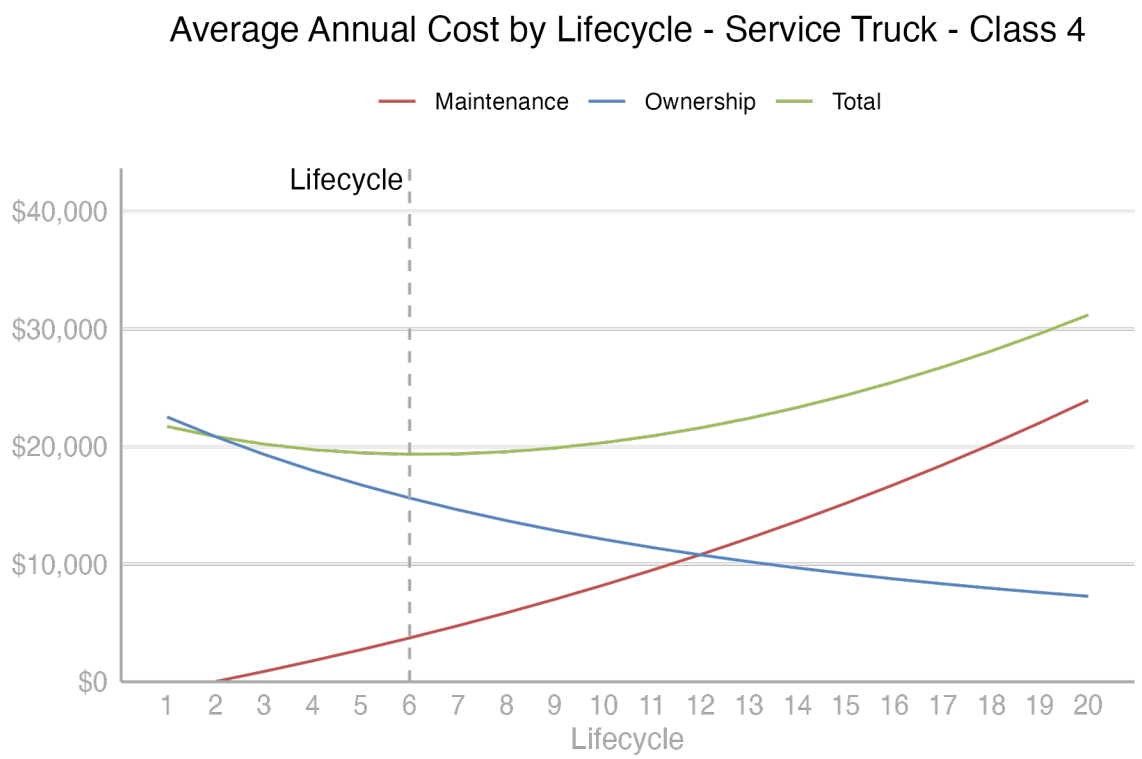

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Service Truck - Class 5

	Value
Lifecycle	7
Purchase Price	$144,222
Average Salvage at Sale	$35,952
Market Depreciation Rate	18%
Inflation Rate	3.8%
Average Annual Km	17,323

Lifecycle	Maintenance	Ownership	Total	Deviation
1	$1,213.58	$21,466.02	$22,679.61	13.66%
2	$1,921.15	$19,868.52	$21,789.67	9.20%
3	$2,663.98	$18,429.53	$21,093.51	5.71%
4	$3,443.57	$17,131.37	$20,574.94	3.11%
5	$4,261.49	$15,958.43	$20,219.92	1.33%
6	$5,119.35	$14,896.99	$20,016.34	0.31%
7	$6,018.86	$13,934.91	$19,953.76	0.00%
8	$6,961.75	$13,061.48	$20,023.23	0.35%
9	$7,949.86	$12,267.26	$20,217.12	1.32%
10	$8,985.10	$11,543.86	$20,528.96	2.88%
11	$10,069.43	$10,883.89	$20,953.32	5.01%
12	$11,204.92	$10,280.77	$21,485.69	7.68%
13	$12,393.70	$9,728.69	$22,122.39	10.87%
14	$13,638.00	$9,222.48	$22,860.48	14.57%
15	$14,940.13	$8,757.56	$23,697.69	18.76%
16	$16,302.51	$8,329.83	$24,632.33	23.45%
17	$17,727.62	$7,935.66	$25,663.29	28.61%
18	$19,218.08	$7,571.83	$26,789.91	34.26%
19	$20,776.60	$7,235.42	$28,012.03	40.38%
20	$22,405.99	$6,923.88	$29,329.87	46.99%

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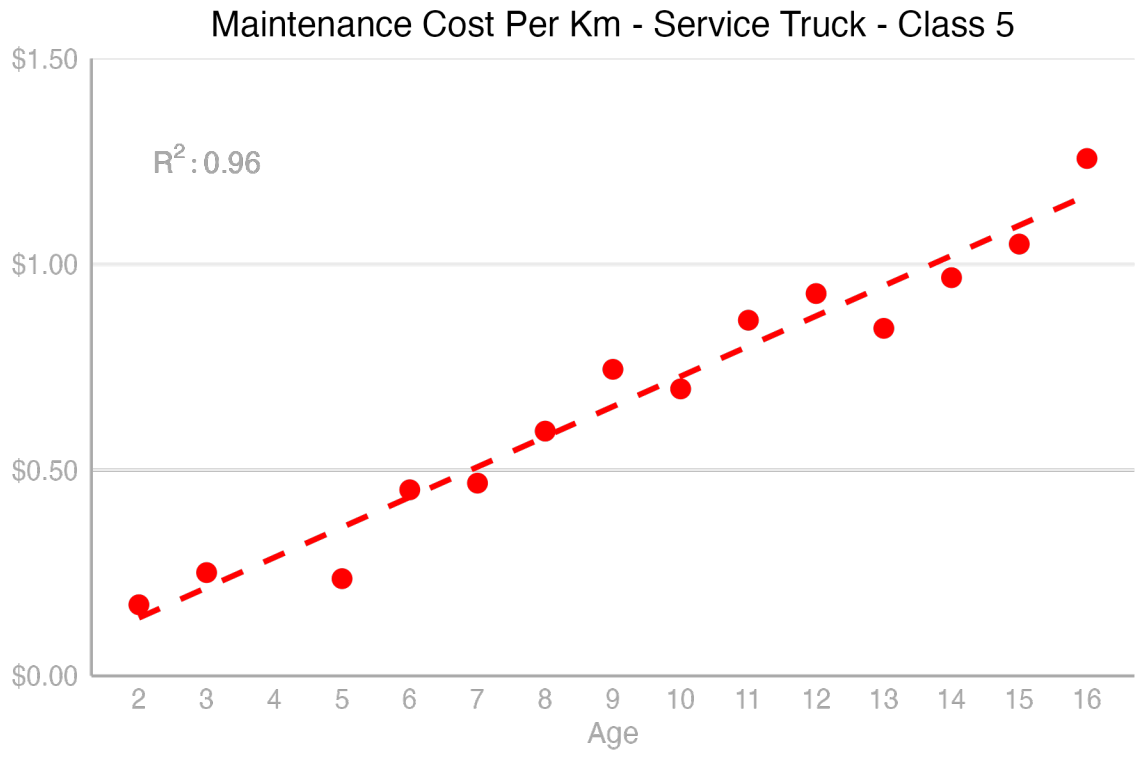

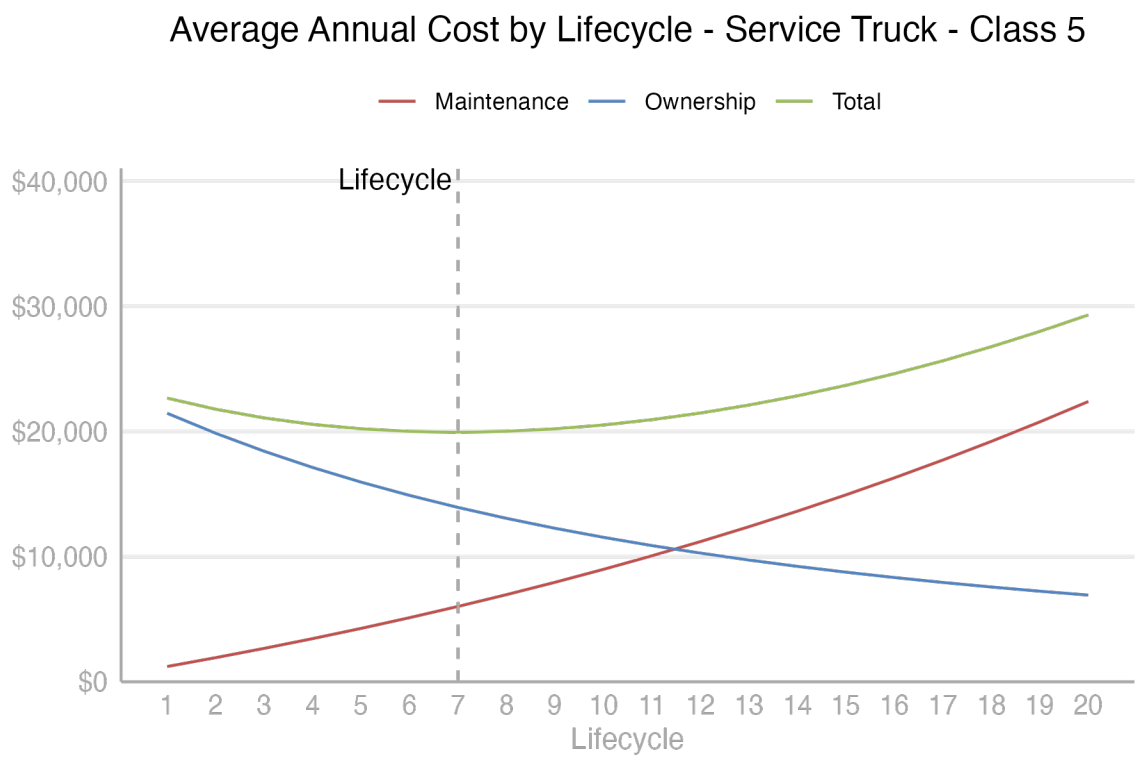

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Bucket Truck - Class 5

	Value
Lifecycle	7
Purchase Price	$387,914
Average Salvage at Sale	$81,452
Market Depreciation Rate	20%
Inflation Rate	3.8%
Average Annual Km	25,508

Lifecycle	Maintenance	Ownership	Total	Deviation
1	-$548.11	$65,732.99	$65,184.89	18.88%
2	$1,666.31	$60,163.68	$61,830.00	12.76%
3	$3,993.20	$55,223.53	$59,216.73	7.99%
4	$6,437.35	$50,832.57	$57,269.92	4.44%
5	$9,003.78	$46,921.69	$55,925.48	1.99%
6	$11,697.71	$43,431.08	$55,128.78	0.54%
7	$14,524.54	$40,308.92	$54,833.46	0.00%
8	$17,489.92	$37,510.29	$55,000.20	0.30%
9	$20,599.71	$34,996.18	$55,595.89	1.39%
10	$23,860.03	$32,732.69	$56,592.72	3.21%
11	$27,277.21	$30,690.32	$57,967.53	5.72%
12	$30,857.87	$28,843.37	$59,701.24	8.88%
13	$34,608.88	$27,169.42	$61,778.30	12.67%
14	$38,537.39	$25,648.89	$64,186.28	17.06%
15	$42,650.83	$24,264.64	$66,915.48	22.03%
16	$46,956.94	$23,001.69	$69,958.64	27.58%
17	$51,463.77	$21,846.88	$73,310.65	33.70%
18	$56,179.68	$20,788.66	$76,968.34	40.37%
19	$61,113.38	$19,816.86	$80,930.24	47.59%
20	$66,273.91	$18,922.55	$85,196.47	55.37%

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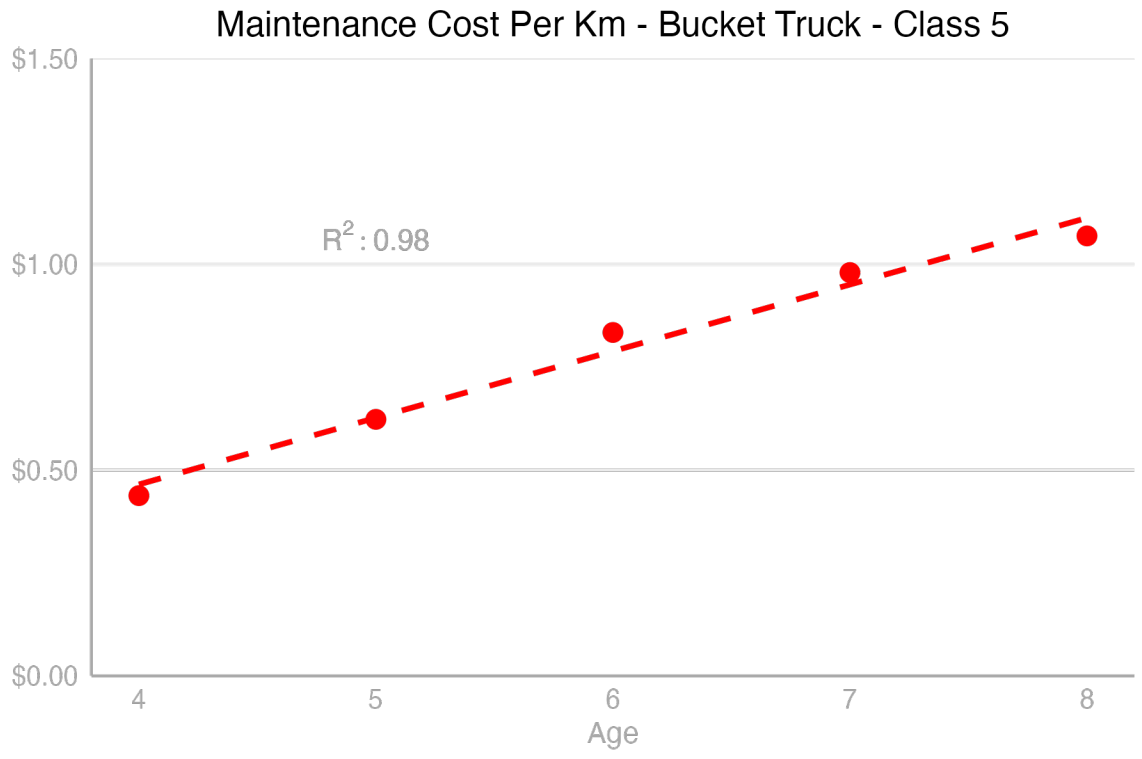

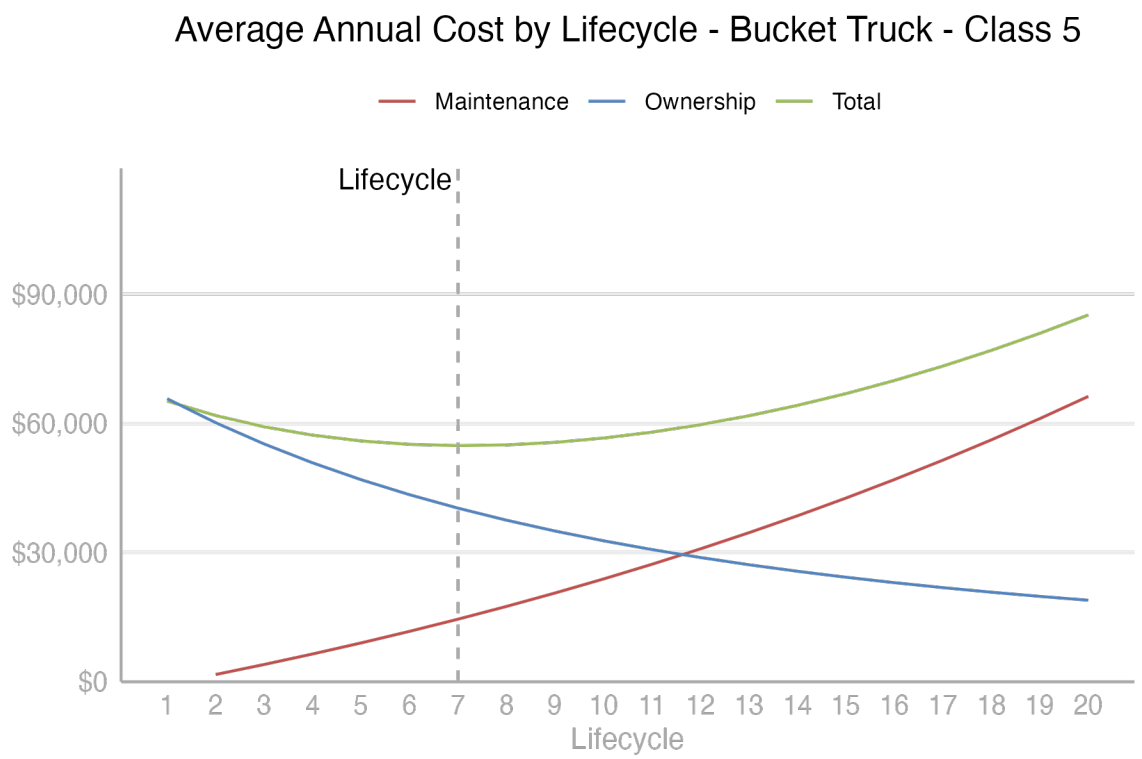

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Bucket Truck - Class 8

	Value
Lifecycle	8
Purchase Price	$515,148
Average Salvage at Sale	$105,303
Market Depreciation Rate	18%
Inflation Rate	3.8%
Average Annual Km	21,292

Lifecycle	Maintenance	Ownership	Total	Deviation
1	$6,401.21	$76,674.63	$83,076	15.26%
2	$8,745.81	$70,968.50	$79,714	10.60%
3	$11,206.12	$65,828.58	$77,035	6.88%
4	$13,787.04	$61,191.65	$74,979	4.03%
5	$16,493.68	$57,002.03	$73,496	1.97%
6	$19,331.34	$53,210.64	$72,542	0.65%
7	$22,305.54	$49,774.18	$72,080	0.00%
8	$25,422.03	$46,654.40	$72,076	0.00%
9	$28,686.77	$43,817.50	$72,504	0.59%
10	$32,105.98	$41,233.59	$73,340	1.75%
11	$35,686.12	$38,876.23	$74,562	3.45%
12	$39,433.92	$36,721.95	$76,156	5.66%
13	$43,356.37	$34,749.98	$78,106	8.37%
14	$47,460.73	$32,941.85	$80,403	11.55%
15	$51,754.57	$31,281.17	$83,036	15.21%
16	$56,245.76	$29,753.37	$85,999	19.32%
17	$60,942.48	$28,345.45	$89,288	23.88%
18	$65,853.23	$27,045.85	$92,899	28.89%
19	$70,986.86	$25,844.26	$96,831	34.35%
20	$76,352.57	$24,731.45	$101,084	40.25%

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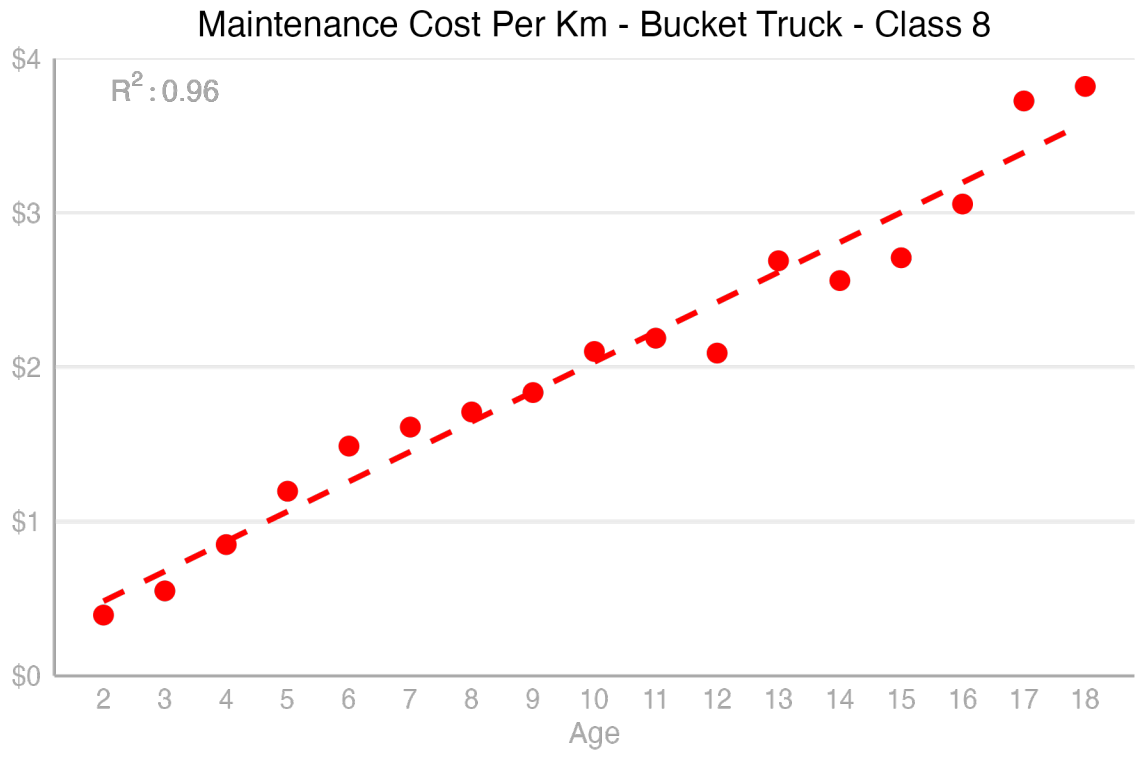

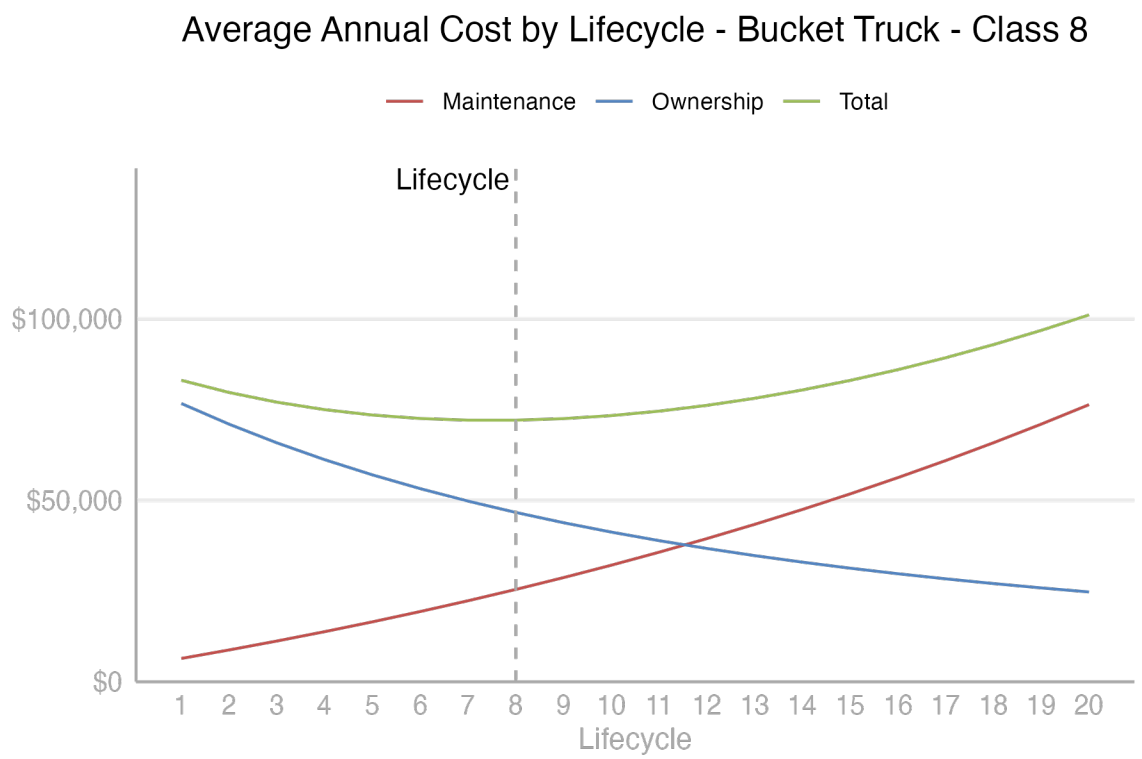

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Forestry Bucket

	Value
Lifecycle	13
Purchase Price	$519,826
Average Salvage at Sale	$39,394
Market Depreciation Rate	18%
Inflation Rate	3.8%
Average Annual Km	12,154

Lifecycle	Maintenance	Ownership	Total	Deviation
1	$17,981.56	$77,370.90	$95,352.46	34.88%
2	$19,137.20	$71,612.96	$90,750.16	28.37%
3	$20,342.75	$66,426.36	$86,769.11	22.74%
4	$21,600.20	$61,747.32	$83,347.52	17.90%
5	$22,911.64	$57,519.66	$80,431.30	13.78%
6	$24,279.25	$53,693.84	$77,973.10	10.30%
7	$25,705.29	$50,226.17	$75,931.46	7.41%
8	$27,192.09	$47,078.06	$74,270.15	5.06%
9	$28,742.10	$44,215.40	$72,957.50	3.20%
10	$30,357.84	$41,608.03	$71,965.87	1.80%
11	$32,041.95	$39,229.26	$71,271.21	0.82%
12	$33,797.16	$37,055.42	$70,852.58	0.23%
13	$35,626.31	$35,065.54	$70,691.85	0.00%
14	$37,532.36	$33,240.99	$70,773.35	0.12%
15	$39,518.37	$31,565.23	$71,083.61	0.55%
16	$41,587.54	$30,023.56	$71,611.09	1.30%
17	$43,743.17	$28,602.85	$72,346.02	2.34%
18	$45,988.70	$27,291.45	$73,280.15	3.66%
19	$48,327.72	$26,078.95	$74,406.67	5.25%
20	$50,763.94	$24,956.03	$75,719.97	7.11%

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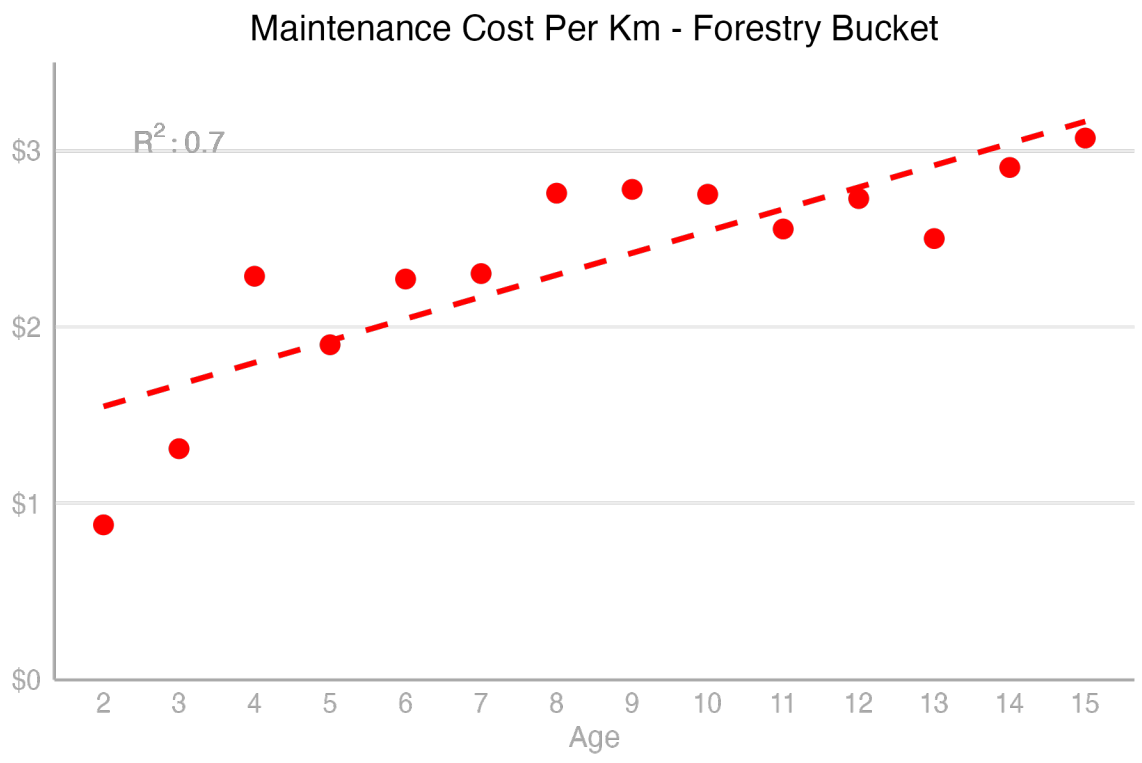

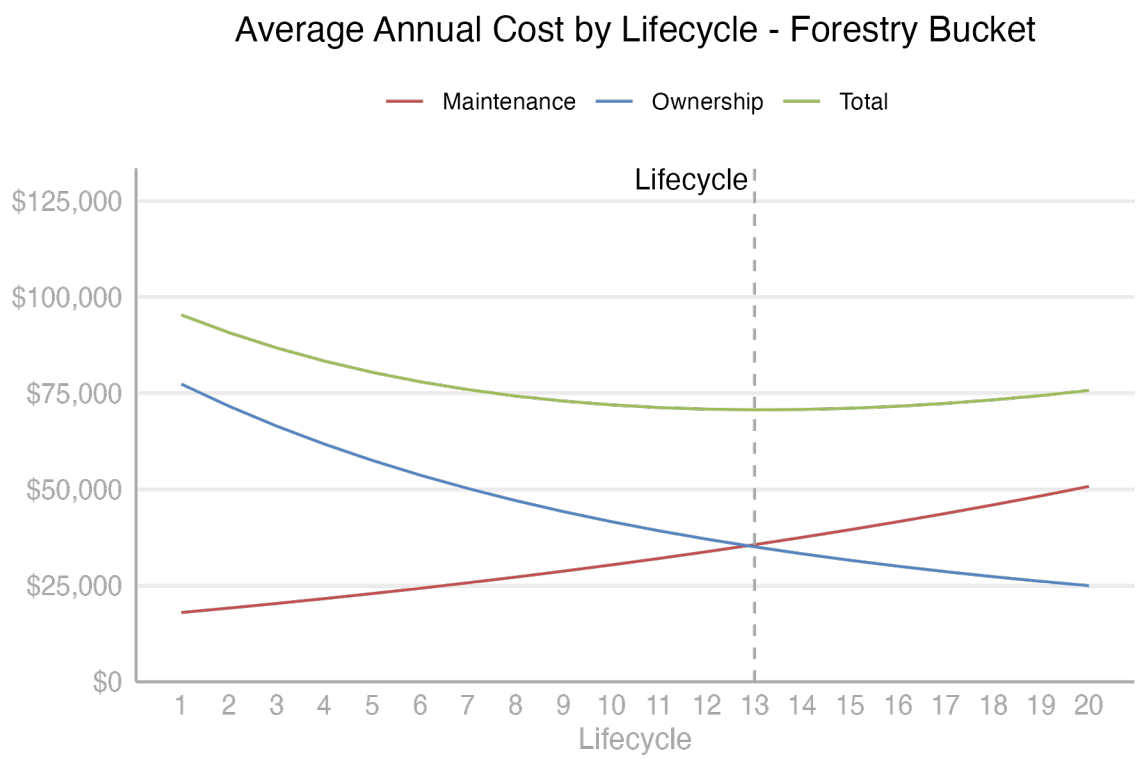

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Digger Derrick - Class 8

	Value
Lifecycle	12
Purchase Price	$528,517
Average Salvage at Sale	$48,845
Market Depreciation Rate	18%
Inflation Rate	3.8%
Average Annual Km	13,062

Lifecycle	Maintenance	Ownership	Total	Deviation
1	$19,935.98	$78,664.47	$98,600.45	30.02%
2	$21,265.73	$72,810.26	$94,075.99	24.06%
3	$22,653.25	$67,536.94	$90,190.20	18.93%
4	$24,100.89	$62,779.68	$86,880.57	14.57%
5	$25,611.07	$58,481.33	$84,092.40	10.89%
6	$27,186.30	$54,591.56	$81,777.86	7.84%
7	$28,829.21	$51,065.91	$79,895.12	5.36%
8	$30,542.52	$47,865.16	$78,407.68	3.40%
9	$32,329.05	$44,954.64	$77,283.69	1.91%
10	$34,191.76	$42,303.68	$76,495.44	0.87%
11	$36,133.69	$39,885.13	$76,018.82	0.25%
12	$38,158.02	$37,674.95	$75,832.97	0.00%
13	$40,268.05	$35,651.80	$75,919.85	0.11%
14	$42,467.21	$33,796.75	$76,263.96	0.57%
15	$44,759.06	$32,092.98	$76,852.04	1.34%
16	$47,147.32	$30,525.52	$77,672.84	2.43%
17	$49,635.81	$29,081.06	$78,716.88	3.80%
18	$52,228.56	$27,747.74	$79,976.30	5.46%
19	$54,929.70	$26,514.96	$81,444.66	7.40%
20	$57,743.56	$25,373.27	$83,116.84	9.61%

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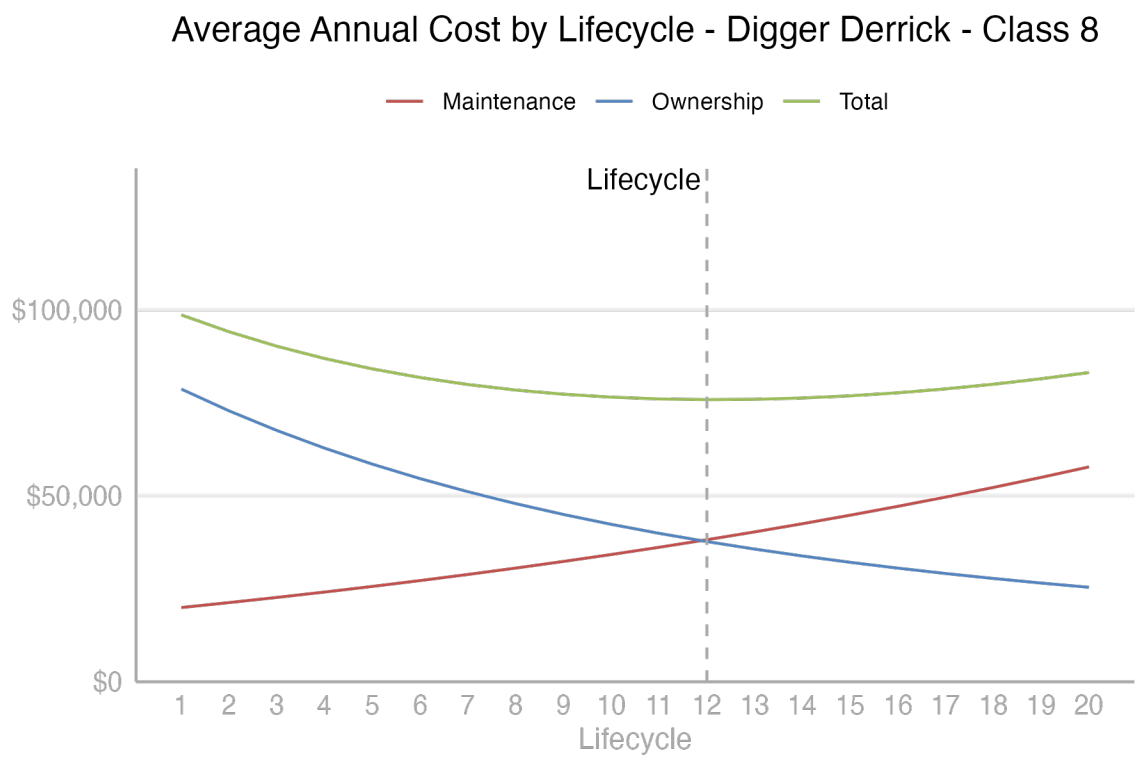

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Appendix

A – CO_2 Emissions Per Liter by Fuel Type

Fuel Type	Kg CO_2 Per Liter
biodiesel	2.49642707
diesel	2.69719793
ethanol	1.51899002
lng	1.1887748
lpg	1.50049796
gasoline	2.31943171
cng	1.77787875
electric	0
gas/electric hybrid	2.31943171

B – Inflation

Industry inflation rate averages from 2020-2024 are similar to Hydro One's provided value of 3.8%.

Category	Utility Industry
Light Duty	5.12%
Medium Duty	4.15%
Heavy Duty	2.66%
Average	3.98%

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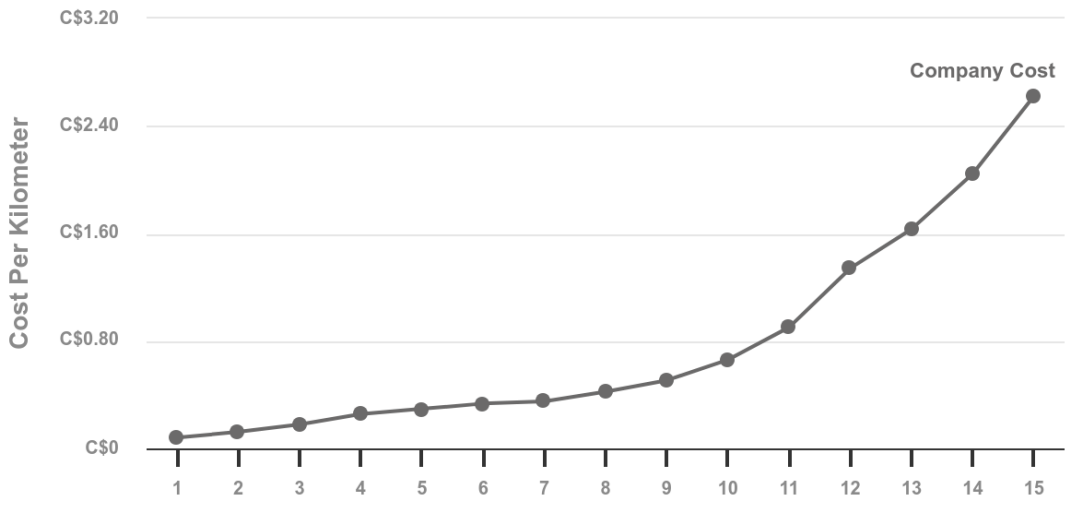
C – Maintenance Cost per Kilometer by Age

Maintenance costs per kilometer by age for Hydro One's largest class codes averaged from 2020-2024.



D – Class Level Information

- Starting purchase prices are sourced from a current replacement list provided by Hydro One and benchmarking data that is provided annually by Hydro One.
- Depreciation rate default is 18% based on utility industry data. For the Utilimarc classes that Hydro One spends the most on, depreciation values are calculated separately from auction data provided. The minimum threshold for these custom rates is 18% to avoid unrealistic auction results on shorter lifecycles (e.g., a 10% depreciation rate could cause a model recommendation replacement cycle of 3 years because the asset would be keeping a higher value compared to a 10% depreciation rate occurring during a 15-year cycle.)

Utilimarc Class	Starting Purchase Price	Lifecycle Used	Inf	Dep
3.1	$102,575	8	3.8%	18.0%
3.2	$49,268	10	3.8%	18.0%
6.1	$54,599	8	3.8%	18.0%
6.21	$63,645	8	3.8%	22.5%
6.22	$79,340	7	3.8%	22.0%

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Utilimarc Class	Starting Purchase Price	Lifecycle Used	Inf	Dep
6.3	$81,498	7	3.8%	24.0%
6.4	$105,978	8	3.8%	18.0%
10.1	$55,015	10	3.8%	25.5%
10.2	$51,402	8	3.8%	18.0%
11.1	$60,192	8	3.8%	18.0%
11.21	$65,304	8	3.8%	18.0%
11.22	$53,895	5	3.8%	18.0%
11.3	$69,313	8	3.8%	18.0%
12.1	$42,428	8	3.8%	18.0%
13.5	$103,960	8	3.8%	18.0%
14.3	$80,139	6	3.8%	18.0%
14.4	$151,188	6	3.8%	18.0%
14.5	$144,222	7	3.8%	18.0%
16.5	$387,914	7	3.8%	20.0%
16.7	$393,059	11	3.8%	18.0%
16.8	$519,826	8	3.8%	18.0%
16.81	$528,517	13	3.8%	18.0%
18	$847,295	14	3.8%	18.0%
19.8	$528,517	12	3.8%	18.0%
21	$324,153	14	3.8%	18.0%
22.1	$575,735	14	3.8%	18.0%
22.2	$579,161	14	3.8%	18.0%
25	$528,174	20	3.8%	18.0%
26	$811,962	20	3.8%	18.0%
28	$538,252	20	3.8%	18.0%
30	$212,214	20	3.8%	18.0%
31.1	$10,000	20	3.8%	18.0%
31.2	$156,254	20	3.8%	18.0%
32	$588,156	20	3.8%	18.0%
35.1	$111,285	20	3.8%	18.0%
35.2	$423,226	20	3.8%	18.0%
35.3	$625,705	20	3.8%	18.0%
35.4	$725,562	20	3.8%	18.0%
39	$448,970	20	3.8%	18.0%
40	$149,885	20	3.8%	18.0%
43.2	$30,932	20	3.8%	18.0%
44	$365,679	20	3.8%	18.0%
45	$10,000	20	3.8%	18.0%
48	$164,110	20	3.8%	18.0%

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Utilimarc Class	Starting Purchase Price	Lifecycle Used	Inf	Dep
49	$95,608	20	3.8%	18.0%
52	$10,000	20	3.8%	18.0%
99.1	$324,158	20	3.8%	18.0%
99.2	$11,020	20	3.8%	18.0%
100	$39,708	20	3.8%	18.0%

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E – Utilimarc Class Codes

Class Code	Class	Description	Examples	GVWR/HP Range
3	Sedan - Unassigned			
3.1	Sedan - Compact		Cavalier	
3.2	Sedan - Midsize		Camry, Malibu, Taurus, Lumina	
3.3	Sedan - Fullsize		Impala, Crown Vic	
4	Police			
4.1	Police - Marked Squad Sedan	Marked Pursuit Rated Vehicle	Interceptor, Crown Vic, Charger	
4.2	Police - Marked Squad SUV	Marked Pursuit Rated SUV	Interceptor, Explorer, Tahoe	
4.3	Police - Unmarked Sedan	Unmarked, detective, or undercover vehicles. Administrative vehicles under police department should be placed in Class 3 if identifiable.		
4.4	Police - Unmarked SUV	Unmarked, detective, or undercover SUVs Administrative vehicles under police department should be placed in Class 3 if identifiable.	Escape, Tahoe	
4.5	Police - Light Vans	Transports, 1.5 Ton or Less	E350, Walk-in Vans, Light Transports	
4.6	Police - Heavy Vans	Command Centers, HAZMAT, Armored Vehicles or SWAT	Freightliner or International Chassis, Bearcats	

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Class Code	Class	Description	Examples	GVWR/HP Range
4.7	Police - Motorcycles			
5	Passenger Van			
6	Pickup - Unassigned			
6.1	Pickup - Class 1	A 1/4 ton pickup.	Ford Ranger, Chev S10	(0 - 6000)
6.21	Pickup - Class 2a	A 1/2 ton pickup.	F150, Chev 1500	(6001 - 8500)
6.22	Pickup - Class 2b	A 3/4 ton pickup.	F250, Chev 2500	(8501 - 10000)
6.3	Pickup - Class 3	A 1 ton pickup.	Ford 350, Chev 3500	(10001 - 14000)
6.4	Pickup - Class 4+			(14001 -)
10	SUV - Unassigned			
10.1	SUV - Compact		Escape, Jeep Liberty, Blazer, Equinox	
10.2	SUV - Midsize		Explorer, Trailblazer	
10.3	SUV - Fullsize		Suburban, Tahoe, Expidition	
11	Van - Unassigned			
11.1	Van - Class 1	A 1/4 ton van.	Use GVW E-Series is not the same weight as F-Series	(0 - 6000)
11.21	Van - Class 2a	A 1/2 ton van.	Use GVW E-Series is not the same weight as F-Series	(6001 - 8500)
11.22	Van - Class 2b	A 3/4 ton van.	Use GVW E-Series is not the same weight as F-Series	(8501 - 10000)
11.3	Van - Class 3	A 1 ton van.	Use GVW E-Series is not the same weight as F-Series	(10001 - 14000)
11.4	Van - Class 4+		Use GVW E-Series is not the same weight as F-Series	(14001 -)

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Class Code	Class	Description	Examples	GVWR/HP Range
12	Cube/Step Van			
12.1	Cube Van	A cargo van with a cube or box shaped cut-away body. (Think Uhaul). Also called Box, Cube, Cutaway, or Dock Trucks/Vans.		
12.2	Step Van	A cargo van with a walkthrough body. (Think, UPS or delivery truck).		
13	Dump Truck - Unassigned			
13.4	Dump Truck - Class 4	A truck with dump body, typically ≤ 6 yards	Ram 4500, GMC 4500, Ford F-450 with Dump	(14001 - 16000)
13.5	Dump Truck - Class 5	A truck with dump body, typically 7-15 yards	Ram 5500, GMC 5500, Ford F-550, Peterbilt 325, International TerraStar with Dump	(16001 - 19500)
13.6	Dump Truck - Class 6	A truck with dump body, typically >15 yards		(19501 - 26000)
13.7	Dump Truck - Class 7	A truck with dump body, typically >15 yards		(26001 - 33000)
13.8	Dump Truck - Class 8	A truck with dump body, typically >15 yards		(33001 -)
14	Service Truck - Unassigned			
14.2	Service Truck - Class 2	A truck with with service body, breaker trucks, gas constr. trucks		(6000 - 10000)

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Class Code	Class	Description	Examples	GVWR/HP Range
14.3	Service Truck - Class 3	A truck with with service body, breaker trucks, gas constr. trucks		(10001 - 14000)
14.4	Service Truck - Class 4	A truck with with service body, breaker trucks, gas constr. trucks		(14001 - 16000)
14.5	Service Truck - Class 5	A truck with with service body, breaker trucks, gas constr. trucks		(16001 - 19500)
14.6	Service Truck Class 6+	A truck with with service body, breaker trucks, gas constr. trucks		(19501 -)
15	Stake Truck	A truck with a flatbed or stake body.		
16	Bucket Truck - Unassigned			
16.5	Bucket Truck - Class 5	A truck with an insulated aerial lift attachment and side cabinets.	Troubleman, First Responder, 37'	(16000 - 19500)
16.6	Bucket Truck - Class 6	A truck with an insulated aerial lift attachment and side cabinets.	37' or 42'	(19501 - 26000)
16.7	Bucket Truck - Class 7	A truck with an insulated aerial lift attachment and side cabinets.	42' or 55'	(26001 - 33000)
16.8	Bucket Truck - Class 8	A truck with an insulated aerial lift attachment and side cabinets.	55'	(33001 -)

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Class Code	Class	Description	Examples	GVWR/HP Range
16.81	Forestry Truck	A bucket truck used for forestry work.	55’	(33001 -)
17	Non-Insulated Bucket Truck			
18	Transmission Bucket Truck	A truck with an insulated aerial lift attachment and side cabinets, typical with aerial height greater than 65'	> 65'	
19	Digger Derrick - Unassigned			
19.7	Digger Derrick - Class 7	A truck with a digger derrick.		(26001 - 33000)
19.8	Digger Derrick - Class 8	A truck with a digger derrick.		(33001 -)
20	Tanker			
21	Semi-Tractor			(33001 -)
22	Crane - Unassigned			
22.1	Crane - On Road			
22.2	Crane - On Road, Articulating			
24	Pressure Digger (Legacy)			
25	Track Unit - Unmounted	Larger than a Bobcat, without Mounted Equipment		
26	Track Unit - Mounted	Larger than a Bobcat, with Mounted Equipment		

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Class Code	Class	Description	Examples	GVWR/HP Range
		(Buckets, Diggers, Cranes, etc.)		
27	Directional (Horizontal) Drill Unit	Construction equipment for drilling holes for cables.	Ditch Witch JT922, Vermeer D20X22II	
28	Crane - Off Road			
30	Frontend Loader & Backhoe	An off-road tractor with a front mounted bucket and rear mounted backhoe.		
31	Skid-steer - Unassigned			
31.1	Skid-steer - Light	Compact construction equipment with zero turning radius. Can have a variety of attachments (typically a loader style bucket) and have wheels or tracks.		(0 - 60)
31.2	Skid-steer - Heavy	Compact construction equipment with zero turning radius. Can have a variety of attachments (typically a loader style bucket) and have wheels or tracks.		(61 -)
32	Dozer			
33	Trencher - Unassigned	Construction equipment for digging trenches,		

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Class Code	Class	Description	Examples	GVWR/HP Range
		usually using a toothed, spinning wheel or chain.		
33.1	Trencher - Walk-Behind	Construction equipment for digging trenches, usually using a toothed, spinning wheel or chain.		
33.2	Trencher - Light	Construction equipment for digging trenches, usually using a toothed, spinning wheel or chain.		(0 - 30)
33.3	Trencher - Medium	Construction equipment for digging trenches, usually using a toothed, spinning wheel or chain.	Ditch Witch RT Series	(31 - 100)
33.4	Trencher - Heavy	Construction equipment for digging trenches, usually using a toothed, spinning wheel or chain.		(101 -)
34	Loader - Unassigned	Tractor or heavy equipment with permenant front mounted wide bucket on hydraulic arms.		
34.1	Loader - Light	Tractor or heavy equipment with permenant front mounted wide bucket on hydraulic arms.		(0 - 175)

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Class Code	Class	Description	Examples	GVWR/HP Range
34.2	Loader - Medium	Tractor or heavy equipment with permenant front mounted wide bucket on hydraulic arms.		(176 - 300)
34.3	Loader - Heavy	Tractor or heavy equipment with permenant front mounted wide bucket on hydraulic arms.		(301 -)
35	Excavator - Unassigned	Heavy equipment consisting of a cab, boom, dipper and bucket on a rotating platform. Can have a wheel or track undercarriage.		
35.1	Excavator - Mini	Heavy equipment consisting of a cab, boom, dipper and bucket on a rotating platform. Can have a wheel or track undercarriage.		(0 - 50)
35.2	Excavator - Light	Heavy equipment consisting of a cab, boom, dipper and bucket on a rotating platform. Can have a wheel or track undercarriage.		(51 - 125)

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Class Code	Class	Description	Examples	GVWR/HP Range
35.3	Excavator - Medium	Heavy equipment consisting of a cab, boom, dipper and bucket on a rotating platform. Can have a wheel or track undercarriage.		(126 - 250)
35.4	Excavator - Heavy	Heavy equipment consisting of a cab, boom, dipper and bucket on a rotating platform. Can have a wheel or track undercarriage.		(251 -)
38	Compactor Equipment	Wheel roller (either walk-behind or ride) or a vibrating compactor (motorized sledge hammer).		
39	Tensioner/Puller	Equipment that pulls wire or cable. Do not count wheel or reel trailers if they are not powered.	AD108, PT-3366	
40	Brush Chipper			
41	Welder			
42	Air Compressor			
43	ATV/Utility Cart			
43.1	ATV			
43.2	Utility Cart		Gators, Golf Carts, etc.	

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Class Code	Class	Description	Examples	GVWR/HP Range
44	Backyard Mobile Equipment	A track mounted digger or bucket that is small enough to fit through a gate.	Altec DB37	
45	Generators			
48	Mobile Aerial Platform		JLG's, Genie	
49	Forklift			
50	Motor Grader	Tractor with long blade for leveling dirt.		
51	Pressure Washer			
52	Off Road Tractor with Equipment			
53	Mower - Unassigned			
53.1	Mower - Push			
53.2	Mower - Riding Reel	Tractor with reel mower attachment. Reel mowers spin towards the ground.		
53.3	Mower - Riding Deck	Tractor with deck mower attachment. Deck mowers spin parallel to the ground.		
54	Sweeper - Unassigned			
54.1	Sweeper - Sidewalk			
54.2	Sweeper - Street			
55	Mobile Substation			
99	Misc. - Unassigned			

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Class Code	Class	Description	Examples	GVWR/HP Range
99.1	Misc. - Vehicle			
99.2	Misc. - POE			
99.3	Misc. - Attachments			
99.4	Misc. - Tools			
100	Trailers			

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Hydro One Helicopter Lifecycle Analysis

July 22, 2026

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Table of Contents

Lifecycle Study Summary *3*

Methodology *3*

Maintenance Cost 3

Ownership Cost 4

Assumptions *5*

Results by Annual Flight Hours *5*

Graphs *6*

350 Annual Flight Hours 6

400 Annual Flight Hours 10

450 Annual Flight Hours 14

500 Annual Flight Hours 18

Appendix *22*

Appendix A: Variable Maintenance Cost per Flight Hour 22

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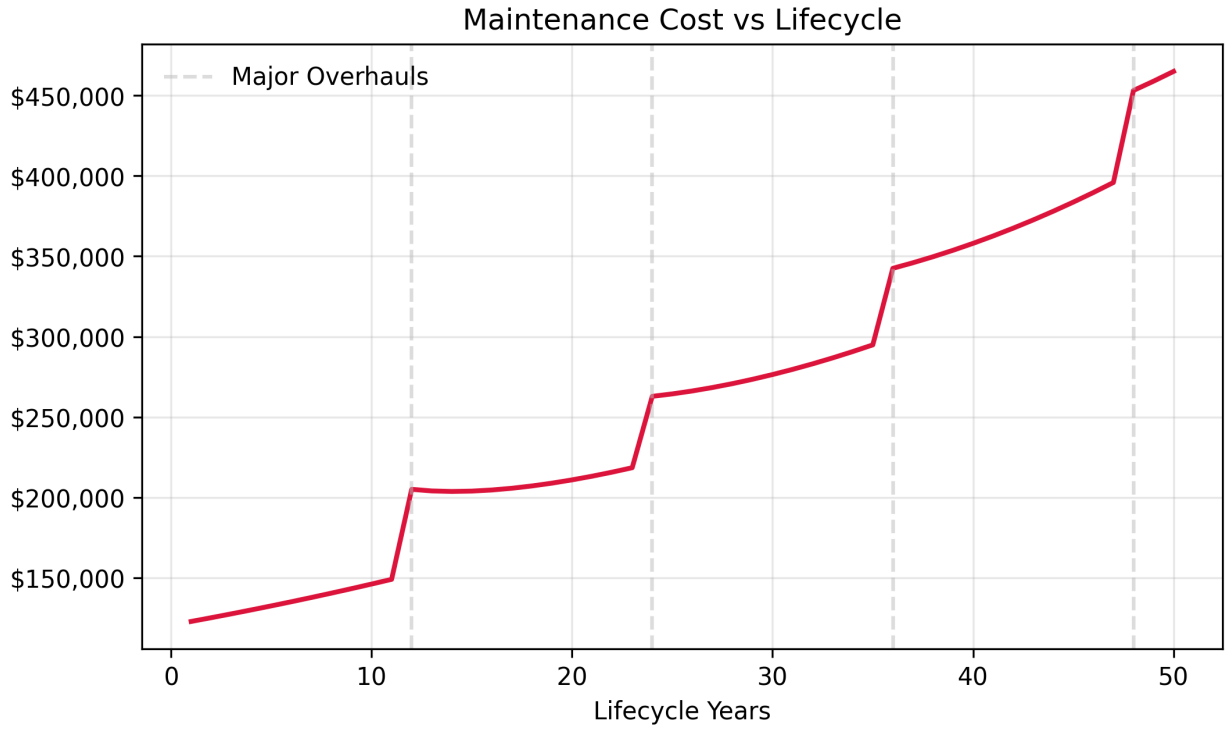
Lifecycle Study Summary

This Lifecycle Analysis shows the optimal economic replacement age for Hydro One's Airbus H125 helicopters based on their purchase price, residual value at sale, and maintenance cost. Varying annual flight hours are modelled to reflect different operational needs and their effect on the optimal replacement age.

Methodology

Maintenance Cost

Variable maintenance costs are sourced from Conklin and de Decker for the Airbus H125. Maintenance equals a fixed variable rate of $338 per flight hour (Parts $116 + Supplies $15 + Engine reserves $207), multiplied by annual hours and compounded by inflation. A separate major overhaul cost of $406,422 (sourced as an average from Hydro One data) is added at each 12-year interval. For the purposes of this study, the labor remains constant. The curve below shows the annualized maintenance cost for each lifecycle length.



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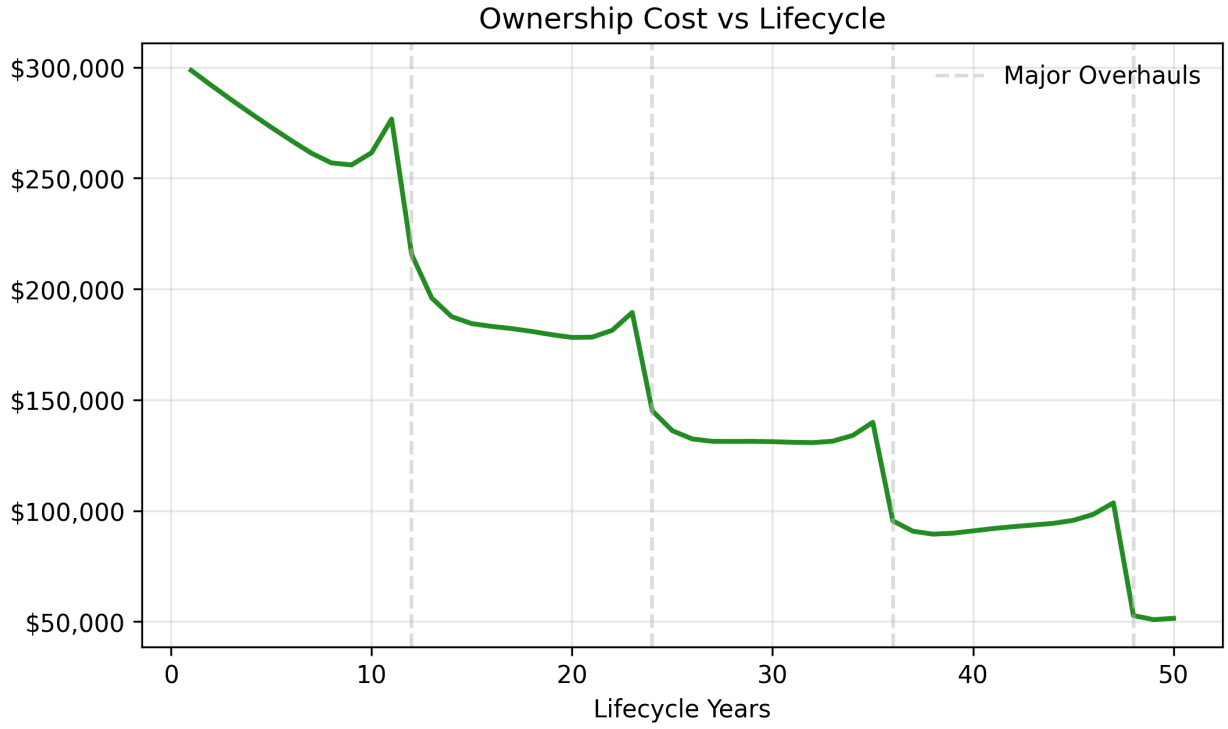
Ownership Cost

Ownership cost is purchase price minus residual value. Residual is computed iteratively year-by-year: apply inflation, then depreciation (8.0%, sourced from Conklin and de Decker for helicopters), and add an appreciation equal to the major overhaul cost at each 12-year interval. The residual is also adjusted downward when the sale falls near an overhaul interval: a buyer will discount the price if a major overhaul is imminent (pre-overhaul window), and the seller has not yet recouped the investment if the helicopter was recently overhauled (post-overhaul window). The plot below shows the annualized ownership cost for each lifecycle length.



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Assumptions

- Analysis is specific to the Airbus H125
- Currency in CAD
- Depreciation rate: 8.0% (source: Conklin and de Decker, helicopters)
- Inflation rate: 3.8% (source: consistent with fleet report)
- Major overhaul interval: 12 years
- Major overhaul event cost: $406,422 (source: average from Hydro One data)
- Appreciation at major overhaul: equal to the major overhaul cost ($406,422), representing the return value of the airframe overhaul and other component replacements (engine overhaul covered via engine reserves per hour) (source: Heli Connections Aviation Inc.)
- Variable maintenance cost elements: Parts $116/h, Supplies $15/h, Engine reserves $207/h (total $338/h) (source: Conklin and de Decker) (Appendix A)
- For the purposes of this study, the labor remains constant.

Results by Annual Flight Hours

The table below summarizes the optimal lifecycle and annualized costs for each annual flight hour estimate. All results use the same Airbus H125 purchase price of $6,630,793 CAD (provided by Hydro One), and differ only in annual flight hours.

Annual Hours	Lifecycle Range*	Optimal Annualized Maintenance	Optimal Annualized Ownership	Optimal Annualized Total
350	14–21	$204,579	$183,168	$387,747
400	14–20	$228,128	$183,168	$411,296
450	7–8, 14–19	$250,039	$184,393	$434,432
500	6–9, 14–18	$200,613	$256,883	$457,496

* Lifecycle range includes all years where the annualized cost is within 1% of the minimum.

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Graphs

350 Annual Flight Hours

Lifecycle	Annualized Maintenance	Annualized Ownership	Annualized Total	Residual Value	Deviation
1	$122,795	$298,651	$421,446	$6,332,142	8.69%
2	$125,129	$291,925	$417,054	$6,046,942	7.56%
3	$127,521	$285,402	$412,922	$5,774,588	6.49%
4	$129,974	$279,073	$409,047	$5,514,501	5.49%
5	$132,489	$272,933	$405,422	$5,266,127	4.56%
6	$135,069	$266,975	$402,044	$5,028,941	3.69%
7	$137,715	$261,287	$399,002	$4,801,787	2.90%
8	$140,429	$256,883	$397,312	$4,575,731	2.47%
9	$143,213	$255,988	$399,201	$4,326,904	2.95%
10	$146,069	$261,494	$407,564	$4,015,850	5.11%
11	$149,000	$276,661	$425,660	$3,587,526	9.78%
12	$204,992	$215,610	$420,602	$4,043,475	8.47%
13	$204,001	$195,984	$399,985	$4,083,004	3.16%
14	$203,674	$187,528	$391,201	$4,005,405	0.89%
15	$203,895	$184,393	$388,288	$3,864,898	0.14%
16	$204,579	$183,168	$387,747	$3,700,108	0.00%
17	$205,664	$182,160	$387,824	$3,534,076	0.02%
18	$207,099	$180,883	$387,982	$3,374,901	0.06%
19	$208,846	$179,397	$388,243	$3,222,246	0.13%
20	$210,875	$178,173	$389,048	$3,067,332	0.34%
21	$213,161	$178,302	$391,464	$2,886,443	0.96%
22	$215,688	$181,388	$397,075	$2,640,267	2.41%
23	$218,438	$189,430	$407,868	$2,273,900	5.19%
24	$262,849	$145,119	$407,968	$3,147,928	5.21%

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Lifecycle	Annualized Maintenance	Annualized Ownership	Annualized Total	Residual Value	Deviation
25	$264,357	$136,120	$400,477	$3,227,791	3.28%
26	$266,188	$132,388	$398,576	$3,188,712	2.79%
27	$268,323	$131,326	$399,649	$3,084,988	3.07%
28	$270,745	$131,267	$402,012	$2,955,326	3.68%
29	$273,440	$131,309	$404,749	$2,822,839	4.38%
30	$276,398	$131,170	$407,567	$2,695,698	5.11%
31	$279,608	$130,876	$410,484	$2,573,634	5.86%
32	$283,064	$130,714	$413,779	$2,447,934	6.71%
33	$286,761	$131,389	$418,150	$2,294,942	7.84%
34	$290,692	$133,982	$424,674	$2,075,408	9.52%
35	$294,855	$139,895	$434,750	$1,734,482	12.12%
36	$342,478	$95,458	$437,935	$3,194,315	12.94%
37	$345,930	$90,776	$436,705	$3,272,089	12.63%
38	$349,670	$89,468	$439,138	$3,231,015	13.25%
39	$353,695	$89,882	$443,577	$3,125,385	14.40%
40	$357,999	$90,922	$448,921	$2,993,903	15.78%
41	$362,581	$91,978	$454,559	$2,859,679	17.23%
42	$367,438	$92,855	$460,293	$2,730,879	18.71%
43	$372,571	$93,571	$466,142	$2,607,230	20.22%
44	$377,977	$94,336	$472,313	$2,480,017	21.81%
45	$383,660	$95,671	$479,331	$2,325,580	23.62%
46	$389,618	$98,394	$488,012	$2,104,666	25.86%
47	$395,855	$103,582	$499,437	$1,762,422	28.80%
48	$453,096	$52,736	$505,832	$4,099,464	30.45%
49	$458,862	$50,905	$509,766	$4,136,470	31.47%
50	$464,956	$51,487	$516,443	$4,056,464	33.19%

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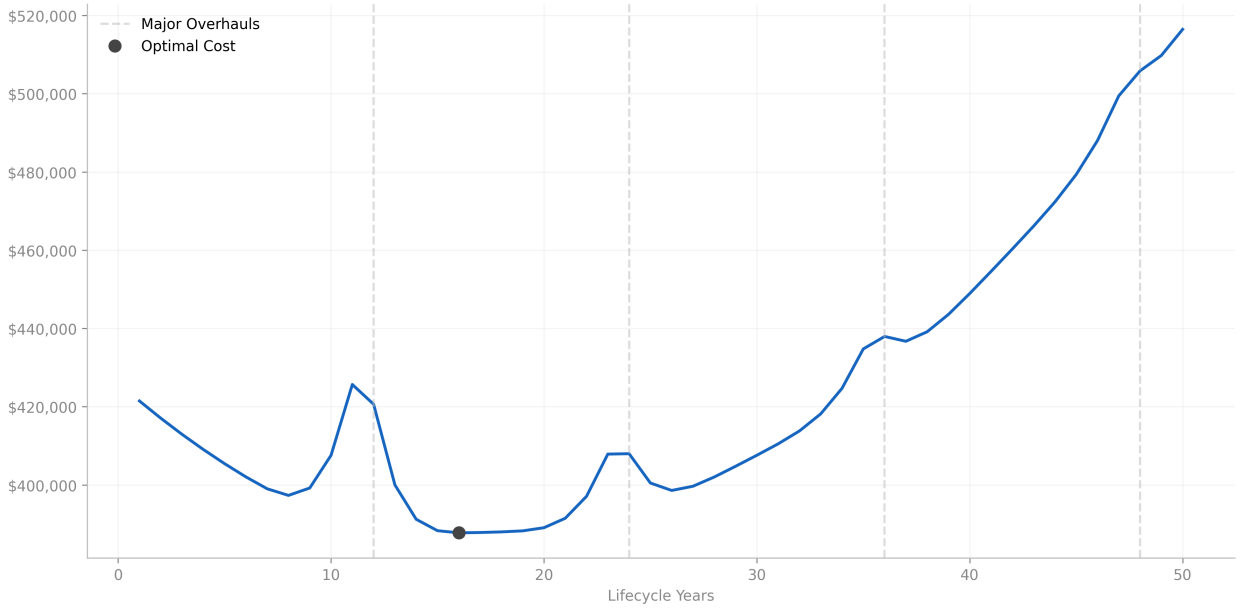
Annualized Total Cost vs Lifecycle Years



Cost Breakdown (Annualized) with Residual Value

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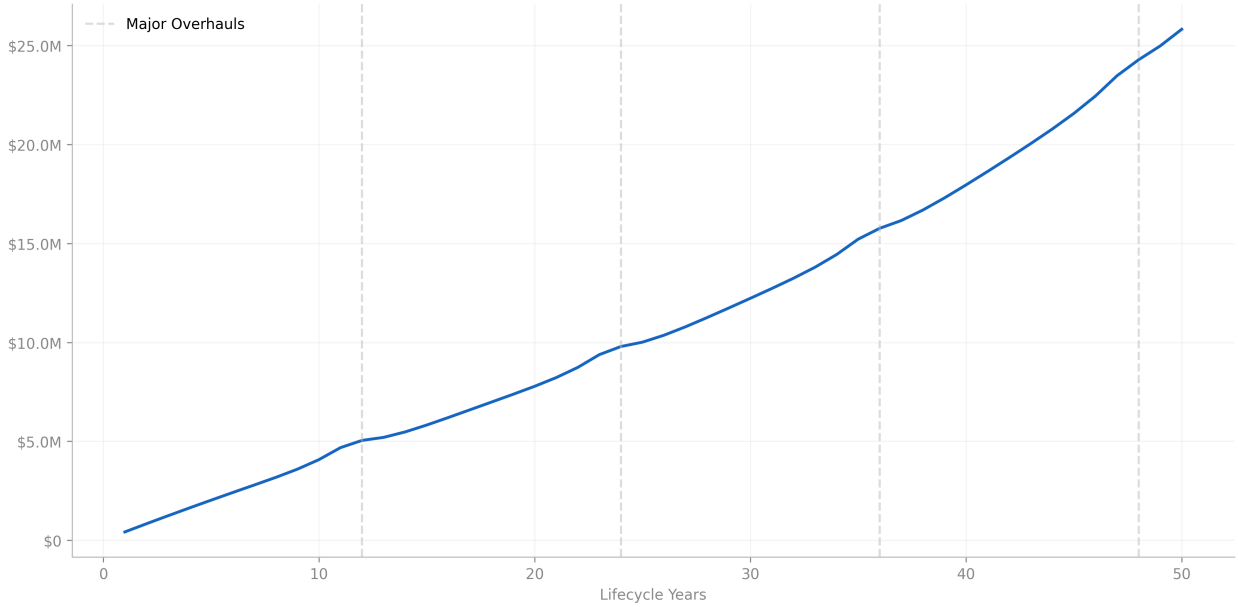
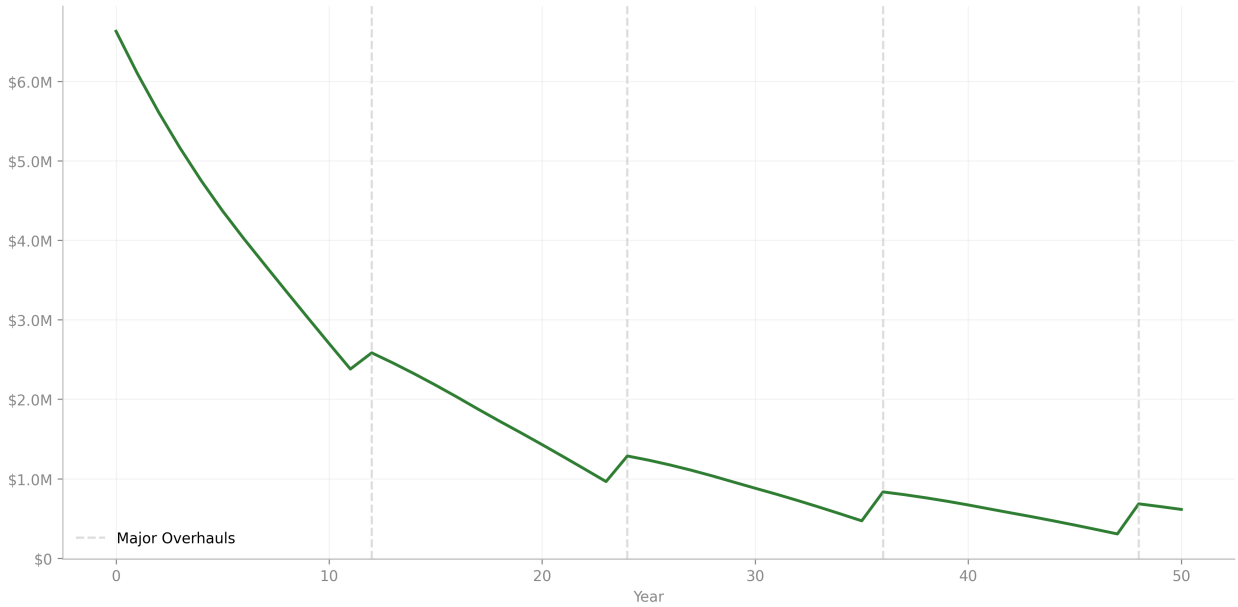
Total Lifecycle Cost (Not Annualized)



Residual Value Over Time (Real Dollars)



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400 Annual Flight Hours

Lifecycle	Annualized Maintenance	Annualized Ownership	Annualized Total	Residual Value	Deviation
1	$140,338	$298,651	$438,989	$6,332,142	6.73%
2	$143,004	$291,925	$434,929	$6,046,942	5.75%
3	$145,738	$285,402	$431,140	$5,774,588	4.82%
4	$148,541	$279,073	$427,614	$5,514,501	3.97%
5	$151,416	$272,933	$424,349	$5,266,127	3.17%
6	$154,365	$266,975	$421,340	$5,028,941	2.44%
7	$157,389	$261,287	$418,675	$4,801,787	1.79%
8	$160,491	$256,883	$417,373	$4,575,731	1.48%
9	$163,672	$255,988	$419,660	$4,326,904	2.03%
10	$166,936	$261,494	$428,431	$4,015,850	4.17%
11	$170,285	$276,661	$446,946	$3,587,526	8.67%
12	$226,708	$215,610	$442,317	$4,043,475	7.54%
13	$226,157	$195,984	$422,141	$4,083,004	2.64%
14	$226,282	$187,528	$413,809	$4,005,405	0.61%
15	$226,967	$184,393	$411,360	$3,864,898	0.02%
16	$228,128	$183,168	$411,296	$3,700,108	0.00%
17	$229,701	$182,160	$411,861	$3,534,076	0.14%
18	$231,638	$180,883	$412,521	$3,374,901	0.30%
19	$233,900	$179,397	$413,297	$3,222,246	0.49%
20	$236,458	$178,173	$414,631	$3,067,332	0.81%
21	$239,288	$178,302	$417,590	$2,886,443	1.53%
22	$242,371	$181,388	$423,759	$2,640,267	3.03%
23	$245,694	$189,430	$435,124	$2,273,900	5.79%
24	$290,693	$145,119	$435,812	$3,147,928	5.96%
25	$292,805	$136,120	$428,925	$3,227,791	4.29%

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Lifecycle	Annualized Maintenance	Annualized Ownership	Annualized Total	Residual Value	Deviation
26	$295,256	$132,388	$427,644	$3,188,712	3.97%
27	$298,027	$131,326	$429,354	$3,084,988	4.39%
28	$301,103	$131,267	$432,370	$2,955,326	5.12%
29	$304,470	$131,309	$435,779	$2,822,839	5.95%
30	$308,118	$131,170	$439,288	$2,695,698	6.81%
31	$312,038	$130,876	$442,914	$2,573,634	7.69%
32	$316,223	$130,714	$446,937	$2,447,934	8.67%
33	$320,668	$131,389	$452,057	$2,294,942	9.91%
34	$325,368	$133,982	$459,350	$2,075,408	11.68%
35	$330,322	$139,895	$470,217	$1,734,482	14.33%
36	$378,757	$95,458	$474,214	$3,194,315	15.30%
37	$383,044	$90,776	$473,819	$3,272,089	15.20%
38	$387,642	$89,468	$477,110	$3,231,015	16.00%
39	$392,549	$89,882	$482,431	$3,125,385	17.30%
40	$397,760	$90,922	$488,682	$2,993,903	18.82%
41	$403,274	$91,978	$495,252	$2,859,679	20.41%
42	$409,090	$92,855	$501,945	$2,730,879	22.04%
43	$415,207	$93,571	$508,779	$2,607,230	23.70%
44	$421,627	$94,336	$515,963	$2,480,017	25.45%
45	$428,351	$95,671	$524,023	$2,325,580	27.41%
46	$435,381	$98,394	$533,775	$2,104,666	29.78%
47	$442,719	$103,582	$546,302	$1,762,422	32.82%
48	$501,093	$52,736	$553,829	$4,099,464	34.65%
49	$508,024	$50,905	$558,929	$4,136,470	35.89%
50	$515,317	$51,487	$566,803	$4,056,464	37.81%

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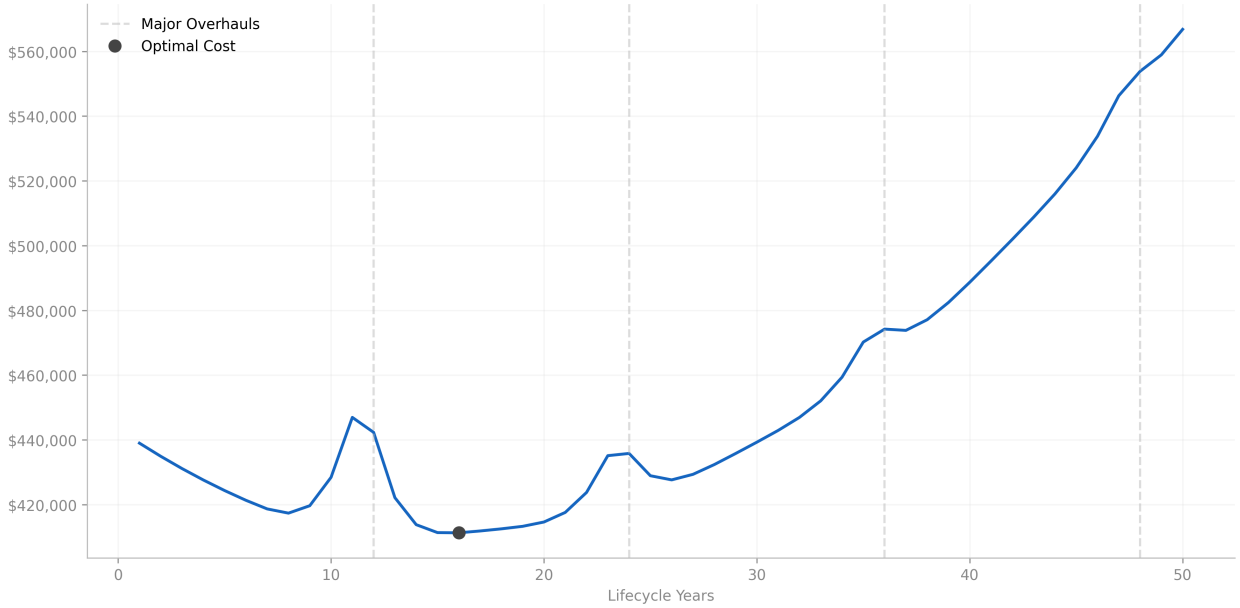
Annualized Total Cost vs Lifecycle Years



Cost Breakdown (Annualized) with Residual Value

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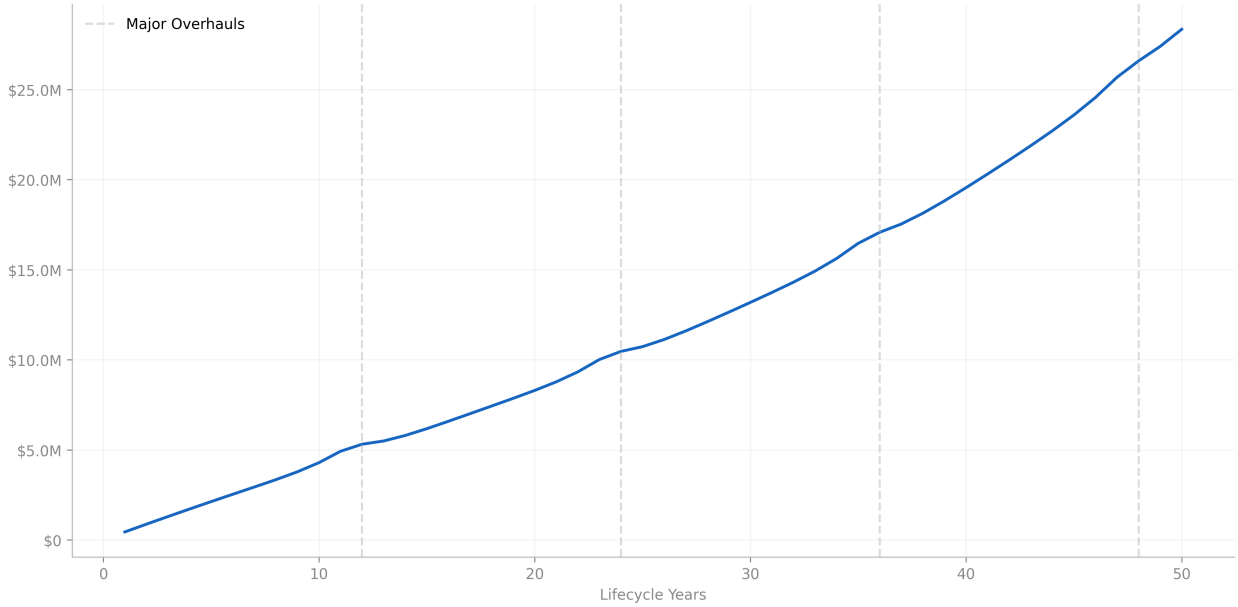
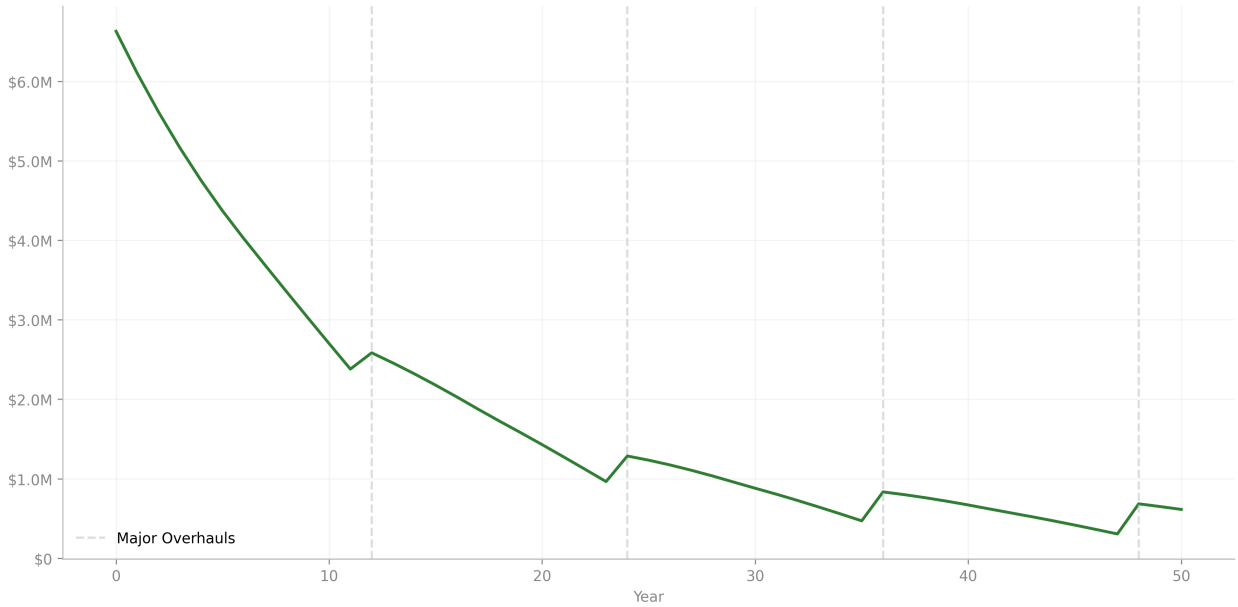
Total Lifecycle Cost (Not Annualized)



Residual Value Over Time (Real Dollars)



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450 Annual Flight Hours

Lifecycle	Annualized Maintenance	Annualized Ownership	Annualized Total	Residual Value	Deviation
1	$157,880	$298,651	$456,531	$6,332,142	5.09%
2	$160,880	$291,925	$452,805	$6,046,942	4.23%
3	$163,955	$285,402	$449,357	$5,774,588	3.44%
4	$167,109	$279,073	$446,182	$5,514,501	2.70%
5	$170,343	$272,933	$443,276	$5,266,127	2.04%
6	$173,660	$266,975	$440,636	$5,028,941	1.43%
7	$177,062	$261,287	$438,349	$4,801,787	0.90%
8	$180,552	$256,883	$437,434	$4,575,731	0.69%
9	$184,131	$255,988	$440,119	$4,326,904	1.31%
10	$187,803	$261,494	$449,298	$4,015,850	3.42%
11	$191,571	$276,661	$468,231	$3,587,526	7.78%
12	$248,423	$215,610	$464,033	$4,043,475	6.81%
13	$248,313	$195,984	$444,297	$4,083,004	2.27%
14	$248,890	$187,528	$436,417	$4,005,405	0.46%
15	$250,039	$184,393	$434,432	$3,864,898	0.00%
16	$251,676	$183,168	$434,844	$3,700,108	0.09%
17	$253,739	$182,160	$435,899	$3,534,076	0.34%
18	$256,177	$180,883	$437,060	$3,374,901	0.61%
19	$258,955	$179,397	$438,352	$3,222,246	0.90%
20	$262,041	$178,173	$440,214	$3,067,332	1.33%
21	$265,414	$178,302	$443,716	$2,886,443	2.14%
22	$269,055	$181,388	$450,442	$2,640,267	3.69%
23	$272,950	$189,430	$462,380	$2,273,900	6.43%
24	$318,537	$145,119	$463,656	$3,147,928	6.73%
25	$321,252	$136,120	$457,372	$3,227,791	5.28%

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Lifecycle	Annualized Maintenance	Annualized Ownership	Annualized Total	Residual Value	Deviation
26	$324,324	$132,388	$456,711	$3,188,712	5.13%
27	$327,732	$131,326	$459,058	$3,084,988	5.67%
28	$331,462	$131,267	$462,729	$2,955,326	6.51%
29	$335,501	$131,309	$466,810	$2,822,839	7.45%
30	$339,839	$131,170	$471,009	$2,695,698	8.42%
31	$344,468	$130,876	$475,344	$2,573,634	9.42%
32	$349,381	$130,714	$480,096	$2,447,934	10.51%
33	$354,575	$131,389	$485,964	$2,294,942	11.86%
34	$360,045	$133,982	$494,027	$2,075,408	13.72%
35	$365,789	$139,895	$505,684	$1,734,482	16.40%
36	$415,036	$95,458	$510,494	$3,194,315	17.51%
37	$420,158	$90,776	$510,934	$3,272,089	17.61%
38	$425,615	$89,468	$515,083	$3,231,015	18.56%
39	$431,403	$89,882	$521,286	$3,125,385	19.99%
40	$437,521	$90,922	$528,443	$2,993,903	21.64%
41	$443,967	$91,978	$535,946	$2,859,679	23.37%
42	$450,741	$92,855	$543,597	$2,730,879	25.13%
43	$457,844	$93,571	$551,415	$2,607,230	26.93%
44	$465,277	$94,336	$559,613	$2,480,017	28.81%
45	$473,043	$95,671	$568,714	$2,325,580	30.91%
46	$481,144	$98,394	$579,538	$2,104,666	33.40%
47	$489,583	$103,582	$593,166	$1,762,422	36.54%
48	$549,090	$52,736	$601,826	$4,099,464	38.53%
49	$557,186	$50,905	$608,091	$4,136,470	39.97%
50	$565,677	$51,487	$617,164	$4,056,464	42.06%

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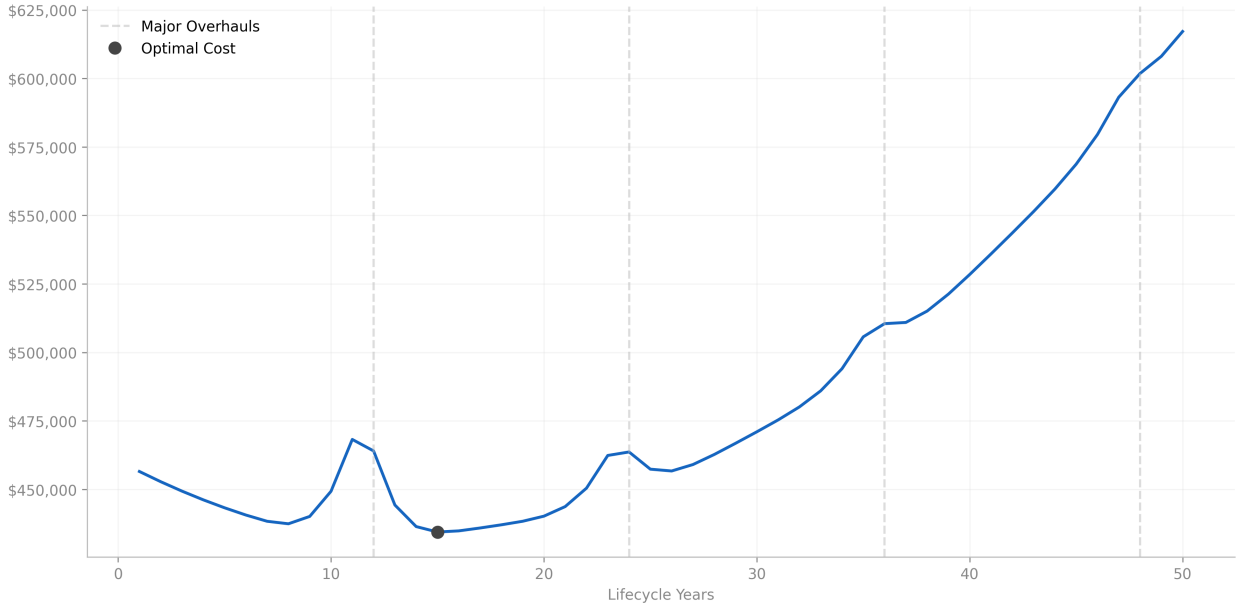
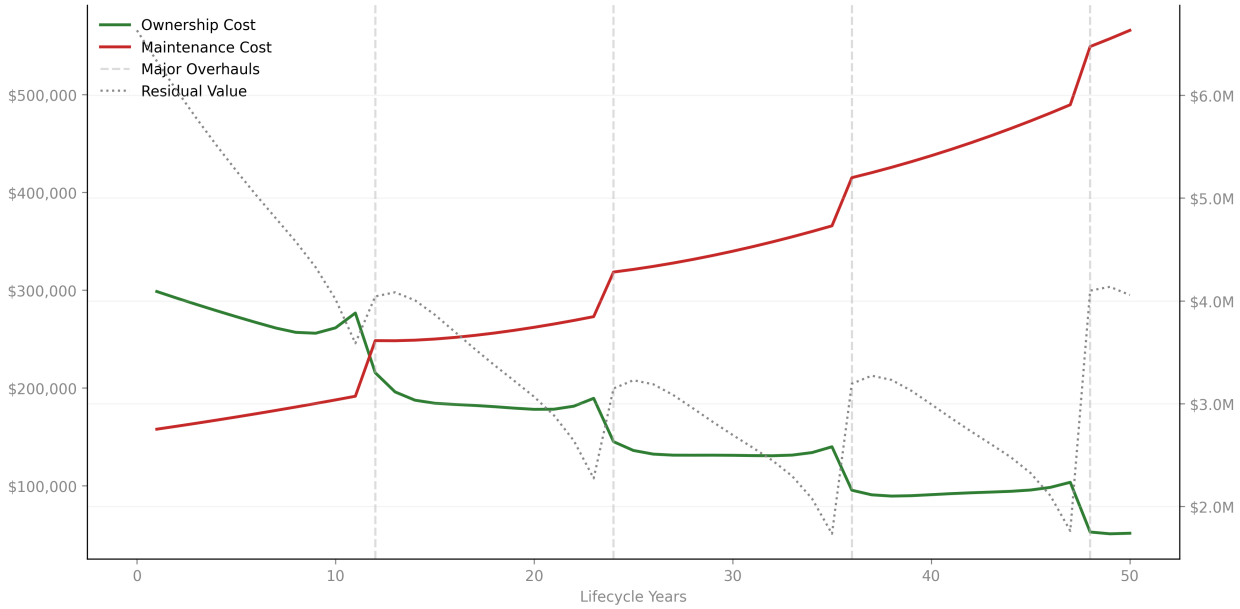
Annualized Total Cost vs Lifecycle Years



Cost Breakdown (Annualized) with Residual Value



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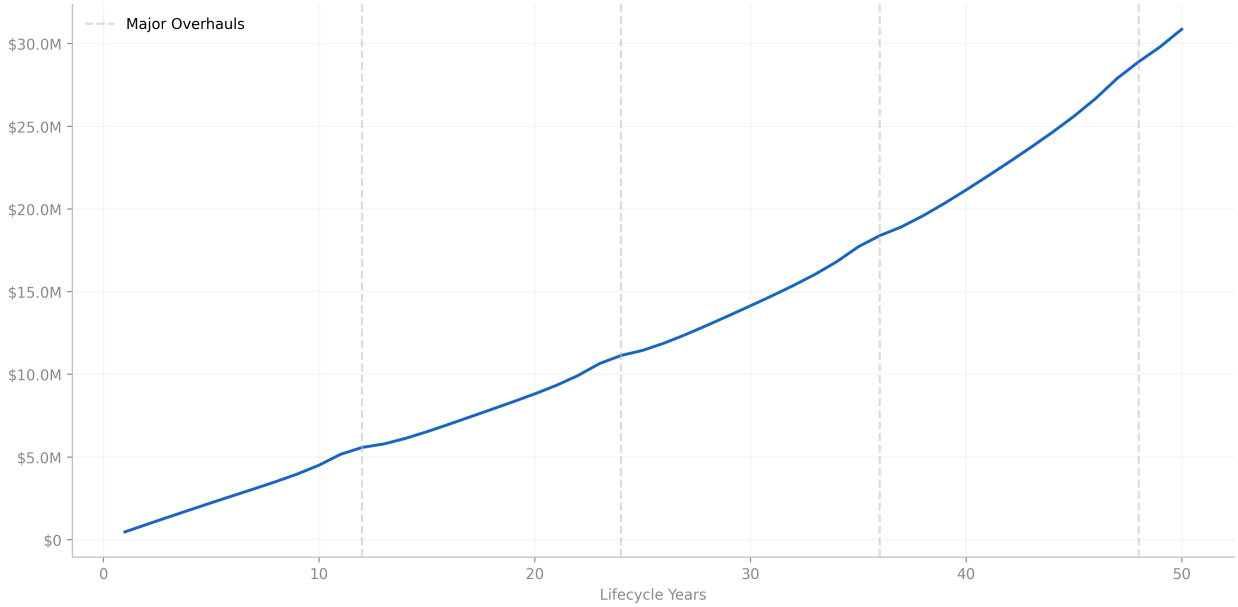
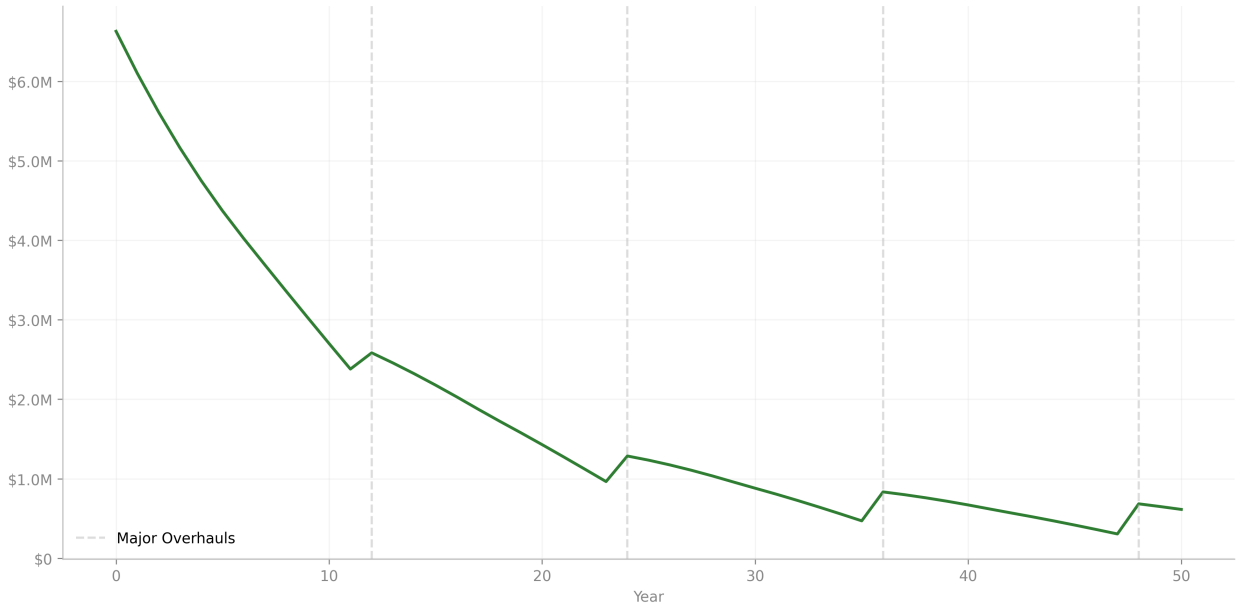
Total Lifecycle Cost (Not Annualized)



Residual Value Over Time (Real Dollars)



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500 Annual Flight Hours

Lifecycle	Annualized Maintenance	Annualized Ownership	Annualized Total	Residual Value	Deviation
1	$175,422	$298,651	$474,073	$6,332,142	3.62%
2	$178,755	$291,925	$470,680	$6,046,942	2.88%
3	$182,172	$285,402	$467,574	$5,774,588	2.20%
4	$185,677	$279,073	$464,750	$5,514,501	1.59%
5	$189,270	$272,933	$462,203	$5,266,127	1.03%
6	$192,956	$266,975	$459,931	$5,028,941	0.53%
7	$196,736	$261,287	$458,022	$4,801,787	0.12%
8	$200,613	$256,883	$457,496	$4,575,731	0.00%
9	$204,590	$255,988	$460,578	$4,326,904	0.67%
10	$208,671	$261,494	$470,165	$4,015,850	2.77%
11	$212,857	$276,661	$489,517	$3,587,526	7.00%
12	$270,138	$215,610	$485,748	$4,043,475	6.18%
13	$270,469	$195,984	$466,453	$4,083,004	1.96%
14	$271,498	$187,528	$459,026	$4,005,405	0.33%
15	$273,111	$184,393	$457,504	$3,864,898	0.00%
16	$275,225	$183,168	$458,393	$3,700,108	0.20%
17	$277,776	$182,160	$459,936	$3,534,076	0.53%
18	$280,717	$180,883	$461,600	$3,374,901	0.90%
19	$284,009	$179,397	$463,406	$3,222,246	1.29%
20	$287,624	$178,173	$465,797	$3,067,332	1.81%
21	$291,540	$178,302	$469,842	$2,886,443	2.70%
22	$295,739	$181,388	$477,126	$2,640,267	4.29%
23	$300,206	$189,430	$489,637	$2,273,900	7.03%
24	$346,381	$145,119	$491,500	$3,147,928	7.43%
25	$349,700	$136,120	$485,820	$3,227,791	6.19%

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Lifecycle	Annualized Maintenance	Annualized Ownership	Annualized Total	Residual Value	Deviation
26	$353,391	$132,388	$485,779	$3,188,712	6.18%
27	$357,436	$131,326	$488,762	$3,084,988	6.83%
28	$361,820	$131,267	$493,087	$2,955,326	7.78%
29	$366,531	$131,309	$497,840	$2,822,839	8.82%
30	$371,559	$131,170	$502,729	$2,695,698	9.89%
31	$376,898	$130,876	$507,774	$2,573,634	10.99%
32	$382,540	$130,714	$513,254	$2,447,934	12.19%
33	$388,482	$131,389	$519,871	$2,294,942	13.63%
34	$394,721	$133,982	$528,703	$2,075,408	15.56%
35	$401,256	$139,895	$541,150	$1,734,482	18.29%
36	$451,315	$95,458	$546,773	$3,194,315	19.51%
37	$457,272	$90,776	$548,048	$3,272,089	19.79%
38	$463,587	$89,468	$553,055	$3,231,015	20.89%
39	$470,258	$89,882	$560,140	$3,125,385	22.44%
40	$477,282	$90,922	$568,205	$2,993,903	24.20%
41	$484,661	$91,978	$576,639	$2,859,679	26.04%
42	$492,393	$92,855	$585,248	$2,730,879	27.92%
43	$500,481	$93,571	$594,052	$2,607,230	29.85%
44	$508,927	$94,336	$603,263	$2,480,017	31.86%
45	$517,734	$95,671	$613,406	$2,325,580	34.08%
46	$526,906	$98,394	$625,300	$2,104,666	36.68%
47	$536,448	$103,582	$640,030	$1,762,422	39.90%
48	$597,087	$52,736	$649,823	$4,099,464	42.04%
49	$606,349	$50,905	$657,253	$4,136,470	43.66%
50	$616,038	$51,487	$667,525	$4,056,464	45.91%

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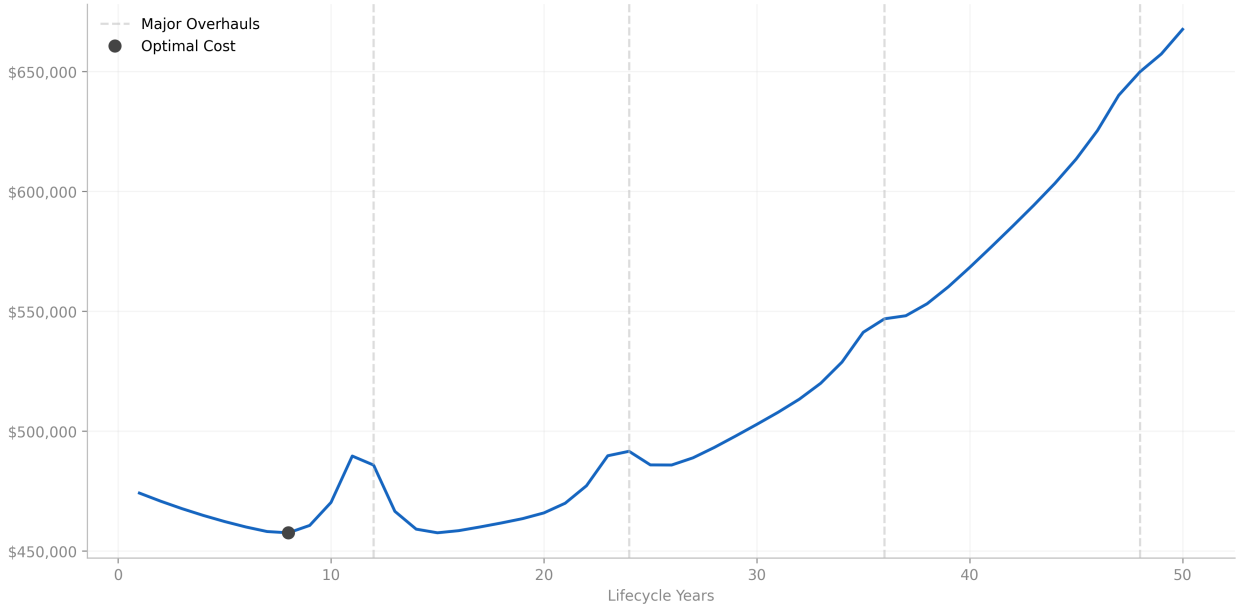
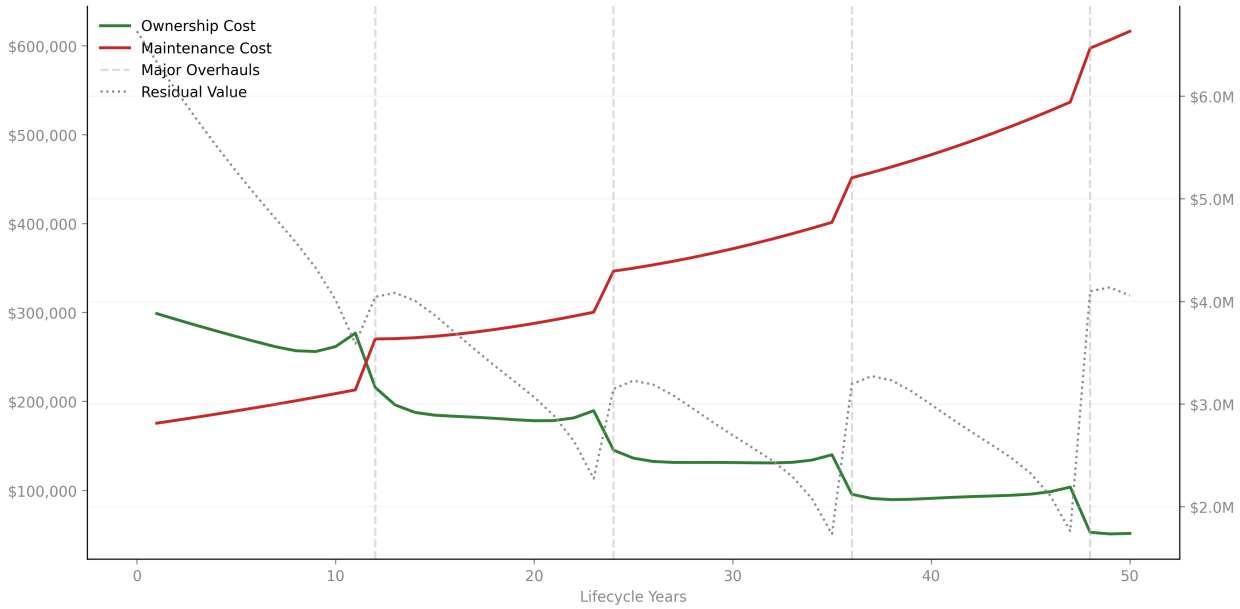
Annualized Total Cost vs Lifecycle Years



Cost Breakdown (Annualized) with Residual Value



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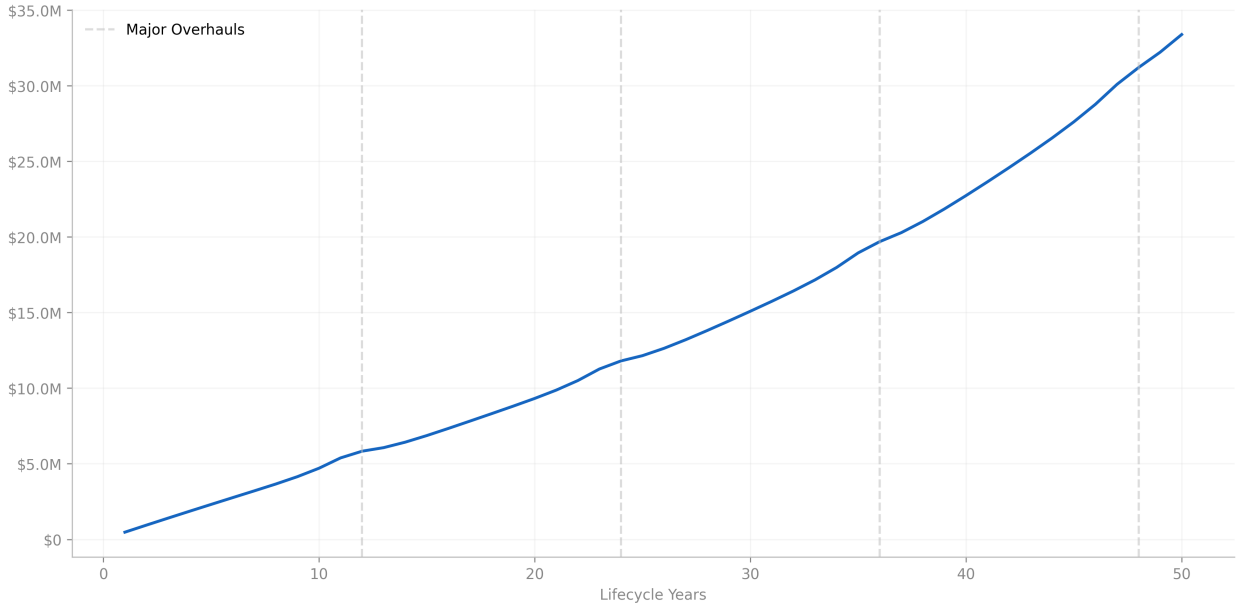
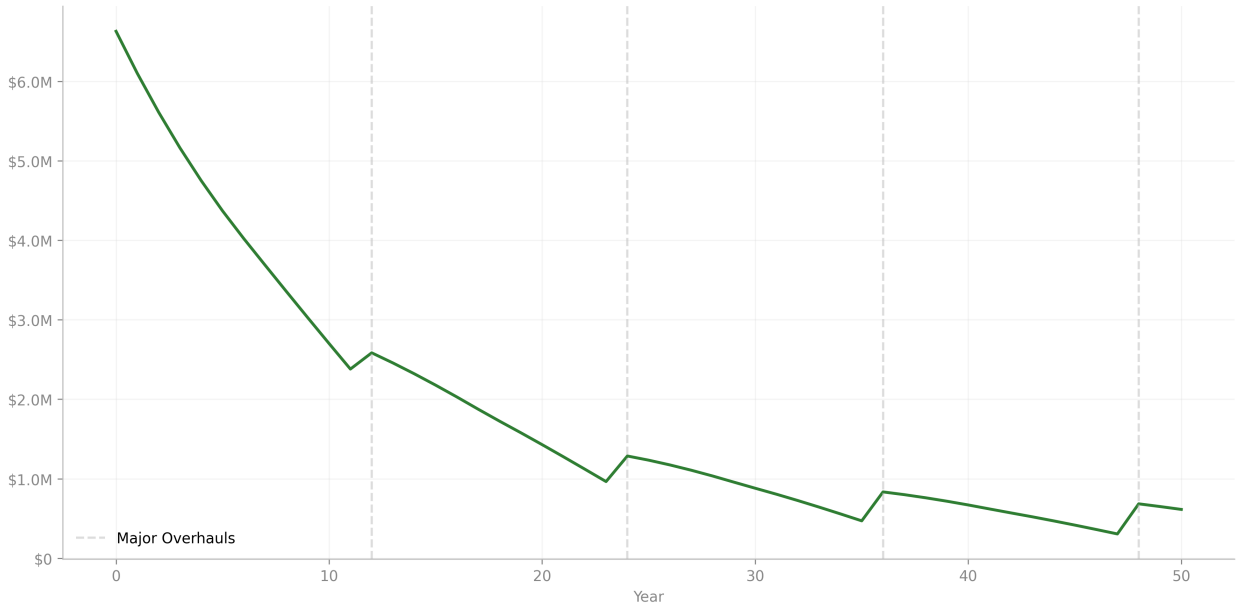
Total Lifecycle Cost (Not Annualized)



Residual Value Over Time (Real Dollars)



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Appendix

Appendix A: Variable Maintenance Cost per Flight Hour

Element	CAD per Hour
Parts	$116
Supplies	$15
Engine reserves	$207
Total variable cost per hour	$338

Source: Conklin and de Decker

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HYDRO ONE FLEET INVESTMENT STRATEGY REPORT

Analysis of Funding Scenario Outcomes

Prepared by Utilimarc
August 2026

Table of Contents

SECTION I - INTRODUCTION 3

SECTION II – EXECUTIVE SUMMARY 5

SECTION III - CURRENT STATE METRICS (2024 BASELINE) 8

SECTION IV - METHODOLOGIES 9

SECTION V – DETAILED OUTCOMES AND ANALYSIS 13

SECTION VI - AVIATION FLEET LIFECYCLE ANALYSIS 15

SECTION VII - SUMMARY OF FINDINGS 17

GLOSSARY 19

SECTION I - INTRODUCTION

1.1 Purpose and Scope

This report analyzes the projected outcomes of three alternative funding levels—full, proposed, and sustained for fleet capital investment over the 2028-2032 planning period. Additional detail is provided on the outcomes associated with Hydro One's proposed funding approach.

Hydro One operates a diverse fleet including on-road vehicles, power-operated equipment, and trailers that support electricity transmission and distribution operations across Ontario. The working fleet size for this report is 8,797 units taken from the end of 2024.

The analysis is based on comprehensive lifecycle studies and fleet benchmarking data compiled by Utilimarc in 2025, providing an evaluation of the proposed investment strategy's projected impacts on fleet age, cost performance, and sustainability.

1.2 About Utilimarc

Utilimarc is a fleet benchmarking and business intelligence company specializing in utility fleet operations. The organization maintains a database of performance metrics encompassing data from many of the largest utility fleets across North America. Their benchmarking participants and methodology are further described in Section III.

This report was created by Alec Henriksen, a Data Analyst who has been with Utilimarc for 5 years and specializes in asset lifecycle and replacement planning projects.

1.3 Analysis Sources

This report draws from three primary studies conducted by Utilimarc in 2025. These sources are cited by footnote throughout the report:

1. **Fleet Lifecycle Study**: Analysis of optimal economic lifecycles and projection of investment scenarios for Hydro One's vehicle fleet
2. **Fleet Operations Benchmarking Report**: Comparative analysis of Hydro One's fleet performance against 48 North American utility participants
3. **Helicopter Lifecycle Analysis**: Analysis of optimal economic lifecycles for Hydro One helicopter fleet

1.4 Structure of the Report

The rest of the report is organized into the following sections:

Section II - Executive Summary: Summarizes key findings, current performance context, and projected outcomes of the proposed funding scenario.

Section III - Current State Metrics: Displays Hydro One's 2024 baseline cost performance and fleet age composition metrics relative to industry peers.

Section IV - Methodologies: Details the lifecycle analysis approach, scenario definitions, and comparative outcomes across three funding levels.

Section V – Detailed Outcomes and Analysis: Projects fleet age trajectory and quantifies electrification and emissions reduction impacts.

Section VI - Aviation Fleet Lifecycle Analysis: Presents results of helicopter lifecycle analysis.

Section VII - Summary of Findings: Consolidates key conclusions and strategic implications.

SECTION II – EXECUTIVE SUMMARY

Hydro One has proposed a fleet capital investment plan for the 2028-2032 period.[1] This report reviews the outcomes of the projections associated with the proposed investment strategy and two others, drawing from comprehensive lifecycle studies and fleet benchmarking data compiled by Utilimarc in 2025.

Current Performance Context (2024)

Cost Performance Metrics:

Metric	Hydro One	Participant Average	Variance	Quartile
Cost per Vehicle Equivalency	C$640.65	C$674.82	-5.06%	2nd
Cost per Kilometer	C$1.48	C$2.25	-34.22%	**1st**
Low-mileage units	12.83%	26.16%	-13.33%	**1st**
Annual Vehicle Mileage	21,549 km	17,516 km	+23.00%	2nd

Fleet Age Positioning:

Metric	Hydro One	Participant Average	Variance	Quartile
Vehicle Average Age	7.42 years	6.54 years	+0.88 years	3rd
Other Equipment Average Age	12.56 years	11.31 years	+1.25 years	3rd

Hydro One's first-quartile cost per kilometer performance (34.22% below average) reflects efficient fleet utilization.[2] However, the fleet's average age positioning in the third quartile indicates an aging asset base that requires strategic investment to maintain reliability and operational effectiveness.[3] Set investments in 2025-2027 put Hydro One into the 4th quartile for average unit age based on 2024 data, increasing maintenance costs and reliability concerns.[4]

Investment Scenario Structure

All three investment scenarios (full, proposed, and sustained) include identical capital allocation for 2026-2027 based on currently expected funding levels.[5] The scenarios differ only in capital

[1] Utilimarc, Fleet Lifecycle Study (August 27, 2026), p. 14.
[2] Utilimarc, 2024 Fleet Operations Benchmarking Report (November 25, 2025), p. 18.
[3] Utilimarc, 2024 Fleet Operations Benchmarking Report (November 25, 2025), p. 20.
[4] Utilimarc, Fleet Lifecycle Study (August 27, 2026), pp. 15–17.
[5] Utilimarc, Fleet Lifecycle Study (August 27, 2026), p. 14.

allocation from 2028-2032, allowing for direct comparison of investment strategies over the five-year planning period.

Proposed Investment Scenario Characteristics

The proposed investment scenario represents the capital needed to reduce average fleet age from 11.27 years in 2027 to 10.29 years in 2032.[6] The replacement strategy prioritizes the oldest assets first, targeting average age reduction as a direct outcome. Despite the increase compared to sustained investment, rising costs and inflation from 2020-2024 have shrunken the capital budget's effectiveness. The proposed investment level increases with inflation from 2028-2032.

Key Outcomes:

Fleet Age and Condition:

- Full fleet average age reduces from 11.27 years to 10.29 years[7]
- Progressive reduction in percentage of assets operating beyond economic lifecycle[8]

Cost Performance:

- Maintenance costs lower than sustained investment scenario due to younger fleet age[9]
- Expected maintenance of second quartile benchmark performance through 2032[10]
- Avoidance of additional technician staffing requirements (over 17 additional technicians) associated with sustained scenario investment levels[11]

Sustainability Impact:

- Electric and hybrid vehicles combined projected to increase to 8% in 2032[12]
- CO2 offset of 2,887,335 kg by 2032 from 2024 baseline[13]
- Improved fuel efficiency from newer vehicle technologies[14]

Conclusion

The proposed investment scenario delivers meaningful fleet age reduction and eases reliability concerns while managing capital expenditure constraints. The investment strategy reverses the increased fleet age that is set to occur through 2027. It also positions Hydro One to maintain total cost performance steady below industry peer average. The conclusion of this assessment is that

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[6] Utilimarc, Fleet Lifecycle Study (August 27, 2026), pp. 15–17.
[7] Utilimarc, Fleet Lifecycle Study (August 27, 2026), pp. 15–17.
[8] Utilimarc, Fleet Lifecycle Study (August 27, 2026), pp. 14–17.
[9] Utilimarc, Fleet Lifecycle Study (August 27, 2026), pp. 15–17.
[10] Utilimarc, Fleet Lifecycle Study (August 27, 2026), pp. 15–17.
[11] Utilimarc, Fleet Lifecycle Study (August 27, 2026), p. 17.
[12] Utilimarc, Fleet Lifecycle Study (August 27, 2026), pp. 17–20.
[13] Utilimarc, Fleet Lifecycle Study (August 27, 2026), pp. 15–16.
[14] Utilimarc, Fleet Lifecycle Study (August 27, 2026), p. 11.

Hydro One's proposed investment strategy is reasonable and prudent. It is the best strategic option based on cost, risk, and sustainability factors outlined in the report.

Helicopter Fleet Review

Economic lifecycle analysis of Hydro One's helicopter fleet using the same MACE methodology as the ground fleet recommends optimal replacement cycles ranging from 14-21 years based on historic and projected Hydro One annual flight hours.[15] These findings provide guidance for long-term aviation asset planning separate from the ground fleet capital scenarios.

[15] Utilimarc, Helicopter Lifecycle Analysis (July 22, 2026), p. 5.

SECTION III - CURRENT STATE METRICS (2024 BASELINE)

3.1 Cost Performance Summary

All Units Cost Performance (2024):

Metric	Hydro One	Participant Average	Variance	Quartile
Cost per VE	C$640.65	C$674.82	-5.06%	2nd
Cost per Unit	C$22,106	C$25,963	-14.90%	2nd
Cost per Litre	C$8.77	C$9.56	-8.26%	2nd

3.2 Fleet Age and Composition

Fleet Age Position (2024):

Metric	Hydro One	Participant Average	Difference	Quartile
Vehicle Average Age	7.42 years	6.54 years	+0.88 years	3rd
Other Equipment Average Age	12.56 years	11.31 years	+1.25 years	3rd

Fleet Composition vs. Industry (2024):

Equipment Type	Hydro One %	Hydro One Age	Industry %	Industry Age	Age Difference
Light Vehicles	38.28%	6.13 yrs	37.49%	6.22 yrs	-0.09 years
Heavy Vehicles	15.69%	10.57 yrs	25.40%	7.02 yrs	**+3.55 years**
Off-Road Equipment	4.08%	13.81 yrs	6.10%	8.58 yrs	**+5.23 years**
Misc POE & Trailers	41.94%	12.44 yrs	29.11%	11.27 yrs	+1.17 years

SECTION IV - METHODOLOGIES

4.1 Lifecycle Analysis Approach

The lifecycle analysis employs Utilimarc's Vehicle Replacement Module (VRM), which determines optimal economic replacement ages by minimizing the Mean Annualized Cost Equivalent (MACE) - the total cost of ownership and maintenance over an asset's life divided by its years in service.[16] Fuel is excluded due to its variability year over year and because usage is being assumed constant.

MACE Formula:

Annualized Total Cost = Annualized Ownership Cost + Annualized Maintenance Cost

Component Calculations:

Component	Calculation Method
Annualized Ownership Cost	Exponential decay model with assets depreciating 18-26% of previous year's value annually. Depreciation rates for Hydro One's largest classes were calculated from Hydro One auction data.[17]
Annualized Maintenance Cost	Linear regression models built from historical maintenance cost per kilometer data.[18]

Key Assumptions:

Assumption	Value/Method
Historic cost adjustment	Translated to 2024 dollars using Statistique Canada Consumer Price Index[19]
Future cost projection	3.8% annual inflation rate[20]
Electric vehicle emissions	Zero CO2 emissions[21]
Hybrid vehicle fuel consumption	40.0% reduction compared to equivalent gasoline counterpart[22]
Newer engine fuel efficiency	0.5% annual fuel efficiency improvement per year of age difference[23]

[16] Utilimarc, Fleet Lifecycle Study (August 27, 2026), p. 4.
[17] Utilimarc, Fleet Lifecycle Study (August 27, 2026), p. 7.
[18] Utilimarc, Fleet Lifecycle Study (August 27, 2026), p. 8.
[19] Utilimarc, Fleet Lifecycle Study (August 27, 2026), p. 11.
[20] Utilimarc, Fleet Lifecycle Study (August 27, 2026), p. 11.
[21] Utilimarc, Fleet Lifecycle Study (August 27, 2026), p. 11.
[22] Utilimarc, Fleet Lifecycle Study (August 27, 2026), p. 11.
[23] Utilimarc, Fleet Lifecycle Study (August 27, 2026), p. 11.

4.2 Benchmark Analysis Approach

Benchmarking compares Hydro One against 48 participating North American utilities using standardized metrics.[24]

Vehicle Equivalency (VE) Weighting: Complexity adjustment factor assigned to each asset based on expected maintenance labor hours.[25] For example, a Class 8 Bucket Truck has a higher VE than a Compact Sedan.

Standardized Cost Categories:

Category	Components
Ownership	Leasing, rental, interest, licensing, depreciation[26]
Operating (Net Fuel)	Mechanic labor (internal and contract) and parts[27]
Fuel	All fuel and energy expenses[28]
Support	Management staff, facilities, shop supplies[29]

Participating Utilities: AEP, AES-Indiana, Alliant, Ameren-AIC, Ameren-Missouri, Arizona Public Service, AVANGRID, Avista, Central Hudson, ConEd, Consumers, DTE, Duke Energy (Carolinas East, Carolinas West, Florida, Midwest), El Paso Electric, ENMAX, Entergy, EPCOR, Essential Utilities, Exelon (BG&E, ComEd, PECO, PHI), FPL, Hydro One, Idaho Power, Indianapolis P&L, JEA, LGE-KU, NationalGrid, NiSource, NV Energy, OGE, Pike, Portland General, Sempra Energy-SDG&E, SMUD, SoCalEd, SRP, TECO, TVA, and Xcel Energy.[30]

4.3 Scenario Definitions and Timeline

Scenario Structure: The first two years (2026-2027) in each scenario are identical based on currently expected funding levels.[31] Funding levels and their respective outcomes in the remaining five years (2028-2032) differ by scenario.

Full Funding Scenario: Represents the amount of capital needed to move the fleet towards all assets being within lifecycle.[32] Replacement numbers are only limited by class to avoid aging bubbles. Full funding is the fastest way to get every asset within lifecycle without creating aging bubbles.

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[24] Utilimarc, 2024 Fleet Operations Benchmarking Report (November 25, 2025), p. 4.
[25] Utilimarc, 2024 Fleet Operations Benchmarking Report (November 25, 2025), p. 5.
[26] Utilimarc, 2024 Fleet Operations Benchmarking Report (November 25, 2025), p. 26.
[27] Utilimarc, 2024 Fleet Operations Benchmarking Report (November 25, 2025), p. 26.
[28] Utilimarc, 2024 Fleet Operations Benchmarking Report (November 25, 2025), p. 26.
[29] Utilimarc, 2024 Fleet Operations Benchmarking Report (November 25, 2025), p. 26.
[30] Utilimarc, 2024 Fleet Operations Benchmarking Report (November 25, 2025), p. 4.
[31] Utilimarc, Fleet Lifecycle Study (August 27, 2026), p. 14.
[32] Utilimarc, Fleet Lifecycle Study (August 27, 2026), p. 14.

Proposed Funding Scenario: Represents the amount of capital needed to reduce the average fleet age by one year between 2027 and 2032.[33] This investment level, increasing with inflation, would take significantly longer to get the entire fleet within lifecycle and will not result in uniform age distributions. It balances increased capital expenditures with reduced maintenance costs and fleet age.

Sustained Funding Scenario: Represents the amount of capital needed to hold the average age of the fleet steady after 2027 while costs rise due to inflation.[34] This will not get the entire fleet within their lifecycle and will require additional technician staffing to maintain the older fleet.

4.4 Annual Investment and Outcomes Summary

Full Funding	2026	2027	2028	2029	2030	2031	2032
Annual Capital	$55,972,365	$56,984,768	$122,251,026	$127,376,087	$135,131,589	$140,415,683	$144,672,786
Units Replaced	268	270	780	768	799	803	801
Annual Maintenance	$90,252,797	$95,982,206	$93,025,139	$90,703,121	$88,804,210	$87,633,177	$87,501,226
Annual Ownership	$54,392,513	$53,595,964	$63,617,442	$72,589,844	$81,090,912	$88,785,730	$95,576,155
Total	$144,645,310	$149,578,170	$156,642,582	$163,292,965	$169,895,121	$176,418,907	$183,077,381
Avg Age	11.01	11.27	10.68	10.23	9.78	9.4	9.1
EV %	1%	1%	2%	3%	4%	5%	5%
Hybrid %	2%	2%	2%	3%	3%	3%	4%
CO2 Emissions (kg)	51,330,128	51,234,925	50,535,255	49,770,324	48,844,416	47,894,535	46,860,637
CO2 Offset (kg)	67,946	163,149	862,819	1,627,750	2,553,658	3,503,539	4,537,437

Proposed Funding	2026	2027	2028	2029	2030	2031	2032
Annual Capital	$55,972,365	$56,984,768	$96,999,902	$100,667,449	$104,501,666	$108,456,063	$112,567,352
Units Replaced	268	270	480	558	652	636	516
Annual Maintenance	$90,252,797	$95,982,206	$96,815,912	$97,764,122	$99,263,703	$100,711,330	$102,487,348
Annual Ownership	$54,392,513	$53,595,964	$59,080,479	$64,677,994	$70,184,341	$75,335,221	$79,753,075
Total	$144,645,310	$149,578,170	$155,896,391	$162,442,116	$169,448,044	$176,046,551	$182,240,423
Avg Age	11.01	11.27	11.17	10.99	10.66	10.37	10.29
EV %	1%	1%	2%	2%	3%	3%	4%
Hybrid %	2%	2%	2%	3%	3%	3%	4%
CO2 Emissions (kg)	51,330,128	51,234,925	50,817,965	50,365,032	49,753,817	49,109,655	48,510,739
CO2 Offset (kg)	67,946	163,149	580,109	1,033,042	1,644,257	2,288,419	2,887,335

Sustained Funding	2026	2027	2028	2029	2030	2031	2032
Annual Capital	$55,972,365	$56,984,768	$76,994,482	$79,898,614	$82,923,183	$86,063,654	$89,365,705
Units Replaced	268	270	347	386	458	503	523
Annual Maintenance	$90,252,797	$95,982,206	$99,418,175	$103,553,050	$107,645,413	$112,040,962	$116,229,836
Annual Ownership	$54,392,513	$53,595,964	$55,954,067	$58,642,646	$61,627,335	$64,765,131	$68,043,262
Total	$144,645,310	$149,578,170	$155,372,242	$162,195,696	$169,272,748	$176,806,093	$184,273,097
Avg Age	11.01	11.27	11.41	11.52	11.49	11.39	11.23
EV %	1%	1%	1%	2%	2%	2%	2%
Hybrid %	2%	2%	2%	2%	3%	3%	3%
CO2 Emissions (kg)	51,330,128	51,234,925	51,015,356	50,720,949	50,415,992	50,015,749	49,608,778
CO2 Offset (kg)	67,946	163,149	382,718	677,125	982,082	1,382,325	1,789,296

Figure IV-1: Investment Scenarios Annual Projections (2026-2032)

[33] Utilimarc, Fleet Lifecycle Study (August 27, 2026), p. 14.
[34] Utilimarc, Fleet Lifecycle Study (August 27, 2026), p. 14.

The proposed investment scenario replaces 2,842 units over the five-year period from 2028-2032, representing 625 more units than sustained funding but 1,099 fewer than full funding.[35] This replacement volume represents the capital funding allotment which is calibrated to achieve the one-year average age reduction from 2027 to 2032.

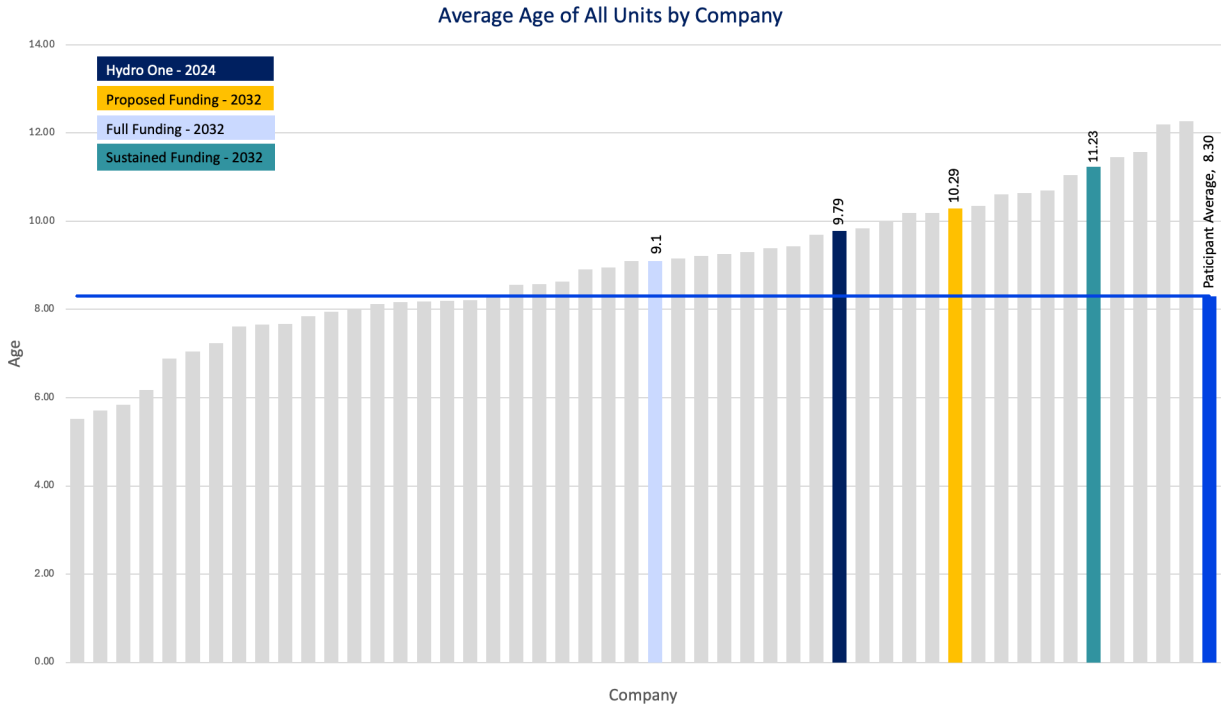
4.5 Maintenance Cost and Staffing Implications

Labor Hour Increase (Sustained Funding vs. Proposed)	2028	2029	2030	2031	2032
Internal	4,969	11,054	16,005	21,635	26,242
External	8,834	19,652	28,454	38,462	46,653
Total	**13,803**	**30,706**	**44,460**	**60,096**	**72,895**
Estimated Technician Increase	3.38	7.51	10.87	14.70	17.83
Percent Technician Increase	2%	6%	8%	11%	13%

The sustained funding scenario would require over 17 additional technicians by 2032 to address increased maintenance demand from the aging fleet, assuming current outsourcing practices (64% of maintenance work externally contracted).[36] This staffing increase represents a significant operational cost beyond the direct maintenance cost increase.

4.6 Comparative Outcomes Analysis

All Units - Projected Average Age Trajectory By Scenario With 2024 Reference:

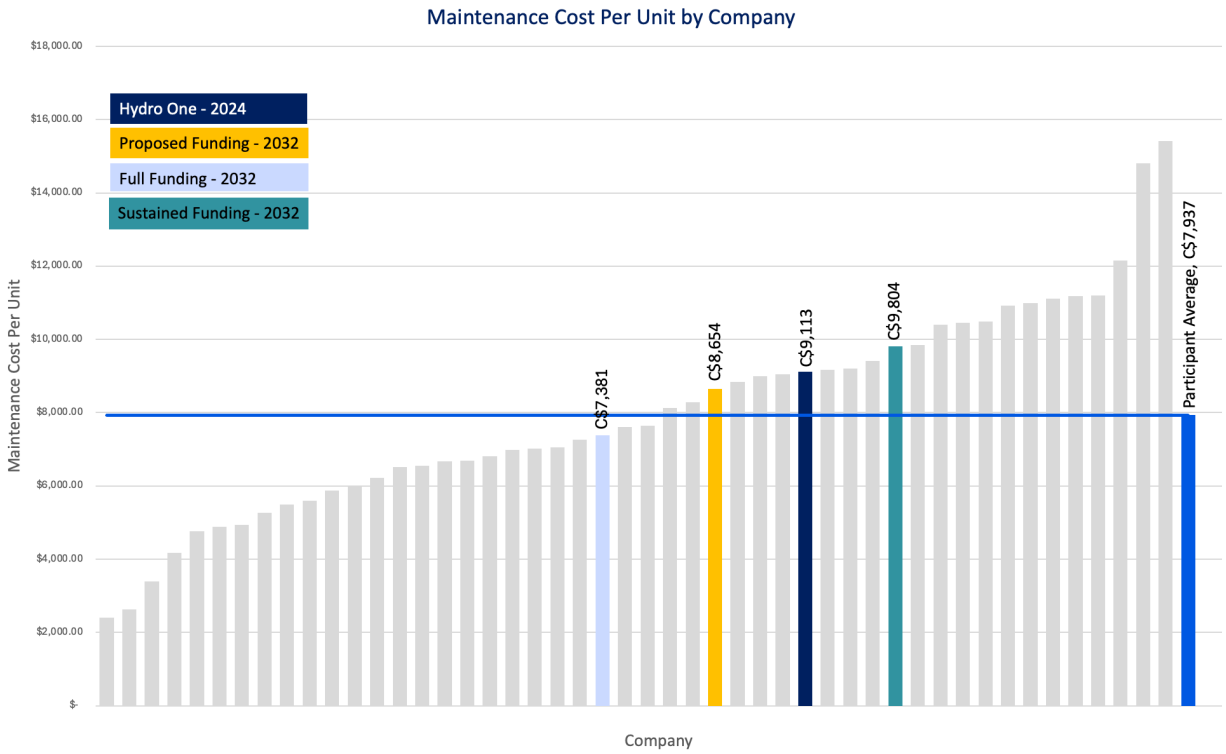


[35] Utilimarc, Fleet Lifecycle Study (August 27, 2026), pp. 15–16.
[36] Utilimarc, Fleet Lifecycle Study (August 27, 2026), p. 17.

SECTION V – DETAILED OUTCOMES AND ANALYSIS

5.1 Cost Projections

All Units - Projected Average Maintenance Cost By Scenario With 2024 Reference:



After adjusting for inflation, the projected maintenance cost outcomes weigh significantly on the differences in funding scenarios due to the direct impact on asset age. Based on current outsourcing practices, an additional $691 per unit in maintenance cost would equate to nearly 18 additional full-time technicians needed.

5.2 Fleet Age Trajectory

Projected Age - All Units (Proposed Funding):

The full fleet age increases from 9.79 years in 2024 to 11.27 years in 2027 due to locked funding levels.[37] The age then decreases progressively to 10.29 years in 2032 under the proposed funding scenario, representing a nearly one-year reduction.

While the fleet remains older than the participant average, the proposed funding scenario reverses the aging trend and starts to move towards the average.

5.3 Electrification and Sustainability Impact

CO2 Emissions - Proposed Funding Scenario:

The proposed funding scenario reduces CO2 emissions from 51,330,128 kg in 2026 to 48,510,739 kg in 2032, representing a cumulative offset of 2,887,335 kg from the 2024 baseline by 2032.[38]

CO2 Reduction Mechanisms:

1. **Electric and hybrid vehicle adoption:** Increasing from 3.0% to 8.0% of fleet composition[39]
2. **Improved fuel efficiency of newer conventional vehicles:** 0.5% per year improvement based on year of manufacture[40]

The proposed funding scenario enables increased electrification efforts and reduced tailpipe emissions compared to sustained funding.[41]

[37] Utilimarc, Fleet Lifecycle Study (August 27, 2026), pp. 15–16.
[38] Utilimarc, Fleet Lifecycle Study (August 27, 2026), pp. 15–16.
[39] Utilimarc, Fleet Lifecycle Study (August 27, 2026), pp. 17–20.
[40] Utilimarc, Fleet Lifecycle Study (August 27, 2026), p. 11.
[41] Utilimarc, Fleet Lifecycle Study (August 27, 2026), pp. 15–20.

SECTION VI - AVIATION FLEET LIFECYCLE ANALYSIS

6.1 Methodology Adaptation for Aircraft

The helicopter lifecycle analysis employs the same MACE methodology as the ground fleet but adapts for helicopter-specific factors.[42]

Key Helicopter-Specific Factors:

Factor	Value/Description
Utilization measurement	Flight hours[43]
Major overhaul interval	12 years[44]
Major overhaul event cost	C$406,422[45]
Appreciation at major overhaul	Equal to the major overhaul cost ($406,422)[46]
Depreciation rate	8.0% (vs. 18.0-25.5% for ground vehicles)[47][48]
Inflation rate	3.8% annually[49]

Financial Assumptions[50]:

Assumption	Value
Purchase Price	C$6,630,793
Variable maintenance cost	C$338/hour
Parts	C$116/hour
Supplies	C$15/hour
Engine reserves	C$207/hour
Labor costs	Excluded (Technician cost treated as constant overhead)

[42] Utilimarc, Helicopter Lifecycle Analysis (July 22, 2026), pp. 3–5.
[43] Utilimarc, Helicopter Lifecycle Analysis (July 22, 2026), p. 5.
[44] Utilimarc, Helicopter Lifecycle Analysis (July 22, 2026), p. 3.
[45] Utilimarc, Helicopter Lifecycle Analysis (July 22, 2026), p. 3.
[46] Utilimarc, Helicopter Lifecycle Analysis (July 22, 2026), p. 5.
[47] Utilimarc, Helicopter Lifecycle Analysis (July 22, 2026), p. 4.
[48] Utilimarc, Fleet Lifecycle Study (August 27, 2026), p. 7.
[49] Utilimarc, Helicopter Lifecycle Analysis (July 22, 2026), p. 5.
[50] Utilimarc, Helicopter Lifecycle Analysis (July 22, 2026), p. 5.

The major overhaul every 12 years represents a significant lifecycle event. This is a major cost that is partially balanced out by the increased value of the airframe. Any additional components replaced at this time can increase the value of the asset nearly as much as they cost.

6.2 Optimal Lifecycle Findings

Lifecycle Recommendation Ranges in Years by Annual Flight Hours:

Annual Hours	Lifecycle Range*	Optimal Annualized Maintenance	Optimal Annualized Ownership	Optimal Annualized Total
350	**14-21**	C$204,579	C$183,168	C$387,747
400	**14-20**	C$228,128	C$183,168	C$411,296

*Lifecycle range includes all years where the annualized cost is within 1% of the optimal age.

Key Findings:

- Optimal replacement range is **14-21 years** based on historic and projected Hydro One annual flight hours.[51]

These findings provide guidance for long-term helicopter asset planning. The longer optimal lifecycle for aircraft compared to ground vehicles (14-21 years vs. 7-13 years) reflects the different depreciation characteristics, maintenance costs, and capital expense tied to helicopters.

[51] Utilimarc, Helicopter Lifecycle Analysis (July 22, 2026), p. 5.

SECTION VII - SUMMARY OF FINDINGS

Hydro One's proposed fleet capital investment plan over 2028-2032 represents capital needed to reduce the full fleet age from 11.27 years in 2027 to 10.29 years in 2032.[52]

Current Fleet Performance (2024)

Better than Industry Average:

- First quartile cost per kilometer (C$1.48 vs. C$2.25 average, **34.22% below average**)[53]
- Second quartile total cost per VE (C$640.65 vs. C$674.82 average, 5.06% below average)[54]
- Second-lowest low-mileage percentage among 48 participants (12.83% vs. 26.16% average) [55]
- Annual vehicle mileage 23.00% above peer average[56]

Worse than Industry Average:

- Third quartile fleet age position (vehicles 0.88 years older, other equipment 1.25 years older than average)[57]
- Heavy vehicles 3.55 years older than peer average[58]
- Off-road equipment 5.23 years older than peer average[59]

Scenario Structure

All three scenarios include identical investment levels for 2026-2027.[60] Differences occur only in 2028-2032 allocation, enabling direct comparison of investment strategy outcomes.

Projected Outcomes - Proposed Funding (2032 vs. 2027)

Fleet Age:

- Full fleet average age: 11.27 years → 10.29 years[61]

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[52] Utilimarc, Fleet Lifecycle Study (August 27, 2026), pp. 15–17.
[53] Utilimarc, 2024 Fleet Operations Benchmarking Report (November 25, 2025), p. 18.
[54] Utilimarc, 2024 Fleet Operations Benchmarking Report (November 25, 2025), p. 8.
[55] Utilimarc, 2024 Fleet Operations Benchmarking Report (November 25, 2025), pp. 23–24.
[56] Utilimarc, 2024 Fleet Operations Benchmarking Report (November 25, 2025), p. 22.
[57] Utilimarc, 2024 Fleet Operations Benchmarking Report (November 25, 2025), pp. 20–21.
[58] Utilimarc, 2024 Fleet Operations Benchmarking Report (November 25, 2025), p. 22.
[59] Utilimarc, 2024 Fleet Operations Benchmarking Report (November 25, 2025), p. 22.
[60] Utilimarc, Fleet Lifecycle Study (August 27, 2026), p. 14.
[61] Utilimarc, Fleet Lifecycle Study (August 27, 2026), pp. 15–17.

- Establishes return to 3rd quartile after upcoming increases[62]

Sustainability:

- Electric and hybrid adoption: 3% to 8% of full fleet[63]
- CO2 offset: 2,887,335 kg cumulative reduction by 2032[64]
- Small fuel efficiency improvements from newer vehicles[65]

Operational Efficiency:

- No additional technician staffing required (vs. over 17 additional in sustained funding scenario)[66]
- Maintenance costs lower than sustained funding due to younger fleet age[67]
- Maintains second quartile cost performance position[68]

Capital Investment:

- Total investment 2026-2032: Proposed funding represents middle ground between full and sustained approaches[69]

Aviation Results

Lifecycle analysis recommends optimal helicopter replacement cycles of **14-21 years** depending on annual flight hour utilization,[70] providing guidance for long-term aviation asset planning separate from ground fleet scenarios.

Conclusion

The proposed investment scenario delivers meaningful fleet age reduction and eases reliability concerns while managing capital expenditure constraints. The investment strategy reverses the increased fleet age that is set to occur through 2027. It also positions Hydro One to maintain total cost performance steady below industry peer average. The conclusion of this assessment is that Hydro One's proposed investment plan is reasonable and prudent. It is the best strategic option based on cost, risk, and sustainability factors outlined above.

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[62] Utilimarc, Fleet Lifecycle Study (August 27, 2026), pp. 15–17.
[63] Utilimarc, Fleet Lifecycle Study (August 27, 2026), pp. 17–20.
[64] Utilimarc, Fleet Lifecycle Study (August 27, 2026), pp. 15–16.
[65] Utilimarc, Fleet Lifecycle Study (August 27, 2026), p. 11.
[66] Utilimarc, Fleet Lifecycle Study (August 27, 2026), p. 17.
[67] Utilimarc, Fleet Lifecycle Study (August 27, 2026), pp. 15–17.
[68] Utilimarc, Fleet Lifecycle Study (August 27, 2026), pp. 15–17.
[69] Utilimarc, Fleet Lifecycle Study (August 27, 2026), pp. 14–17.
[70] Utilimarc, Helicopter Lifecycle Analysis (July 22, 2026), p. 5.

GLOSSARY

Annualized Total Cost: Sum of annualized ownership and maintenance costs over asset service life

Cost per Kilometer: Total fleet cost divided by total kilometers traveled

Cost per Vehicle Equivalency (VE): Total fleet cost divided by total VE

Electric Vehicle (EV): Vehicle powered solely by electric battery with zero tailpipe emissions

Hybrid Vehicle: Vehicle with both internal combustion engine and electric motor/battery

Lifecycle: Optimal service life that minimizes annualized total cost of ownership and maintenance

Low Mileage Unit: Vehicle operating at less than 50% of internal fleet average annual mileage for its asset class

Mean Annualized Cost Equivalent (MACE): Methodology for determining optimal asset lifecycle by calculating total cost of ownership divided by years in service

Quartile: Statistical ranking dividing participant group into four equal segments (1st = top 25%, 4th = bottom 25%)

Vehicle Equivalency (VE): Complexity weighting factor based on expected maintenance labor hours

Currency Conversion

U.S. dollar costs converted to Canadian dollars using annual average exchange rates:

- 2022 = 0.7685
- 2023 = 0.7408
- 2024 = 0.729874[71]

[71] Utilimarc, 2024 Fleet Operations Benchmarking Report (November 25, 2025), p. 4.

BUILDING CONDITION ASSESSMENT REVIEW

REPORT OF

HYDRO ONE REAL ESTATE PORTFOLIO

Located At

ACROSS ONTARIO
CANADA

Prepared For

HYDRO ONE
483 BAY STREET, SOUTH TOWER, 8TH FLOOR,
TORONTO, ON

Prepared By

JONES LANG LaSALLE AMERICAS, INC

1.0 Introduction

JLL has been engaged by Hydro One Networks Inc. to perform an independent, third-party review of a selected portfolio of existing Building Condition Assessment (BCA) reports prepared by its third-party service provider, Brookfield Global Integrated Solutions (BGIS) .

The primary objective of this review is to evaluate the methodology, quality, and completeness of the BCA reports prepared for Hydro One's real estate portfolio against ASTM E2018-24 standards, and to determine whether the BCA framework provides a suitable technical foundation for strategic decision making. This review is a desktop assessment of a representative 10% sample of the building portfolio.

2.0 Qualifications

JLL is a global professional services firm specializing in real estate and investment management. Our Project and Development Services group provides expert technical due diligence, including the preparation and review of BCAs for institutional owners across North America.

2.1 Professional Qualifications

This independent Building Condition Assessment review was conducted by a team of licensed professionals with deep expertise in BCA. Our team includes:

- Licensed Professional Engineers and Architects with direct experience in the evaluation of critical infrastructure, industrial facilities, and large-scale institutional portfolios.
- Specialists in mechanical, electrical, structural, and building envelope systems, each bringing decades of hands-on experience in the assessment and life-cycle management of building assets.
- Seasoned practitioners who have collectively performed condition assessments on thousands of properties across diverse asset types, including power generation and transmission facilities, data centers, office buildings, industrial plants, healthcare facilities, educational campuses, and government infrastructure.

Our team's experience spans properties ranging from small utility substations to multi-million-square-foot portfolio assessments for Fortune 500 corporations, institutional investors, pension funds, and government entities. This breadth of experience provides us with a comprehensive understanding of what constitutes a rigorous and high-quality BCA across all property types and complexity levels.

Furthermore, JLL routinely serves as the independent third-party validator for lenders, investors who require objective verification of technical due diligence prepared by others. This dual perspective, as both practitioners and reviewers, positions us uniquely to evaluate the quality, completeness, and technical rigor of Hydro One's BCA program.

Our team's extensive track record in evaluating condition assessments across diverse industries and asset types provides a robust benchmark against which to measure the quality of Hydro One's BCA program.

3.0 Methodology

JLL performed an independent desktop BCA review of the selected reports. This approach ensures objective, arm's-length reporting. The methodology consisted of the following phases:

3.1 Sample Selection

From the estimated 500 available reports, a representative sample of 50 sites (containing 151 buildings) was identified for review. This sample constitutes approximately 10% of the portfolio. The final sample provides a representation of criticality, facility type, size, and location, and is composed of 23% low-criticality, 35% normal-criticality, and 42% high-criticality assets. It is important to note that JLL utilized the building master list with criticality scores established by Hydro One in our sample selection.

The 50-site sample represents:

- **17.4%** of total building area across the portfolio
- **17.9%** of total replacement value
- **18.1%** of the capital work identified in BCAs

These metrics demonstrate that the sample is well-aligned with the portfolio's overall scale and capital intensity, providing a robust foundation for assessing BCA report quality and methodology.

3.2 Review and Analysis Process

Our team of professional architects and engineers performed a desktop study of the selected BCA reports. The review consisted of analyzing the BCAs in light of the requirements of the ASTM standard, including documented building conditions, projected capital costs, and system lifecycle data. All findings were evaluated with a focus on validating the soundness of the original assessment methodology and the defensibility of its conclusions.

Our methodology is rooted in the principles of the ASTM E2018 Standard Guide for Property Condition Assessments. This standard is the authoritative guide for conducting BCAs and forms the basis of our quality control and review protocols.

JLL's review is based on ASTM E2018-24, the standard current at the time of our assessment. Many of the BCA reports in Hydro One's portfolio were prepared under ASTM E2018-15, which was the applicable industry standard at the time of their preparation. Both versions represent accepted professional practice, and JLL's evaluation criteria, as detailed in Section 3.3 below, are structured around the requirements of ASTM E2018-24.

The professional standard of care is established through commonly accepted institutional procedures and the influence of the ASTM E2018 standard itself. The ASTM E2018 standard is referenced in many of the BCA reports reviewed, further supporting its recognition as an applicable framework within the Canadian context.

3.3 ASTM E2018-24 Criteria

To provide a transparent and methodical review, JLL's review was structured around the core requirements established in ASTM E2018-24. This standard is recognized as the authoritative framework for conducting BCAs in North America and is widely relied upon by institutional investors and lenders to assess the adequacy of BCAs.

Our evaluation focused on the following specific aspects of the ASTM standard:

1. Scope of Assessment and Site Reconnaissance (ASTM Section 6): We assessed whether the original reports documented a thorough physical walk-through survey of all major building systems and whether the scope of the inspection was appropriate to the property type, age, and complexity.
2. Document and Record Review (ASTM Section 7): We verified that the original assessors reviewed relevant background documents, including previous condition reports, maintenance records, capital improvement histories, and available as-built drawings, as recommended by the standard.
3. Interviews with Site Personnel (ASTM Section 8): We confirmed whether the assessments included interviews with on-site property management, maintenance staff, or facility operators to gather operational history and insight into known issues or recent repairs.
4. Assessment of Building Systems (ASTM Section 9): We evaluated the depth and accuracy of the technical evaluation of each major building system, including structural, architectural, mechanical, electrical, plumbing, fire/life safety, and site components.
5. Opinions of Probable Costs (ASTM Section 10): We validated that the cost estimates for immediate repairs and capital replacements were reasonable, appropriately timed, and supported by a credible methodology or cost reference source.
6. Report Content and Clarity (ASTM Section 11): We reviewed whether the final reports were clear, complete, and provided sufficient detail.

This combination of technical standards, industry best practices, and deep professional experience forms the foundation of our independent assessment.

4.0 Limitations of Review

This independent assessment is based on a desktop review of the written reports provided to JLL. The process did not involve new site walkthroughs or physical testing. Our assessment is limited to the information contained within the documents reviewed.

JLL’s review does not attempt to reconcile or correlate BCA-derived cost recommendations with Hydro One’s enterprise-level capital plan.

As previously noted, the sample reviewed constitutes 10% of the portfolio. While this approach is appropriate to review the process, it does not represent an independent verification of every individual project or cost estimate across the entire asset base.

The review scope excludes consulting on hazardous materials, tax depreciation, or cost segregation services.

5.0 Evaluation Against ASTM E2018-24 Standards

The objective of this independent review was to evaluate whether the BCAs met the baseline requirements of ASTM E2018 – 24. Overall, Hydro One's assessment process was found to meet the standards outlined in this framework. Six reports within the sample of fifty were issued in an abbreviated format, and the basis on which JLL considers them acceptable is discussed below.

Many of the assessment reports were completed before the release of the 2024 update and were prepared under ASTM E2018-15, which was the applicable industry standard at the time of their preparation. The requirements under the ASTM E2018-24 standard that are the focus of this assessment are materially the same as those under the earlier version of the ASTM E2018. Technical standards of this kind are reviewed and updated on a regular cycle, in the same way that building codes are periodically refreshed. An update reflects ongoing refinement of professional practice rather than an inadequate finding from previous versions. The 2024 revision clarified certain definitions and reporting conventions, but it did not change the fundamental work an assessor performs. Under both the 2015 and 2024 versions, the assessor walks through the property, reviews available records, interviews site personnel, identifies physical deficiencies, and provides opinions of probable cost to address them. JLL compared the requirements of the two versions and identified no material change to the assessment methodology. Both ASTM E2018-15 and E2018-24 therefore represent accepted professional practice for BCAs. This methodology was applied consistently across the portfolio of reports reviewed.

Six of the fifty reports provided were identified as location summary reports, which differed from the full reports primarily in format and presentation. Based on discussions with BGIS, which performed the assessments, JLL confirmed that these sites underwent the same site inspections, data collection procedures, and technical evaluations as the full BCAs.

While the issued summary reports were more limited in scope and did not include all elements typically presented in a full BCA report, such as published photographs or comprehensive system narratives, supporting documentation was collected during the assessments and is retained within BGIS's asset management database. This documentation includes system-level data and site photographs.

As such, the distinction relates to report format rather than assessment rigor or methodology. JLL has directly reviewed BGIS's supporting documentation for these six sites, including folder structures which include site photographs, draft reports, and evidence of asset data review by the Director of Facility Assessments Professional Services at BGIS, and has confirmed that the assessment process and technical rigor applied were consistent with the full reports. Therefore, these location summary reports are considered acceptable BCAs for their intended purpose, as the underlying documentation is comprehensive and validates their suitability for strategic planning and asset management decisions.

5.1 Scope of Assessment and Site Reconnaissance

ASTM Requirement: The standard requires a comprehensive walk-through survey of the property, including accessible and representative areas of all major building systems.

Observations: Our review confirmed that the original reports consistently documented thorough site reconnaissance.

JLL Conclusion: The scope and depth of the site inspections were appropriate and thorough. The six reports identified as location summary reports included a site observation consistent with the other 44 full BCAs.

5.2 Document and Record Review

ASTM Requirement: The assessor should review available documentation, including prior condition reports, maintenance logs, capital improvement records, and drawings, to provide context for the physical observations.

Observations: The original reports demonstrate that the assessors systematically reviewed relevant background documents. References to prior condition reports, recent capital projects, and maintenance records were evident throughout the reports. This background work enabled the assessors to distinguish between new and pre-existing deficiencies and to validate the accuracy of equipment age assumptions.

JLL Conclusion: The reviewed BCAs document a systematic review of relevant background materials, including prior condition reports, maintenance records, capital improvement histories, and available drawings. For the six location summary reports, JLL has reviewed BGIS's supporting documentation, which identified the folder structures which include site photographs, reports, and evidence of asset data review, and has found that similar background documentation and assessment rigor were applied as in the full reports. Therefore, the document and record review process is confirmed as appropriate for the intended use of the assessments.

5.3 Interviews with Site Personnel

ASTM Requirement: The standard recommends interviews with property management, operations, and maintenance staff to gain insight into building performance, known issues, and recent repairs.

Observations: Our review confirmed that the assessors conducted interviews with on-site personnel or representatives familiar with the property for all of the facilities. The reports included references to discussions regarding recent maintenance activities, operational challenges, and future plans, which provided valuable context and enhanced the reliability of the findings.

JLL Conclusion: The engagement with site personnel was appropriate and provided a valuable operational context.

5.4 Assessment of Building Systems

ASTM Requirement: The standard requires an evaluation of the condition of all major building systems, with observations documented in sufficient detail to support conclusions and cost estimates.

Observations: The technical content of the reports was comprehensive and detailed. The assessments of structural, architectural, mechanical, electrical, and life safety systems were thorough, with specific deficiencies clearly documented. The use of photographs and annotated diagrams in many reports further strengthened the technical quality and provided clear evidence to support the conclusions.

JLL Conclusion: The technical evaluations reviewed were robust, well-documented, and met the baseline expectations for detail and clarity.

5.5 Opinion of Probable Costs

ASTM Requirement: The standard requires that cost estimates be reasonable and based on a credible methodology. Costs should be presented with sufficient detail to allow for informed decision-making.

Observations: Our review of the cost estimates confirmed that they were reasonable and aligned with regional market conditions in Ontario at the time the BCAs were prepared. The use of recognized cost databases and the appropriate application of regional adjustments demonstrated a sound approach to cost forecasting. The timing and categorization of costs (immediate, short-term, long-term) were logical and well justified within the context of each individual report. Some of the BCAs reviewed were prepared in earlier periods, and Hydro One has advised JLL that cost escalation factors have been applied within its capital plan to support alignment with current market conditions. JLL has not evaluated those escalation factors, as this was outside the scope of the review.

JLL Conclusion: The cost estimates in the original BCAs are reliable as baseline assessments and were appropriate at the time of preparation.

5.6 Report Content and Clarity

ASTM Requirement: The final report should be clear, complete, and organized in a manner that facilitates decision-making. It should include all necessary sections, including executive summaries, site descriptions, observations, and cost tables.

Observations: The reports were well-organized, clearly written, and consistently formatted. Each report included a concise executive summary, detailed system-by-system observations, and comprehensive cost tables. The quality of the reports facilitates straightforward data extraction and supports portfolio-wide analysis.

JLL Conclusion: The majority of the BCAs, 44 of the 50, are clear, complete, and well organized, and provide sufficient detail to support informed decision making. The location summary reports are more limited in presentation and do not include the same level of documentation typically found in the full BCA reports, such as photographs and comprehensive system narratives. For the six location summary reports, JLL has reviewed BGIS's supporting documentation, which provided folder structures which include site photographs, draft reports, and evidence of asset data review, and has found that similar background documentation and assessment rigor were applied as in the full reports. While the issued summaries are more limited in presentation, they provide pertinent information and are suitable for their intended purpose, even when reviewed on a standalone basis, due to the supporting documentation retained and reviewed by BGIS.

6.0 Assessment of BCA Reports

Based on the review as described in the previous section, JLL has formed the following independent opinion on the validity of the original BCA reports as appropriate inputs for strategic decision making.

6.1 Overall Assessment of BCA Report Validity

It is JLL's professional opinion that the majority of buildings reviewed, representing 44 of the 50 sites in the sample, were documented through BCA reports prepared in general conformance with the ASTM E2018. The methodology applied across the portfolio is consistent and reflects recognized professional practice for building condition assessments. These reports reflect a consistent and professionally executed assessment process and provide an appropriate representation of building conditions at the time of assessment. These reports address the core elements contemplated by ASTM E2018-24, including comprehensive site assessments, evaluation of building systems, and documentation of observed conditions.

The remaining six sites were documented through location summary reports that represent abbreviated reporting outputs. JLL has reviewed supporting documentation provided by BGIS for these sites which include folder structures, site photographs, draft reports, and evidence of asset data review, and has found that these sites were assessed using the same inspection protocols, data collection procedures, and technical evaluation methodologies as the full BCAs. Although the published reports are more limited in presentation and do not include all supporting documentation and detailed system evaluations, JLL has confirmed that similar assessment rigor and background documentation were applied as in the full reports. The underlying documentation appears comprehensive and supports the validity of the assessments.

6.2 Confidence in BCA Report Quality

Based on the representative 10% sample reviewed, the BCA program demonstrates a standard of technical practice consistent with prevailing industry practice as reflected in ASTM E2018. JLL has a high degree of confidence in the quality and reliability of the assessment process employed by BGIS, and the reports provide a sound technical foundation for understanding building conditions and capital needs and provide a sound basis for Hydro One's asset management and strategic planning processes.

6.3 Recommendation for Future Assessments

While the location summary reports provide some useful information for their intended purpose, JLL recommends that full BCA report formats be used for future assessments to strengthen consistency across the portfolio.

6.4 Application of Sample Based Conclusions

While JLL's conclusions are drawn from a representative sample, they are not intended to constitute an independent verification of every individual site or cost estimate within the full portfolio.

7.0 Documentation Reviewed

The following materials were provided for our review:

- Hydro One property and building master list with criticality
- Total of 50 BCA reports selected

8.0 Appendix

1. Margaret Asimakis, P.E., Statement of Qualifications
2. Joseph Marciano, P.E., Statement of Qualifications

Respectfully submitted,

JONES LANG LaSALLE AMERICAS, INC.

asimakis

Margaret Asimakis, P.E.
Managing Director

JLL Biography

Margaret Asimakis, P.E., LEED AP

Managing Director
Technical Investment Advisory Services
Project and Development Services

Qualifications

Margaret leads JLL's Technical Investment Advisory Services practice, an independent engineering group performing building condition assessment, plan and cost review, construction monitoring, and technical due diligence for lenders, investors, and owners. She directs 35 professionals and oversees 300 active projects representing $45B in hard costs.

Her own assessment record spans hundreds of facilities of varying complexity across the United States, Latin America, the Caribbean, and Europe. She previously led the practice's Plan & Cost Review and Structural Engineering teams.

Margaret joined legacy Merritt & Harris in 2011 and has 15 years with the practice, continuing through JLL's 2016 acquisition. She was previously a Senior Engineer at Thornton Tomasetti.

Role on This Engagement

Margaret directed the engagement and participated directly in the preparation of this report.

Education and Affiliations

B.S., Civil Engineering, Rensselaer Polytechnic Institute
M.S., Structural Engineering, University of Southern California, concentration in earthquake engineering
Licensed Professional Engineer, State of New York
LEED Accredited Professional, U.S. Green Building Council

Relevant Experience

Moynihan Train Hall
New York, New York

National Grid
Various Locations, New York State

National Cold Storage Portfolio, 17 Facilities
Multiple States

Confidential Data center / mission-critical facilities
Multiple States

SoFi Stadium
Inglewood, CA

TD Garden, North Station
Boston, MA

Hudson Yards Development
New York, NY

JLL Biography

Joseph J. Marciano, P.E., LEED AP

Senior Vice President
Head of Mechanical and Electrical Engineering Group
Project and Development Services

Qualifications

Joseph Marciano is a Senior Vice President in JLL's Technical Investment Advisory Services practice and heads its Mechanical and Electrical Engineering Group. He performs design review of mechanical, electrical, and plumbing systems for new construction and renovation work. His property condition assessment work includes detailed review of the HVAC, plumbing, electrical, and life safety systems of existing buildings, together with their sustainable attributes.

Joseph joined Merritt & Harris as a Mechanical Engineer in 1996 and has 30 years with the practice. He was elevated to Head of the Mechanical and Electrical Engineering Group and appointed to the practice's Management Committee. He has performed MEP analysis for major projects across all primary divisions of the practice, has incorporated LEED evaluations for existing buildings into property condition assessment assignments, and supports the Plan and Cost Review group by analyzing designs for buildings seeking sustainability recognition. He has evaluated cogeneration plants and data centers and has performed energy audits for a range of property types.

Role on This Engagement

Joseph directed the team of reviewers and led the technical analysis for this engagement.

Education and Affiliations

B.S., Mechanical Engineering, Cornell University
Diploma in Construction Management, The Real Estate Institute at New York University
Licensed Professional Engineer, State of New York
LEED Accredited Professional, U.S. Green Building Council
Member, ASHRAE, USGBC, Association of Energy Engineers, and Designers Lighting Forum of New York, 20+ years

Relevant Experience

PEPCO portfolio
New Jersey, Delaware, Maryland and Washington DC

National Grid building
Brooklyn, NY

Kuehne + Nagel Warehouse
Baie-d'Urfe, QC, Canada

New York University Cogeneration Plant
New York, New York

Greenridge Power Generation Plant
Seneca Lake, New York

Menlo Micro
Former IBM Campus
Fishkill, New York

Hudson Yards Cogeneration Plant
New York, New York

Marriott Marquis Cogeneration Plant
New York, New York

Deutsche Bank Center
New York, New York

Google Headquarters
New York, New York

Manhattan Plaza Tri-generation Plant
New York, New York

Enterprise IT Spending & Staffing Benchmark

Final Report

May 20, 2026

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Table of Contents

01 Executive Summary

02 Objectives & Approach

03 Enterprise IT Spending & Staffing Analysis

04 Appendix: IT Spending & Staffing Benchmarking Definitions

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1.0
Executive Summary

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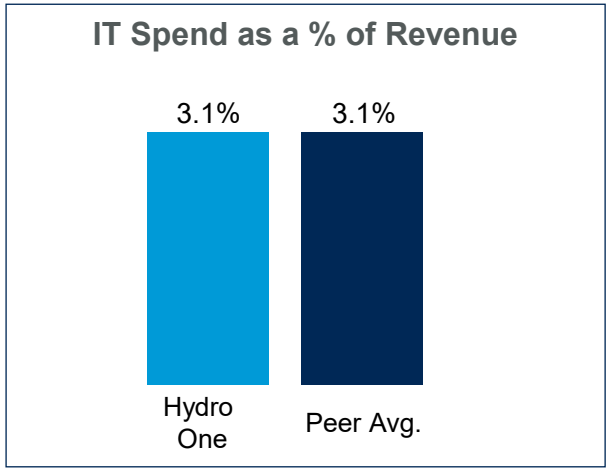
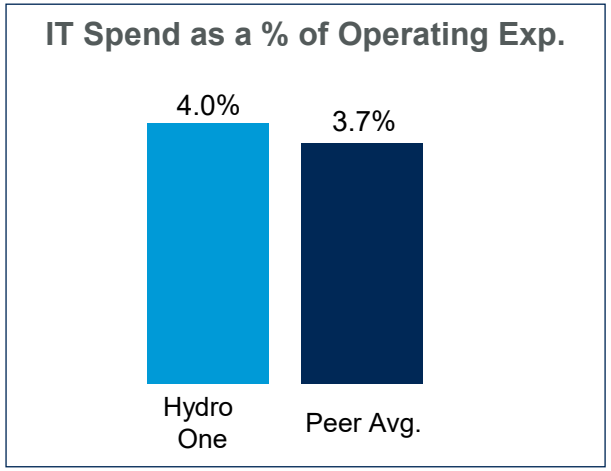
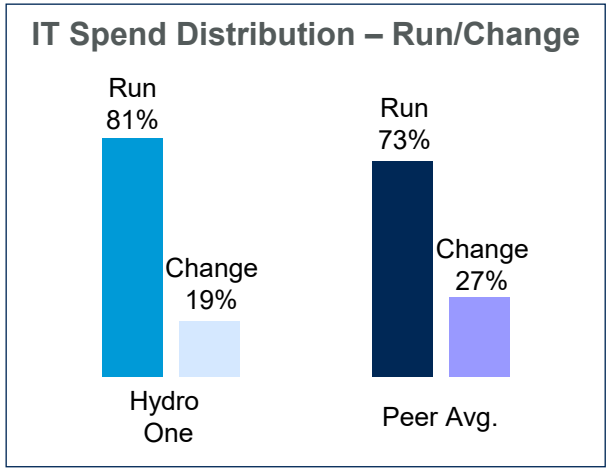
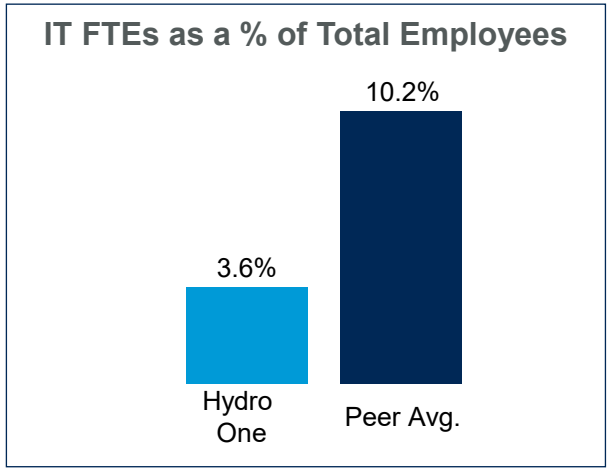
Hydro One's 2025 IT Spend was in line with similar electric utility organizations, however, more spend was allocated to "run the business" limiting resources for growth / transformation investments

- For benchmarking purposes, Hydro One was compared to a custom Peer Group of 7 electric utility organizations and Gartner's IT Key Metrics Data for the broader Utilities industry. **Hydro One's total IT Spend for 2025 was $262.2 million.**
- **Total IT Spending was similar to that of the Peer Group**; IT Spend as a % of Revenue was 3.1% for both Hydro One and the Peer Group average. IT Spend as a % of Operating Expenses was slightly higher at 4.0% compared to an average of 3.7% for the Peer Group. The slightly higher level of spend showing in this metric can be attributed to Hydro One's higher operating margin (23% vs. 17% for the Peer Group average).
- **Hydro One allocated 11% more to "run the business" activities than the Peer Group average**. Higher costs associated with the supporting the application portfolio is the largest item contributing to higher "run" costs. Having to support higher run costs limits Hydro One's ability to invest in growth and transformation, resulting in 30% less investment than the Peer Group average (19% of IT Spending vs. 27%).
- **Hydro One's IT staffing levels were lower than the Peer Group average**. This is largely a function of Hydro One's larger base of organizational employees.









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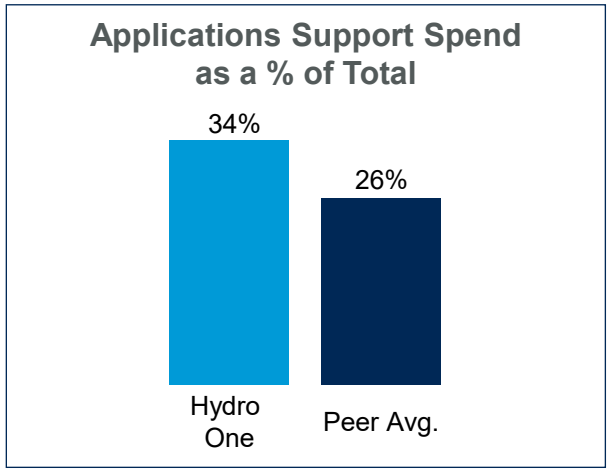
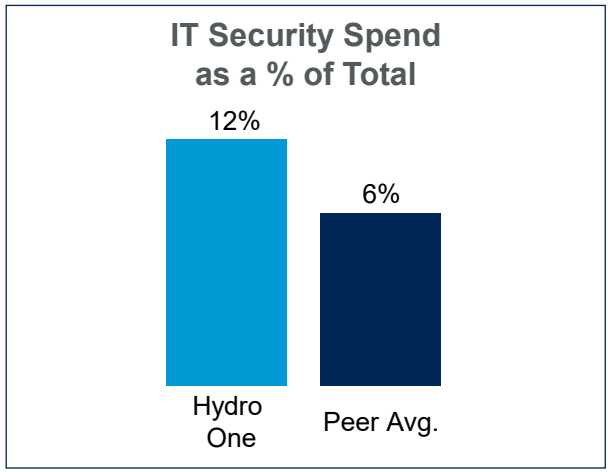
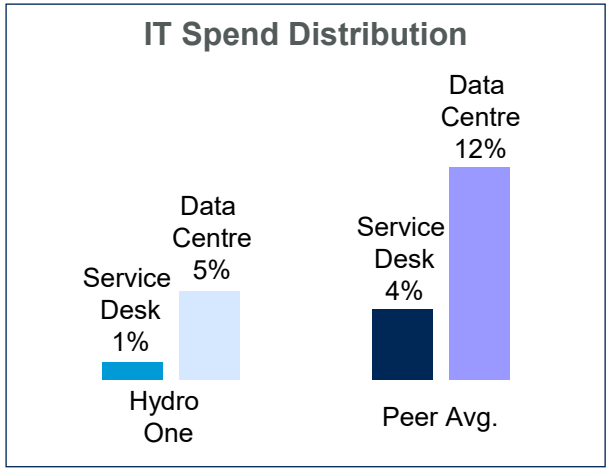
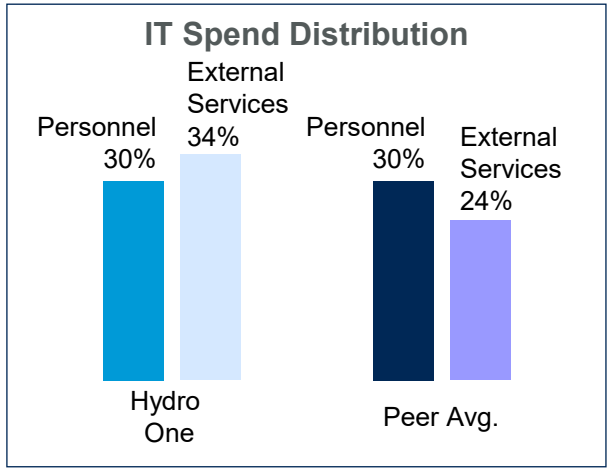
Hydro One's higher allocation to Applications Support suggests an opportunity to optimize the Applications portfolio; IT Security has been an area of investment

- **Hydro One allocated more to Applications Support spend than the Peer Group** average. Higher Applications Support costs are typically associated with supporting legacy systems and managing technical debt. Allocation to Application Development costs were similar to the Peer Group average (24% vs. 23% of IT Spending), see page 21 for details.
- **Hydro One had a higher allocation to IT Security** compared to the Peer Group average. This higher level of spend is aligned with Hydro One's efforts in maturing IT security in response to growing regulatory / compliance requirements, an increasing threat landscape and desire to manage enterprise risk.
- **Allocation to several IT domains were lower** than the Peer Group averages, including IT Service Desk, Data Center / Hosting, Governance & Business Management and Workplace Services.
- Overall allocation to **External Services – Traditional spending was more** than the Peer Group average. However, this allocation has decreased significantly over the last several years as more service delivery has been brought back in house. The primary reason for the higher allocation than the Peer Group is large transformation projects (e.g., S/4HANA project). Allocation to Personnel is the same as the Peer Group average.









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Hydro One should leverage key findings from this assessment to optimize technology spend to support investments in digital

Sourcing View of IT Spend

Peers	Hydro One
70%	**70%** of IT Spend **Vendors and Contracts** Renegotiate contracts, optimize service models and consolidate vendors
30%	**30%** of IT Spend **IT Staffing and Maturity** Shift labor to lower-cost scenarios, right-size teams and automate manual processes
100%	100%

Technology View of IT Spend

Hydro One	Peers
58% of IT Spend **Applications*** Rationalize the portfolio, prioritize demand and investments and optimize development and support delivery	49%
42% of IT Spend **Infrastructure and IT Management** Consolidate data centres, shift to the cloud, and align service models to business needs	51%
100%	100%

*Includes Application Support & Application Development

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2.0
Objectives & Approach

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Business context and engagement objectives

Business Context

- This analysis provides an independent and objective expert benchmark of Hydro One's overall IT spending and staffing position relative to comparable peer organizations.
- In the short-term, this spending and staffing benchmark will provide data driven insights for the organization's regulatory filing and provide inputs for developing a roadmap of initiatives for Hydro One's IT Leaders to drive improvements.
- Longer term, these spending and staffing benchmarking insights can inform the IT strategy and future direction.

Engagement Objectives

- Gartner combined several unique and proprietary assets and capabilities that will give Hydro One a fact-based, objective starting point for its ongoing strategic direction. These capabilities include Gartner's world-leading IT Benchmark database to build a custom Peer Group for Hydro One, to understand the current state in key IT enterprise-level spending and staffing measures.
- Outcomes of the engagement include a current state summary of Hydro One's IT spend and staffing levels relative to peers with a comparable environment that will identify optimization opportunities to focus future strategic efforts.

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Spending & Staffing Benchmark Methodology Overview

Gartner will use its industry-leading benchmarking consensus models to evaluate total IT Spending and Staffing relative to a custom group of industry peers and IT Key Metrics Data for the Utilities industry.

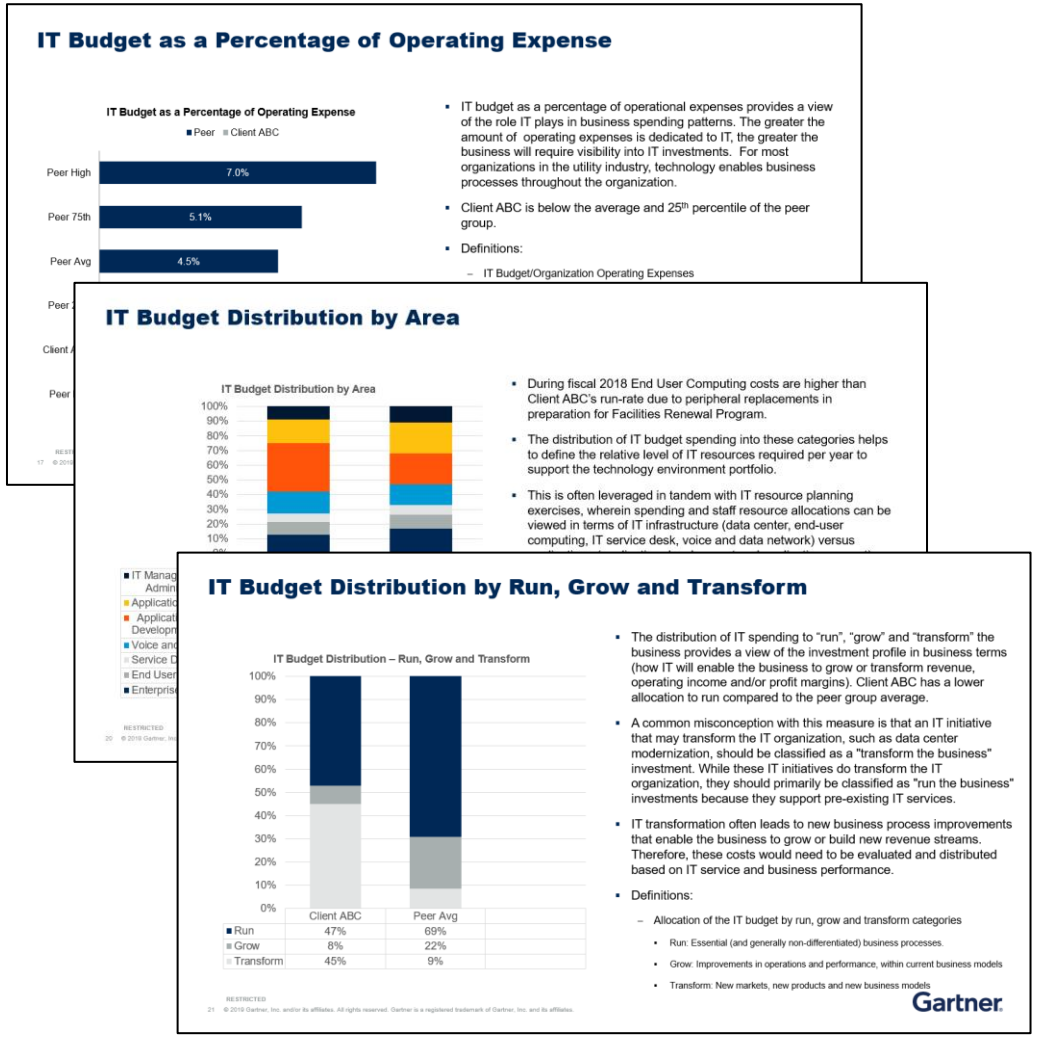
The Enterprise View: IT Spending and Staffing Assessment analysis will provide and compare the following metrics:

Spending Measures

- IT Spending as a % of Revenue
- IT Spending as a % of Operating Expense
- IT Spending Per Employee
- Capital vs. Operational Spending
- Run vs. Grow vs. Transform Spending
- Distribution of IT Spend—Hardware, Software, Personnel, Outsourcing, Other
- Distribution of IT Spend—by IT Function

Staffing Measures

- IT Staff as a % of Company Employees
- IT Contractor Usage
- Distribution of IT Staff—by IT Function



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3.0
Enterprise IT Spending & Staffing Analysis

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Analysis Notes

- Hydro One's data submission for this benchmarking engagement includes:
  - Actual Revenue and Operating Expenses for fiscal year ending December 31, 2024
  - Actual Total Employees, IT Spending & Staffing for fiscal year ending December 31, 2025

- Operational Technology spending and staffing are excluded from the analysis (for Hydro One & the Peer Group)

- Peer Group data is no older than 2 years (i.e., IT spending and staffing data from 2024 and 2025)

- Gartner's IT Key Metrics Data (ITKMD) for the Utilities Industry is from 2025

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Peer Group Profiles

Selection Criteria	
Primary Criteria	Utilities Industry
Secondary Criteria	Nature of Business (i.e., electrical utility with transmission / distribution focus), Total Revenue, Total Operating Expenses, # of Employees and Geography

Custom Peer Group Profile		
Number of Organizations	7	
Geographical Location	Canada (3), USA (3), Finland (1)	
	Hydro One	**Peer Group Average**
Total Revenue	**$8.48 Billion**	**$7.01 Billion***
Total Operating Expense	**$6.52 Billion**	**$5.85 Billion***
Total Employees	**9,466**	**3,330**

2025 IT Key Metrics Data (ITKMD) Utilities
Utilities
147
Global
2025 ITKMD

* All analysis is in Canadian dollars, using the exchange rate of 1 USD = 1.36 CAD and 1 EURO = 1.60 CAD

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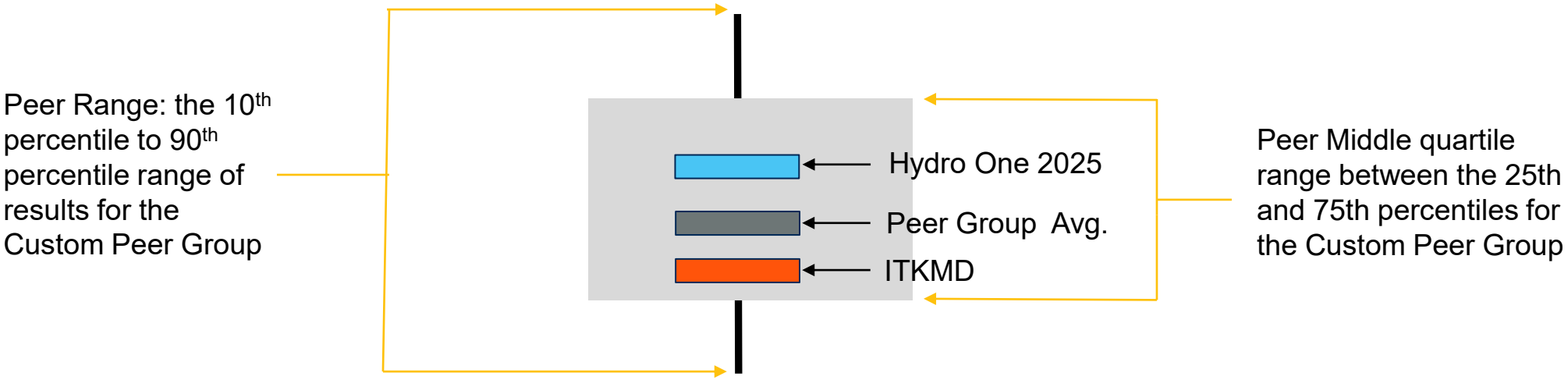
Benchmark Analysis Methodology
Peer Comparisons

Hydro One's results are displayed in comparison with the following reference points:



There are not necessarily "good" or "bad" results for any individual metric.

Differences in spending and staffing metrics derived from this analysis provide insight into current strategic IT investment levels versus Hydro One's competitive landscape.

These measures should also be considered within the context of Hydro One's future state organizational objectives.

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3.1
IT Spending

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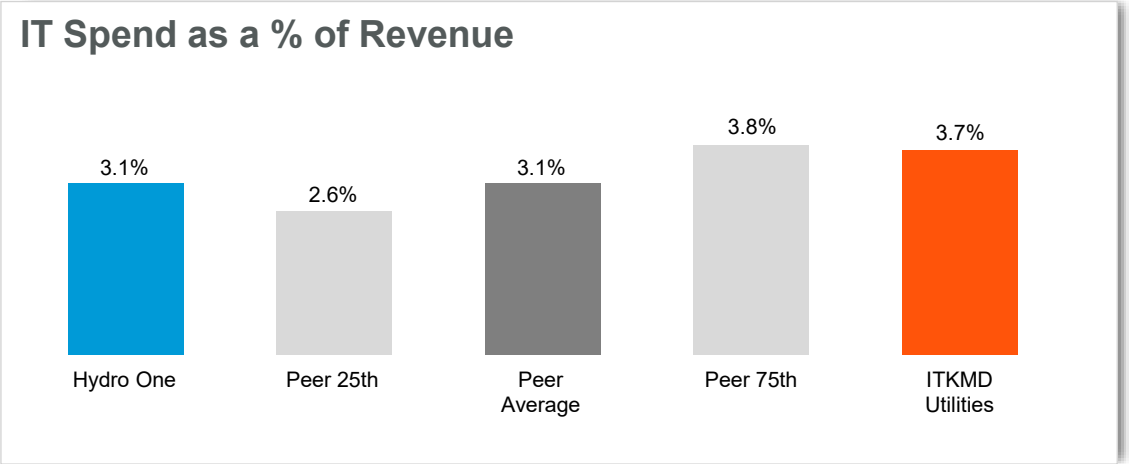
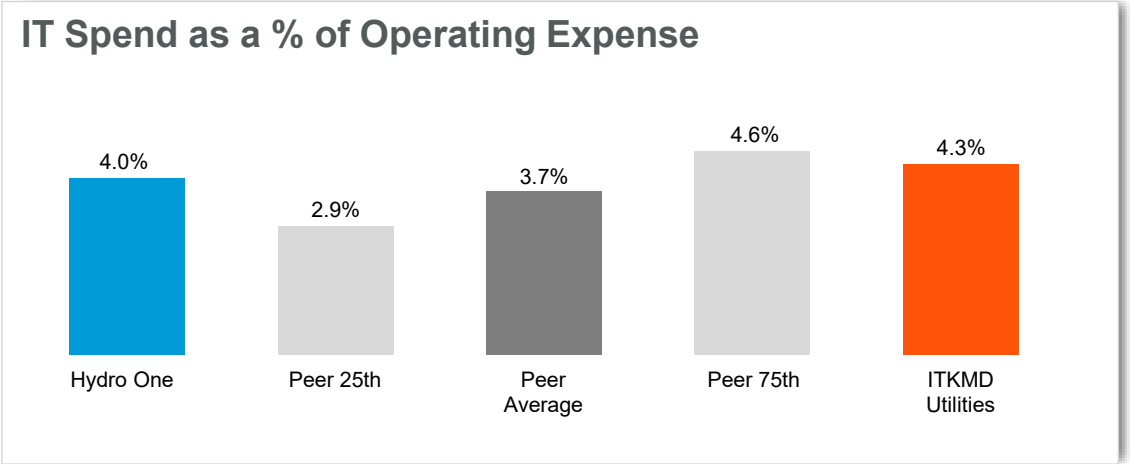
Hydro One's overall 2025 IT Spend was similar to industry peers





Observations / Implications

- Hydro One's 2025 IT Spending was $262.2 million. IT Spend as a % of Revenue was 3.1% compared to an average of 3.1% for the Peer Group. IT Spending as a % of Operating Expenses was 4.0% compared to an average of 3.7% for the Peer Group. Both these metrics indicate that Hydro One's overall IT spend level was in line with the Peer Group and Gartner's IT Key Metrics Data for the Utilities industry.

- The "appropriate" level of IT spend is the level that will deliver the necessary IT solutions that will enable Hydro One to deliver on its business objectives, in a cost-effective manner. Investing an additional dollar in IT makes sense if it can reduce operational costs elsewhere in the business and/or enhance business capabilities.

- To ensure value for money from all IT investments, it will be important for Hydro One focus on continuing to develop strategic cost optimization capabilities.

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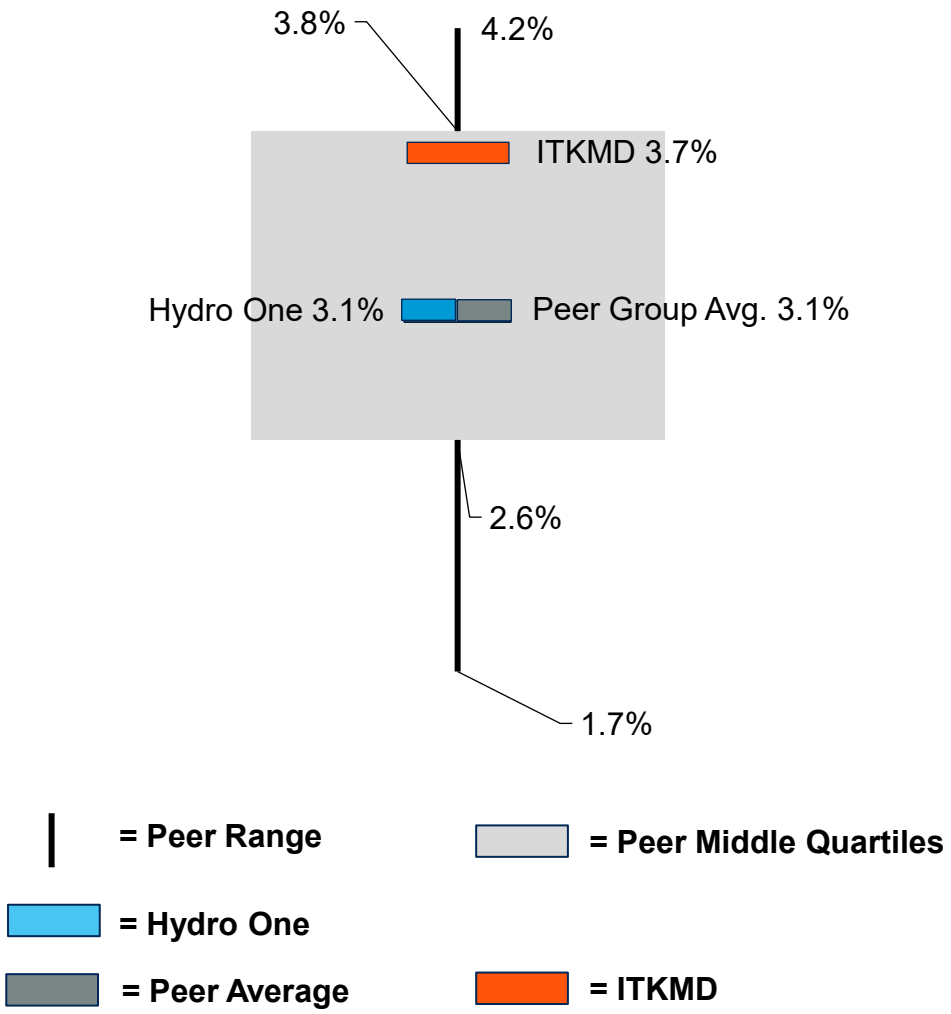
IT Spend as a Percentage of Revenue



Description	IT spending as a percentage of revenue provides a view of the role IT plays in the spending patterns of the organization. The greater the amount of the operational expenses that is dedicated to IT, typically the greater need for visibility into the IT investments the organization will require.	
Definition	IT Spending includes capital and operations spending for technology during the study period, including labour, software, hardware, telecommunications expenses; includes project spending	
Calculation	IT Spend / Revenue	**Hydro One: $262,234,351 / $8,484,000,000**

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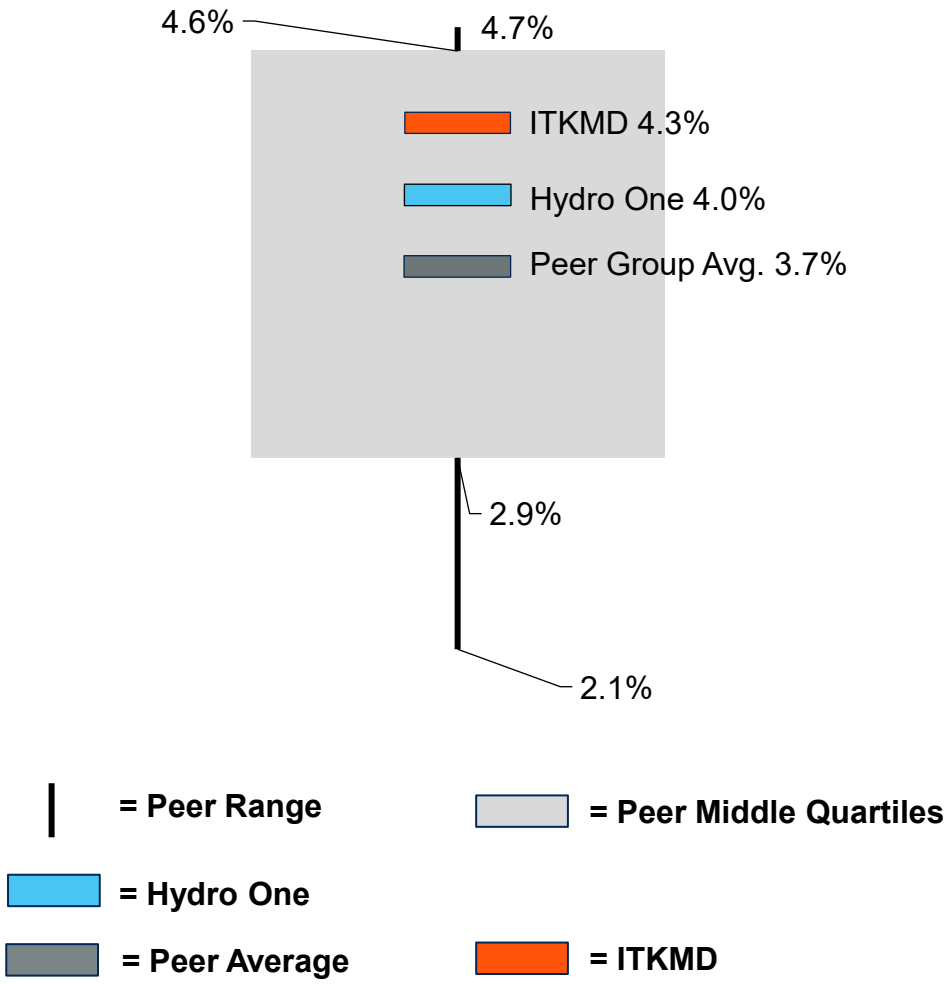
IT Spend as a Percentage of Operational Expense



Description	IT spending as a percentage of operational expenses provides a view of the role IT plays in the spending patterns of the organization. The greater the amount of the operational expenses that is dedicated to IT, typically the greater need for visibility into the IT investments the organization will require.	
Definition	IT Spending includes capital and operations spending for technology during the study period, including labour, software, hardware, telecommunications expenses; includes project spending	
Calculation	IT Spend / Operational Expense	**Hydro One: $262,234,351 / $6,517,000,000**

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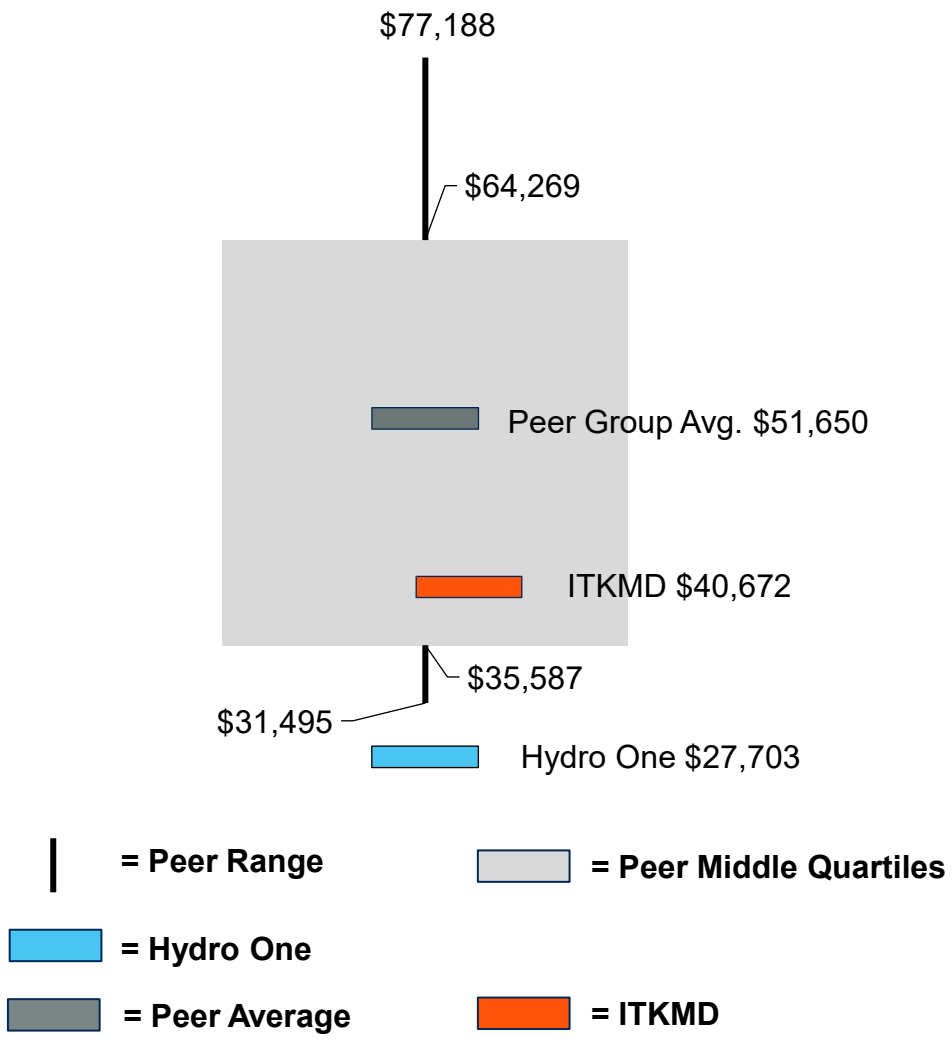
IT Spend per Employee



Observations / Implications

- IT Spend per Employee for Hydro One ($27,703) was much lower than the Peer Group average of $51,650, this was largely the result of Hydro One's higher number of employees than the Peer Group average (9,466 versus 3,330)
- Hydro One is somewhat unique in that many functions are performed by in-house employees versus contracting out to a vendor. Also, Hydro One serves a much larger geography than most other utilities. These are a few factors contributing to Hydro One's higher employee count.

Description	• IT spending per employee provides insight into the amount of technology support an organization's workforce receives. • High spending can imply higher levels of automation and/or higher investment in IT in general. Low spending levels can be related to higher overall staffing levels and or lower IT investment than peers. • Large variations within industry groups can represent different business models for service or product delivery.	
Definition	IT Spending includes capital and operations spending for technology during the study period, including labour, software, hardware, telecommunications expenses and includes project spending. Organization Employees includes staff, exclusive of Contractors.	
Calculation	IT Spending / Organization Employees	**Hydro One: $262,234,351 / 9,466**

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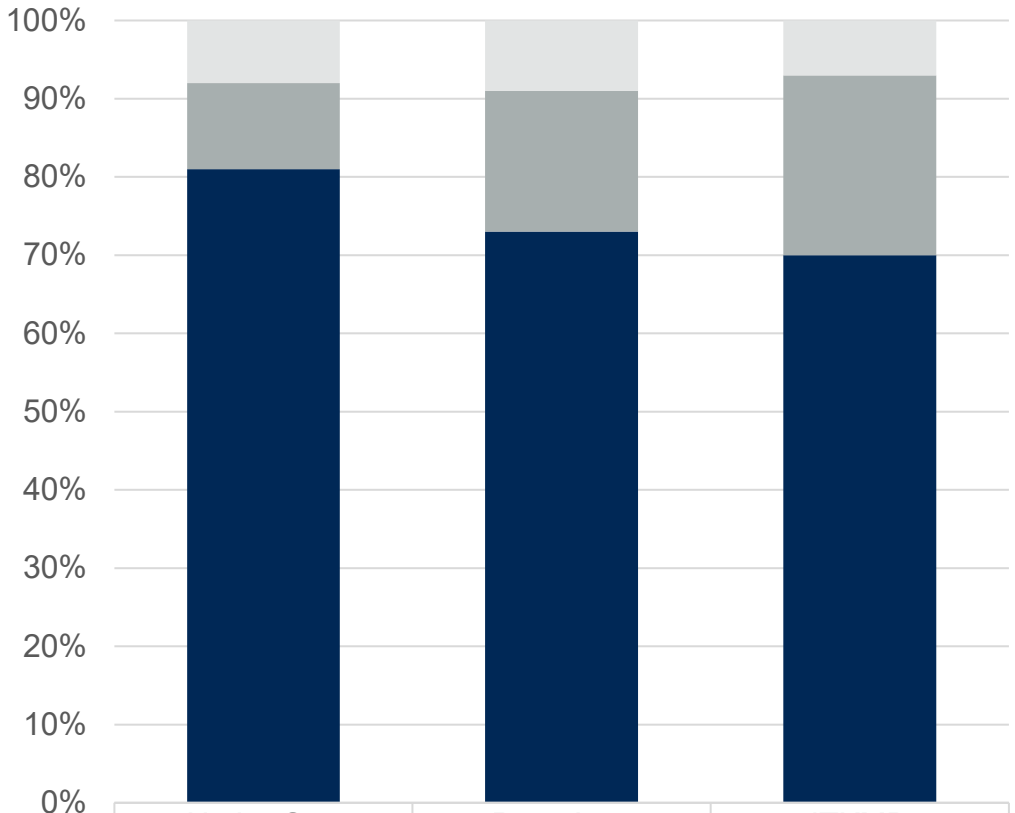
IT Spend Distribution by Run, Grow and Transform



	Hydro One	Peer Avg.	ITKMD
Transform	8%	9%	7%
Grow	11%	18%	23%
Run	81%	73%	70%

Observations / Implications

- In 2025, Hydro One allocated 19% of IT Spending to Growth / Transformation (i.e., “change the business” activities), 30% less than the Peer Group average of 27%.
- This is the result of a larger portion of spend being required to support “run the business” activities (i.e., 81% of spend versus 73% for the Peer Group). Higher costs associated with supporting the application portfolio is the largest item contributing to higher “run” costs.

Description	• The distribution of IT spending provides a view of the investment profile in business terms (how IT will enable the business to grow or transform revenue, operating income and/or profit margins)
Definition	Allocation of IT Spending by Run, Grow and Transform, where: • Run: Essential (and generally non-differentiated) business processes. • Grow: Improvements in operations and performance, within current business models • Transform: new services and new operating models

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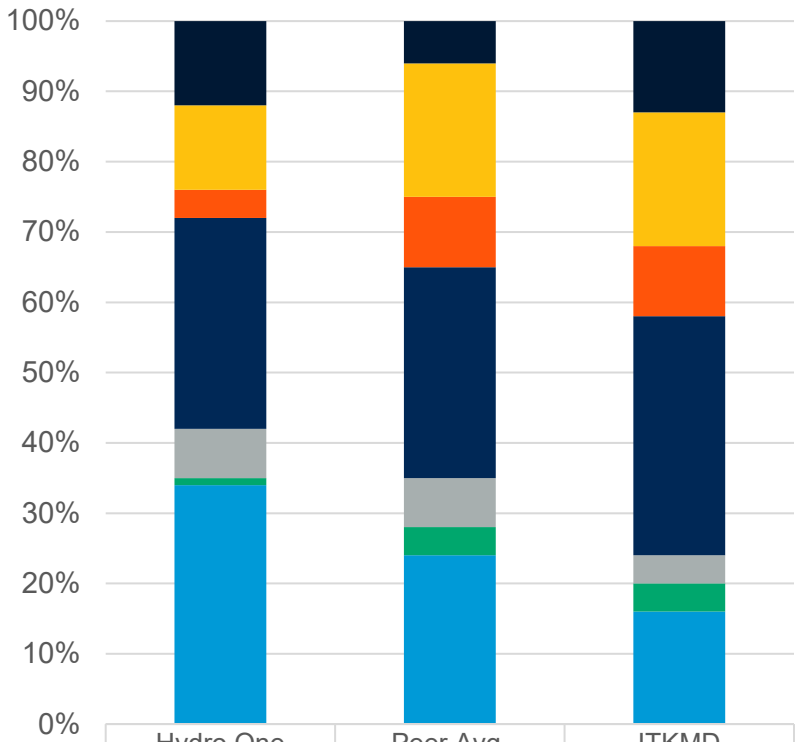
IT Spend Distribution by Cost Category



	Hydro One	Peer Avg.	ITKMD
Software (SaaS)	12%	6%	13%
Software (On-Prem)	12%	19%	19%
Hardware	4%	10%	10%
Personnel	30%	30%	34%
Ext. Services - Network	7%	7%	4%
Ext. Services - Public Cloud	1%	4%	4%
Ext. Services - Traditional	34%	24%	16%

Observations / Implications

- In 2025, Hydro One allocated the same amount of spend to Personnel as the Peer Group (30% of IT Spend). This is a major shift over the last several years, as 200+ IT FTEs have been insourced.
- Leveraging External Services continues to be an important element of Hydro One's delivery model, accounting for 34% of total spend (versus 24% for the Peer Group average). A strong ecosystem of vendor partners is used to access needed skills and additional resources (i.e., Network, IT Service Desk, ERP managed services). The primary reason for the higher allocation than the Peer Group is large transformation projects (e.g., S/4HANA project).
- Hydro One's allocation to Software as a Service (SaaS) is notably higher than the Peer Group (12% versus 6%), indicating a movement to cloud-based solutions. Overall software spend, however, remains closely aligned with peers (24% versus 25%).

Description	• This measure can be helpful in adding context to the IT investment strategy from a sourcing perspective, in terms of accounting-based resources that may be insourced versus services delivered by a third party. • As an organization increases or decreases the level of outsourced services, it may find an inverse effect in its associated personnel, hardware and/or software expenditures, depending on the scope of services retained and on requirements.
Definition	Allocated IT Spending among the different cost categories

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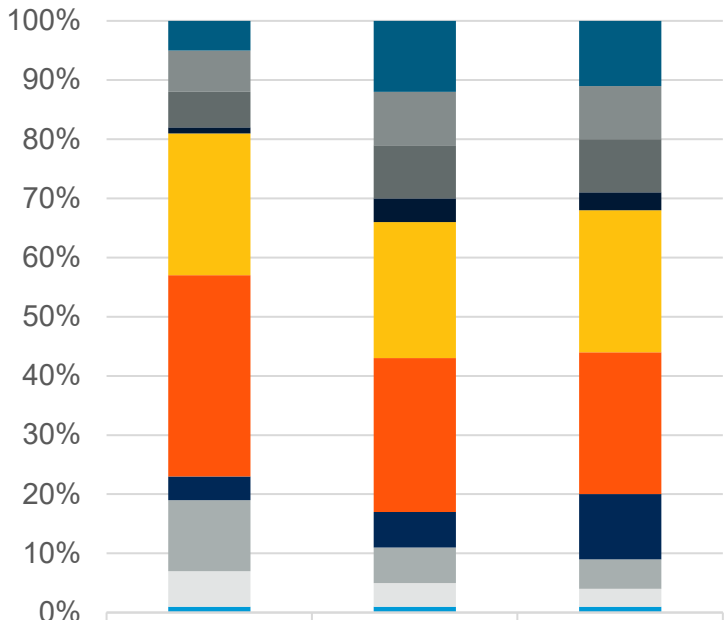
IT Spend Distribution by IT Functional Area



	Hydro One	Peer Avg.	ITKMD
Data Center / Hosting	5%	12%	11%
Network	7%	9%	9%
Workplace Services	6%	9%	9%
IT Service Desk	1%	4%	3%
App. Development	24%	23%	24%
App. Support	34%	26%	24%
Gov. / Business Mgmt.	4%	6%	11%
IT Security	12%	6%	5%
IT Ops. Mgmt.	6%	4%	3%
Ser. Con't / DR	1%	1%	1%

Observations / Implications

- Allocation to Applications Support spending was higher than the Peer Group (34% vs. 26% of IT spend), this suggests higher costs associated with supporting legacy systems and managing technical debt. Application Development spending was similar to the Peer Group (24% of IT spend vs. 23% for the peer group).
- Hydro One allocated twice as much to IT Security spending than the Peer Group average (12% vs. 6%). This higher level of spend is aligned with Hydro One's strategy to mature IT security based on growing regulation and compliance requirements, an increasing threat landscape and management of enterprise risk. IT Operations Management was also higher than the Peer Group average.
- Allocation to Data Center / Hosting was lower than the Peer Group average (5% versus 12% of total IT spend). Other IT domains with lower spend allocation than the Peer Group average included IT Service Desk, Governance & Business Management, Workplace Services and Network.
- Service Continuity / Disaster Recovery spend allocation was comparable to the Peer Group.

Description	• This information is often leveraged in tandem with IT resource planning exercises, wherein resource allocations can be viewed in terms of IT infrastructure versus applications versus IT overhead. • While this measure is helpful in identifying relative volumes of IT resource consumption by IT functional area, as compared to Peers, it does not aid in identifying whether resources are being leveraged in a cost-effective or productive manner.
Definition	Allocated IT Spending among the different functional areas

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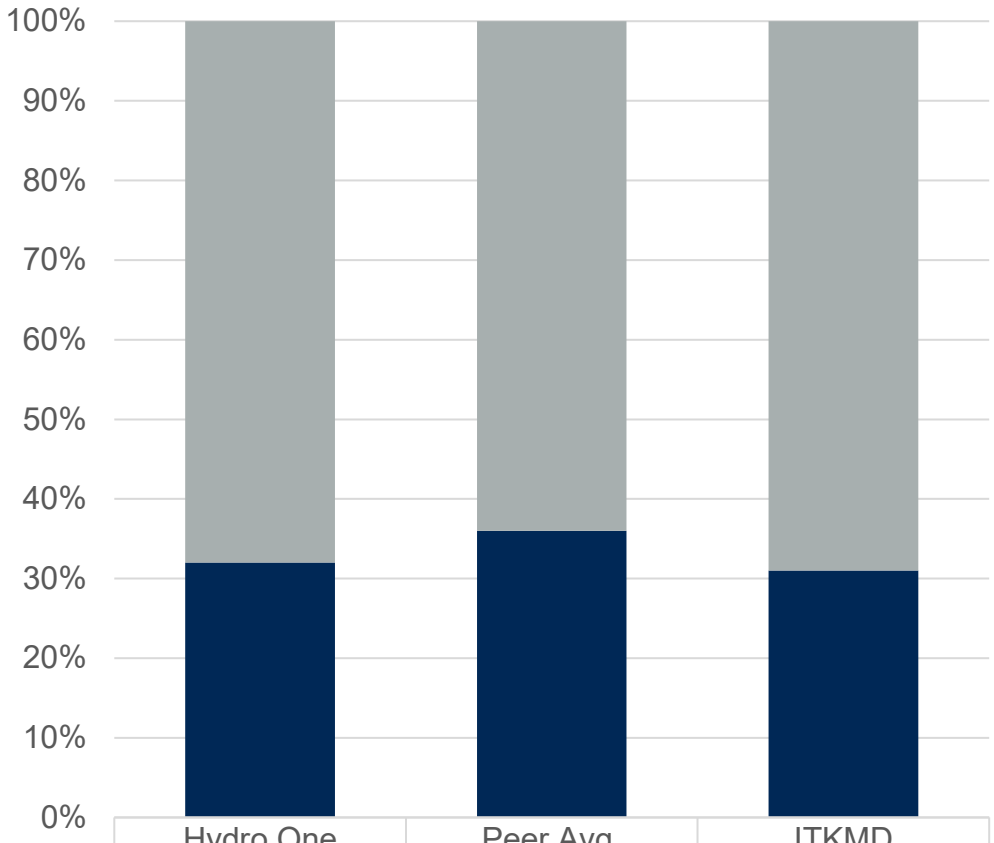
IT Spend Distribution – Operations vs. Capital



	Hydro One	Peer Avg.	ITKMD
Operational	68%	64%	69%
Capital	32%	36%	31%

Observations / Implications

- Hydro One allocated a similar amount of its IT spending to capital (32%) as the Peer Group average of 36%.
- Applications and Infrastructure are increasingly cloud-based, creating an escalating shift away from more traditional capital-based models to operational funding. Hydro One has experienced this shift over the last several years.
- There can be unanticipated operating expense increases as a result of SaaS and IaaS contracts. The resultant shift from capital expenditure (CapEx) to operating expenditure (OpEx) can cause budgetary and cost management pressures.

Description	• IT capital expenses vs. operational expenses helps to portray the investment profile for an organization in a given year.
	• Organizations with a higher capital spending may…
	  ○ Be investing heavily in strategic IT infrastructure
	  ○ Have reached a planned point of investment in their infrastructure lifecycle
	  ○ Not have been managing asset investments well (i.e., “catching up”)
	  ○ Simply have a more aggressive capitalization policy

Definition	Distribution of IT Operational spending versus Capital spending

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From a real dollar perspective, Hydro One's "Run" spend is materially higher than Peers, which is offset by a lower level of investment in Growth / Transformation

IT Spend per $100 of Operating Expense

Enterprise View	IT Spend as % of Operating Expense		IT Spend per $100 of Operating Expense		
	Hydro One	Peer Avg	Hydro One	Peer Avg	Variance
	4.00%	3.70%	$ 4.00	$ 3.70	$0.30

Investment View	Run / Change Distribution		Run / Change per $100 of Operating Expense		
	Hydro One	Peer Avg	Hydro One	Peer Avg	Variance
Run	81%	73%	$ 3.24	$ 2.70	$0.54
Grow / Transform	11%	27%	$ 0.44	$ 1.00	($0.56)
Total	**8%**	**100%**	**$ 3.68**	**$ 3.70**	**($0.02)**

Technical View	IT Functional Area Distribution		IT Functional Area Spend per $100 of Operating Expense		
	Hydro One	Peer Avg	Hydro One	Peer Avg	Variance
Data Center	5%	12%	$ 0.20	$ 0.44	($0.24)
Voice and Data Network	7%	9%	$ 0.28	$ 0.33	($0.05)
Workplace Services	6%	9%	$ 0.24	$ 0.33	($0.09)
IT Service Desk	1%	4%	$ 0.04	$ 0.15	($0.11)
Application Development	24%	23%	$ 0.96	$ 0.85	$0.11
Application Support	34%	26%	$ 1.36	$ 0.96	$0.40
Governance & Business Mgmt.	4%	6%	$ 0.16	$ 0.22	($0.06)
IT Security	12%	6%	$ 0.48	$ 0.22	$0.26
IT Ops Mgmt.	6%	4%	$ 0.24	$ 0.15	$0.09
Service Con't. / DR	1%	1%	$ 0.04	$ 0.04	$0.00
Total	**100%**	**100%**	**$ 4.00**	**$ 3.70**	**$0.30**

From a real dollar perspective "Run" spending is higher than Peer Group levels

Compared to the Peer Group average, Application Support and IT Security have the highest real dollar spending variances

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3.2
IT Staffing

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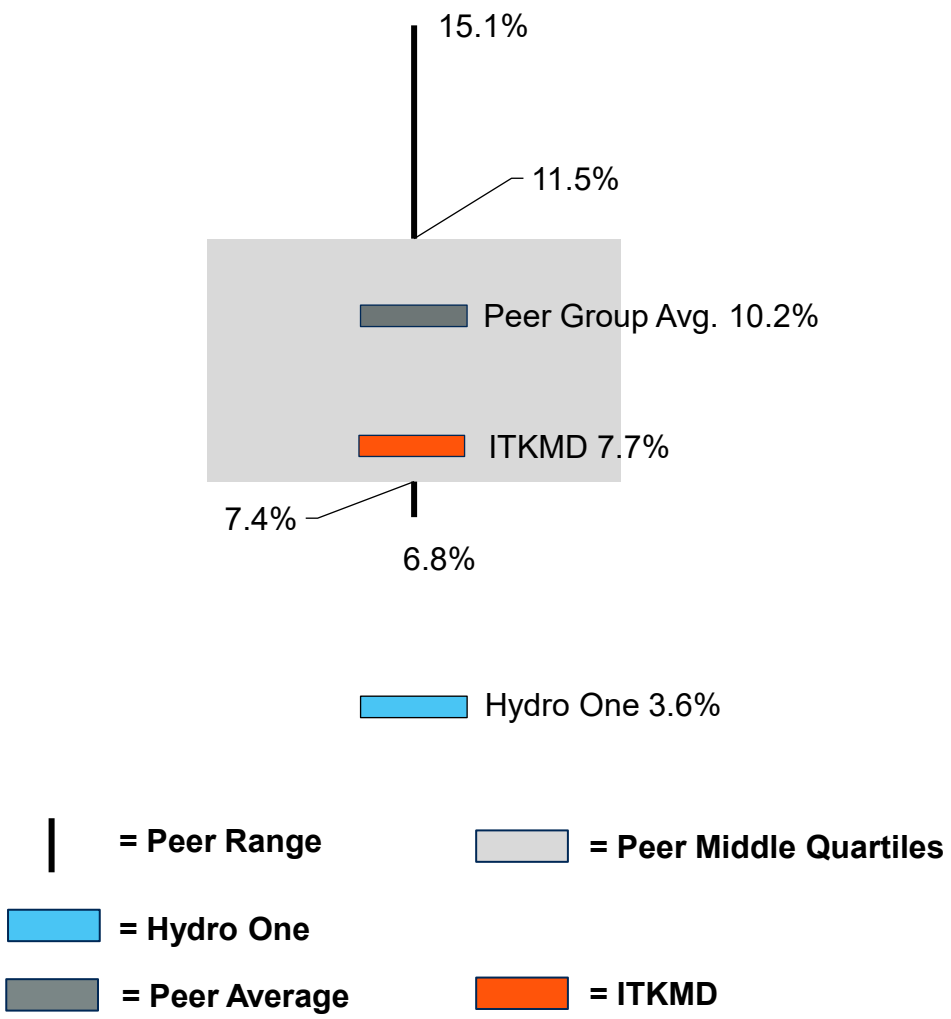
IT FTEs as a Percentage of Total Employees



Observations / Implications

- Hydro One's level of IT staffing was lower than the Peer Group average, with IT FTEs as a % of Total Employees at 3.6% compared with 10.2%. This is largely the result of Hydro One's higher number of employees than the Peer Group average (9,466 versus 3,330). See page 18 for explanation of the higher number of employees.

- Typically, a lower level of IT FTEs as a % of Total Employees, goes together with a higher use of External Services – Traditional (i.e., outsourcing). This is indeed the case for Hydro One as use of External Services – Traditional represents 34% of total IT Spend, compared to 24% for the Peer Group average (see page 20).

Description	• The percentage of IT FTEs in the organization compared to the total number of employees is a key measure of how critical IT support is to the business. This measure can be heavily influenced, however, by the level of outsourcing an organization may have. • Organizations with high levels of manageability and automation should require fewer operations staff. Manual processes and lack of standards will increase the number of IT FTEs needed.	
Definition	IT FTEs includes in-house and contractor FTEs, does not include managed services adjusted FTEs. Organization Employees includes employees, exclusive on Contractors.	
Calculation	IT FTEs / Organization Employees	**Hydro One: 339 / 9,466**

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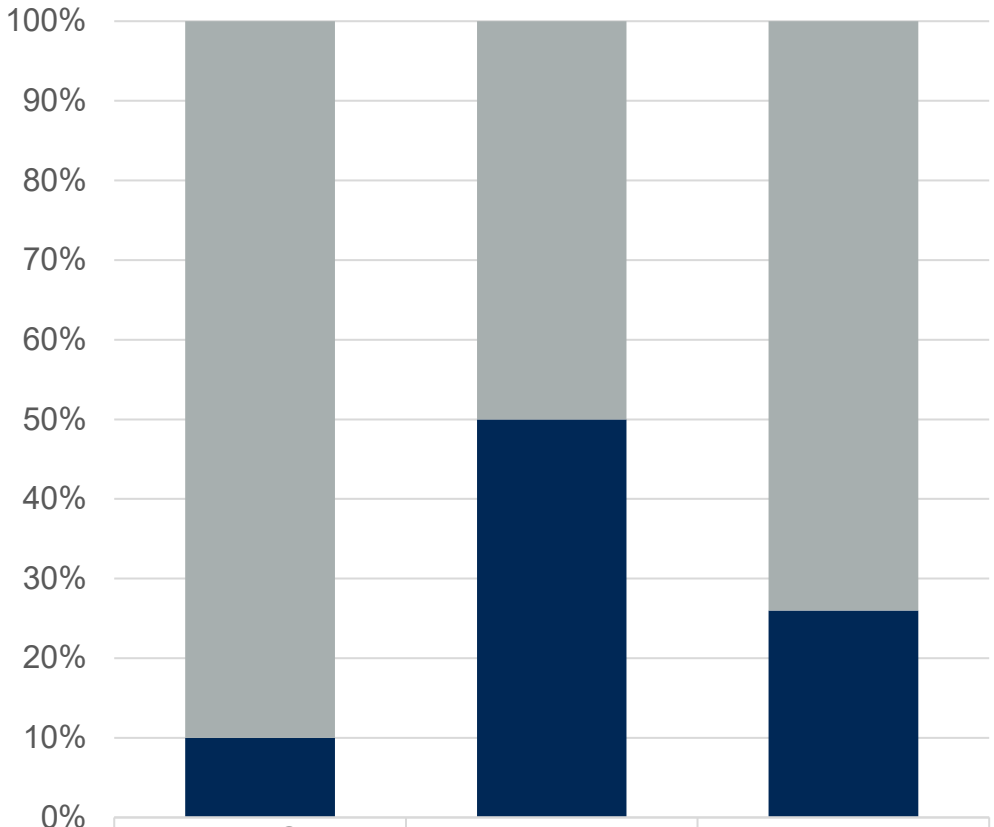
IT FTEs Distribution by Inhouse and Contractor



	Hydro One	Peer Avg.	ITKMD
Inhouse	90%	50%	74%
Contractors	10%	50%	26%

Observations / Implications

- In 2025, Hydro One's use of Contractors was less than the Peer Group, with only 10% of IT FTEs being Contractors. This compares with 50% for the Peer Group.
- This is the result of a strategic decision to keep differentiated skillsets in-house (i.e., IT Security).
- Leveraging contractors for specialized skills and/or staff augmentation can be an alternative to hiring full-time employees, but it generally costs more and comes with some risk (i.e. sense of team, commitment to organization, knowledge retention, etc.)

Description	• The distribution of IT FTEs (insourced versus contractor) provides a view of the IT staffing strategy. • IT Contract labour or Contractor usage can be an effective approach to maintaining flexibility and agility when business conditions are changing. However, keeping Contractors for extended periods can be costly and limit process standardization.
Definition	Distribution of Contractor FTEs and In House FTEs

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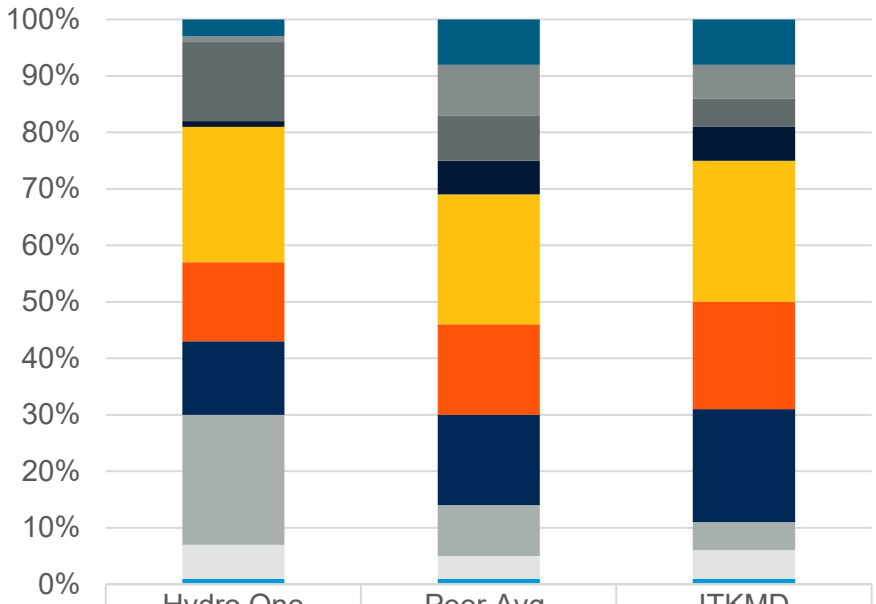
IT FTEs Distribution by IT Functional Area



	Hydro One	Peer Avg.	ITKMD
Data Center / Hosting	3%	8%	8%
Network	1%	9%	6%
Workplace Services	14%	8%	5%
IT Service Desk	1%	6%	6%
App. Development	24%	23%	25%
App. Support	14%	16%	19%
Gov. / Business Mgmt.	13%	16%	20%
IT Security	23%	9%	5%
IT Ops. Mgmt.	6%	4%	5%
Ser. Con't / DR	1%	1%	1%

Observations / Implications

- Hydro One's IT FTE allocations were higher than the Peer Group average for IT Security, Workplace Services, and IT Operations Management.
- Hydro One's IT FTE allocation to Network, IT Service Desk and Data Center / Hosting were lower than the Peer Group average, largely because many of these activities are outsourced.
- Allocations to Application Support & Development staffing are comparable with the Peer Group.

Description	• By viewing human resources (IT FTEs) within the context of the total portfolio, organizations are able to identify which environment is the most labour- intensive as a % of the IT labour pool. Typically, application activities (development and support) demand the most resources from both cost and staffing perspectives. The degree to which an organization outsources should be considered alongside such staffing metrics.
Definition	Distributes In House and Contractor IT FTEs among the different functional areas

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4.0
Appendix: IT Spending & Staffing Benchmarking Definitions

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IT Budget Benchmark Methodology — Key Definitions

- The IT Budget Assessment follows the Gartner Benchmarking chart of accounts. In order to match the Gartner Benchmark chart of accounts, the data presented in the benchmark will not completely align with the official Information Technology budget or organization. For example, the Gartner Benchmark chart of accounts has historically excluded operational technology.
- IT Budget Definition
  - The total spend for a twelve month budget period for information technology to support the enterprise. IT spend can come from anywhere in the enterprise that incurs IT costs, and it is not limited to the IT organization. It is calculated on an annualized “cash out” basis and therefore contains capital budget, and operational expenses. Gartner definitions for IT spend include all IT services, for example:
    - Hardware, software, personnel (including travel and benefits and training), contractors and consultants, outsourcing, disaster recovery, occupancy, data and voice communications/transmission, associated with supporting information technology within the enterprise.
    - Costs for the facilities being used by the staff supporting the enterprise. Some examples include office space, furniture, electricity, maintenance, property taxes, security, and office supplies. Occupancy costs for space dedicated to IT functions such as the data center and IT service desk are also included.
    - The data center (servers, storage etc), Hydro One devices (desktops, laptops, tablets, thin Hydro Ones, handhelds), voice and data networks (including but not limited to voice and data transmission, fixed and mobile telephony, Internet access services), IT service desk, application development and maintenance. IT Support functions such as the office of the CIO, supervisory management, finance and administrative costs, such as purchasing, asset management, process management, and marketing of IT services.

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IT Domain Definitions (1 of 3)

Enterprise Computing (Data Center)

- *Compute:* includes the provisioning of the full life cycle management of processing/hosting services on both mainframe and midrange (UNIX, Windows, Linux, iSeries etc.) platforms including acquisition, deployment, maintenance, change management and disposal.
- *Storage:* includes the provisioning of the full life cycle management of storage services utilizing online, near-line and offline technologies including acquisition, deployment, maintenance, change management and disposal.
- *Facilities/Hosting:* includes the full life cycle management of the physical data center premises, and other facilities and services associated with the premises such as furniture, power supply, heat management, climatization services, access security, floor space, office space, design and consulting.
- *Database:* includes the full life cycle management of relational, non-relational and pre-relational databases including the tools for monitoring and diagnosing problems with databases, analyzing and improving the performance of databases, and routine administration of databases, including configuration changes.
- *Middleware:* is the software "glue" that helps programs and databases (which may be on different computers) work together. Its most basic function is to enable communication between different pieces of software. Integration middleware is software that enables independently designed applications, software components or services to work together, by supporting data consistency, composite application and multistep process styles of integration. It includes multi-enterprise (B2B) integration capabilities and internal integration, as well as those products that enable existing applications to become part of a new multistep process. Platform middleware is system software that provides the runtime hosting environment (a container) for application program logic. It uses embedded or external communications middleware to help programs interact with other programs. It also provides resource management services for hosting application program logic at runtime.

Network

- Network (data and voice) is comprised of: Local-Area Network Service (this subservice provides network access within the office premises), Wide-Area Network Service (this subservice helps in the management and supply of inter-site connections and network infrastructure), Remote Access Service (this subservice helps to connect the internal network from a remote location with broadband or phone line access using a security token), Internet Connectivity Service (this subservice provides access to the internet) and Intranet Connectivity Service (this subservice helps in the provision of the global network provided by third parties. This also includes management of network optimization devices).

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IT Domain Definitions (2 of 3)

End-User Computing

- End-User Computing includes provisioning of the full life cycle management of desktop, laptop, tablet, thin Hydro One, handheld and peripheral assets including acquisition, deployment, maintenance, change management and disposal.

IT Service Desk

- An IT Service Desk is defined as any single location that evenly distributes the receipt and/or placement of technical support calls or contacts to a predetermined group of support staff. The IT service desk assessment examines IT efficiency and effectiveness with respect to the provisioning of remote Tier 0/Tier 1 support provided to end users by the technical support centers (e.g., network, data center, PC and consolidated).
- Because IT service desks may be organized differently across enterprises, you may be required to capture some information that is beyond your specific budget lines to ensure consistent comparisons. Examples include telecommunications equipment used specifically by the IT service desk, transmission expenses attributable to the inbound support calls and remote user support resources that may physically reside in other support groups (e.g. network operations or applications support).

Applications

- *Development*
  - New code for a new application
  - Functional enhancements to current code that take more than two person-weeks or typically add greater than eight function points (see notes below)

- *Support*
  - Programming maintenance of currently operational computer applications. This will include some enhancements to these applications as well.
  - Bug fixes of any size or duration
  - Maintenance of hard-coded data or tables (including field size changes) embedded within the programs (any size or duration)
  - Functional enhancements to current code that take less than two person-weeks and typically add fewer than eight function points
  - Any project that produces no new business functionality for the user

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IT Domain Definitions (3 of 3)

Governance & Service Management

- Identifies service-optimized IT organizations which are growth enablers and a source of both operational and strategic differentiation. Here, the IT organizations constructively and proactively engage with the business to improve business operations to enrich enterprise performance.
  - In order to drive business value, these IT organizations themselves run like a business, bringing out front-office capabilities. IT demonstrates financial discipline, transparency, and delivery of business value by managing an integrated view of technology cost and performance against defined business outcomes, which are formally captured in a strategic service portfolio. These IT organizations exhibit the following key characteristics of an implicit business-oriented consumer/provider relationship:
  - Understand customer's needs
  - Manage service and solution life cycle
  - Deliver solutions and services to customers
  - Governs internal IT operations and architecture to ensure strategic success

IT Operations Management

- Provides on-site and/or remote IT Operations monitoring to gain insight into the historical, current and future availability and performance of IT systems, networks and applications, while also performing root cause analysis. Monitoring typically is performed in four categories: IT Infrastructure Monitoring (ITIM), Applications Performance Monitoring (APM), Artificial Intelligence for IT Operations (AIOps) and Network Performance Monitoring and Diagnostics (NPMD).

IT Security

- The discipline of designing, implementing and maturing security practices to protect critical business processes and IT assets across the enterprise. It covers:
  - Developing and maintaining effective program governance
  - Communicating and engaging successfully with all stakeholders
  - Defining a vision promoting desired security, risk management and business outcomes
  - Defining, communicating and enforcing security policies across the organization
  - Planning budgets and resourcing, including talent management and professional services
  - Assessing and improving program maturity and performance

IT Service Continuity/Disaster Recovery

- The use of alternative network circuits to re-establish communications channels if the primary channels are disconnected or malfunctioning.
- The methods and procedures for returning a data center to full operation after a catastrophic interruption (e.g., including recovery of lost data).

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Consensus Model Overview

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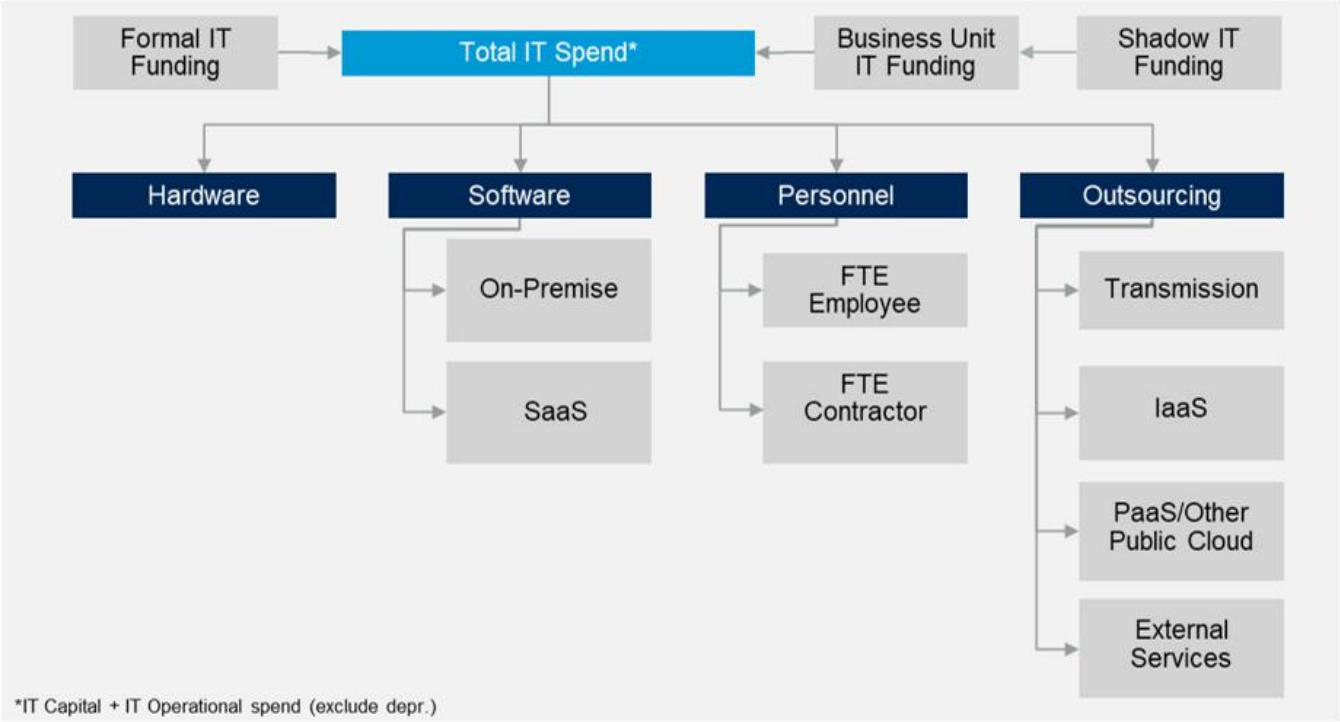
Total IT Spending: Asset-Based Cost Management View

IT Spending includes (From a resource or accounting perspective): Hardware, software, personnel for IT FTEs including IT contractors, network transmission, outsourced IT services e.g., consulting, system integration, infrastructure etc.), public cloud services, occupancy and utilities spending associated data centers, taxes other than value added taxes where it is recovered and refunded to the organization.



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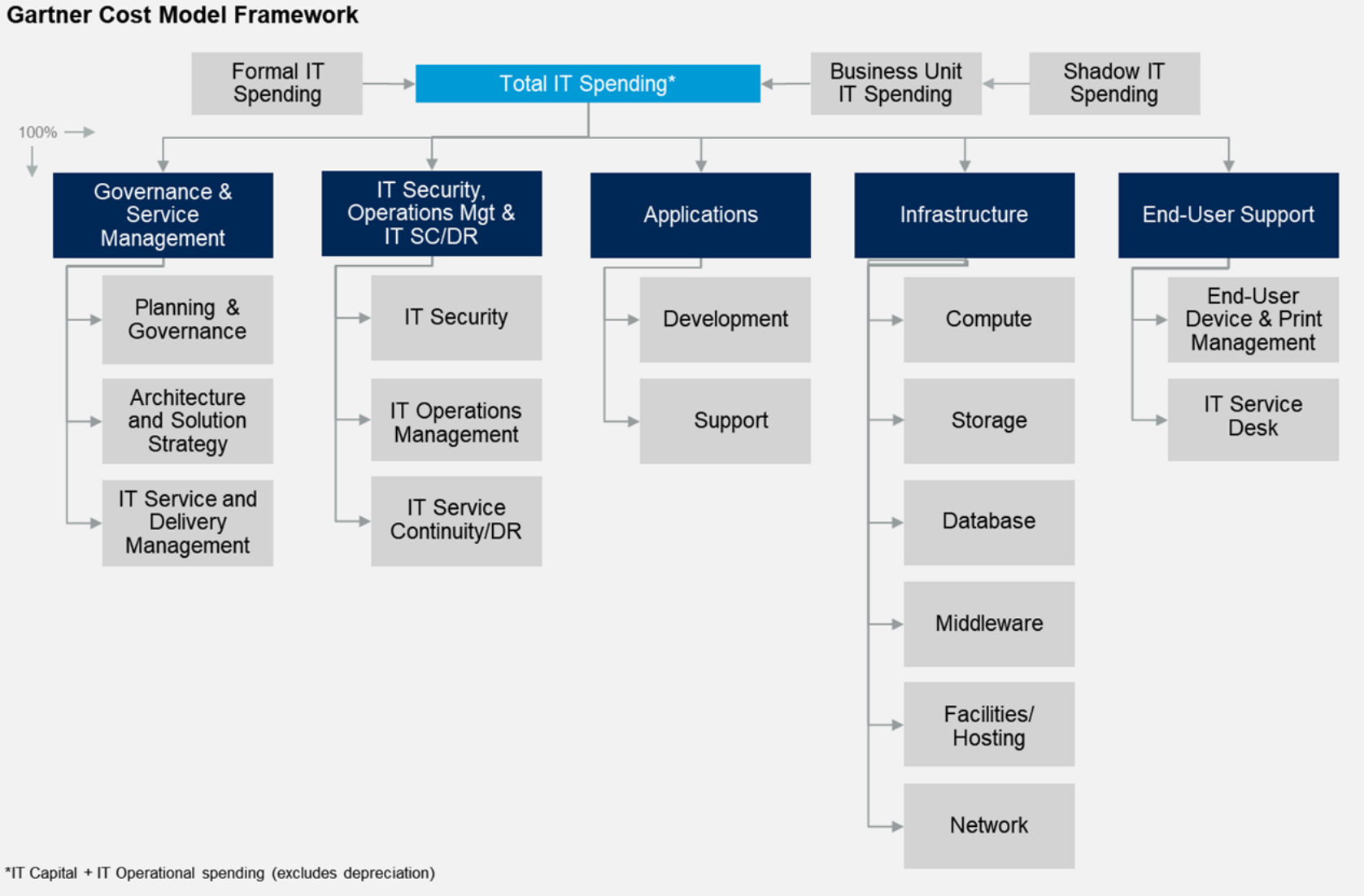
IT Total IT Spending: IT Functional Cost Management View



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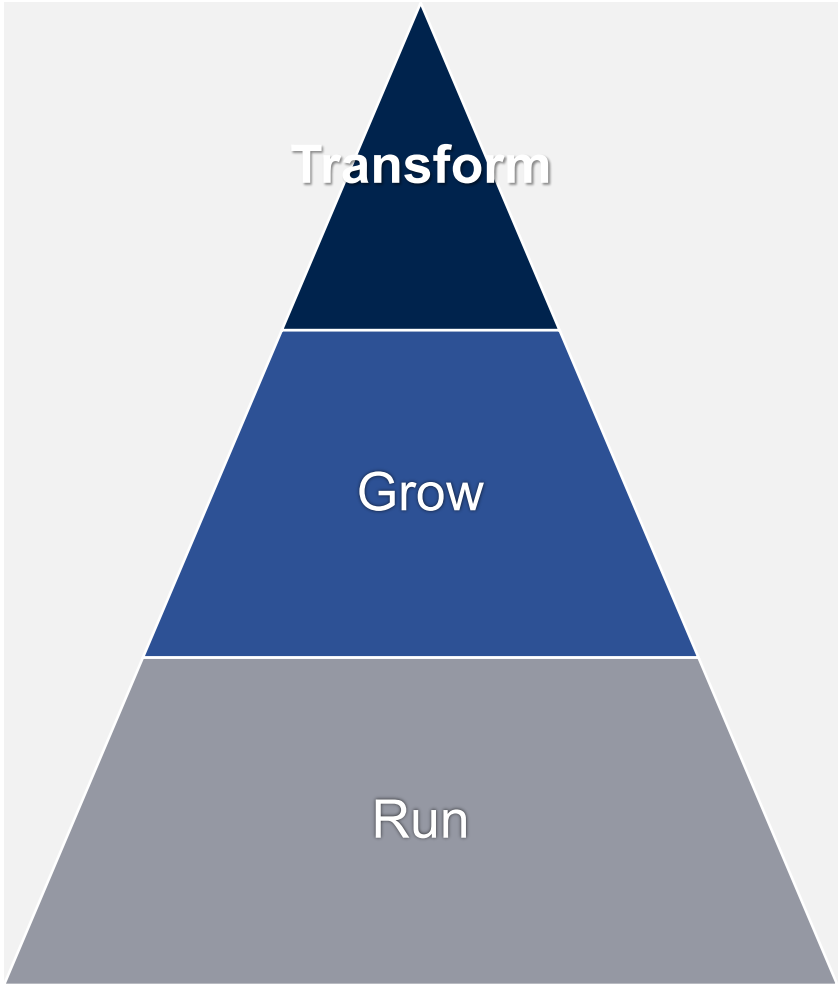
Run, Grow, Transform Describes IT's role



Is it Revolutionary?

For Everyone?
There is potential for new markets or industries, or displacement or elimination of existing industries.

For the Hydro One?
There is potential to move the Hydro One's business into entirely new markets or industries

YES → **Transform the Business**

Does it Make Money?

The situation is about enhancing, extending or differentiating existing business capabilities related to products, services, or markets.

YES → **Grow the Business**

Does it Keep the Lights on?

The situation is about supporting or improving essential, non-differentiated business functions that do not directly produce revenue.

YES → **Run the Business**

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Data Center

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Compute

- Compute includes the provisioning of the full life cycle management of processing/hosting services on both mainframe and midrange (UNIX, Windows, Linux, iSeries etc.) platforms and racks including acquisition, deployment, maintenance, change management and disposal.
- Expenses, staffing and workload related to data center facilities management are included in the Facilities/Hosting service.
- Annual Compute costs include the annual capital and operational expense, maintenance, installation and taxes, as appropriate, for all of hardware, software and outsourcing, in addition to personnel costs.

Hardware	Software	Personnel	Outsourcing
▪ Processors (mainframe, servers) ▪ Internal Disk Storage	▪ Operating Systems ▪ Virtualization ▪ System Utilities ▪ Communications ▪ SaaS	▪ Engineering ▪ Management and Administration	▪ Traditional and Cloud (Private and Public)

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Storage

- Storage includes the provisioning of the full life cycle management of storage services utilizing online, near-line and offline technologies including acquisition, deployment, maintenance, change management and disposal.
- Annual Storage costs include the annual capital and operational expense, maintenance, installation and taxes, as appropriate, for all of hardware, software and outsourcing, in addition to personnel costs.

Hardware	Software	Personnel	Outsourcing
▪ Storage Controllers ▪ Storage Arrays	▪ Storage Maintenance ▪ Replication ▪ Backup/Restore ▪ Archival ▪ Media Handling/ Migration ▪ SaaS	▪ Engineering ▪ Management and Administration	▪ Traditional and Cloud (Private and Public)

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Facilities/Hosting

- Facilities/Hosting includes the full life cycle management of the physical data center premises, and other facilities and services associated with the premises such as furniture, power supply, heat management, climatization services, access security, floor space, office space, design and consulting.
- Annual Facilities costs include the annual capital and operational expense, maintenance, installation and taxes, as appropriate, for all of hardware, software, utilities and outsourcing, in addition to personnel costs.

Hardware	Software	Utilities	Personnel	Outsourcing
▪ Building and Maintenance ▪ Environmental Systems ▪ Electrical Systems ▪ Other Systems	▪ Building Management Systems ▪ Data Center Infrastructure Management ▪ SaaS	▪ Electricity ▪ Gas ▪ Water	▪ Engineering ▪ Management and Administration	▪ Traditional and Cloud (Private and Public)

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Database

- Database includes the full life cycle management of relational, non-relational and pre-relational databases including the tools for monitoring and diagnosing problems with databases, analyzing and improving the performance of databases, and routine administration of databases, including configuration changes.
- Annual Database costs include the annual capital and operational expense, maintenance, installation and taxes, as appropriate, for all of software and outsourcing, in addition to personnel costs.

Software	Personnel	Outsourcing
▪ Database Management Systems ▪ SaaS	▪ Engineering ▪ Management and Administration	▪ Traditional and Cloud (Private and Public)

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Middleware

- Middleware is the software “glue” that helps programs and databases (which may be on different computers) work together. Its most basic function is to enable communication between different pieces of software. This includes Integration middleware and Platform middleware.
- Integration middleware is software that enables independently designed applications, software components or services to work together, by supporting data consistency, composite application and multistep process styles of integration. It includes multi-enterprise (B2B) integration capabilities and internal integration, as well as those products that enable existing applications to become part of a new multistep process.
- Platform middleware is system software that provides the runtime hosting environment (a container) for application program logic. It uses embedded or external communications middleware to help programs interact with other programs. It also provides resource management services for hosting application program logic at runtime.
- Annual Middleware costs include the annual capital and operational expense, maintenance, installation and taxes, as appropriate, for all of software and outsourcing, in addition to personnel costs.

Software	Personnel	Outsourcing
▪ Application Integration Suites ▪ Data Integration Tools ▪ Message-oriented Middleware ▪ SaaS	▪ Engineering ▪ Management and Administration	▪ Traditional and Cloud (Private and Public)

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End-User Support

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End-User Device and Print Management

- End-User Device & Print Management includes provisioning of the full life cycle management of personal computing devices, peripheral assets and fixed telephones including acquisition, deployment, maintenance, change management and disposal.
- Annual End-User Device & Print Management costs include the annual capital and operational expense, installation and taxes, as appropriate, for all of hardware, software and outsourcing, in addition to personnel costs.

Hardware

- Desktops, Laptops, Tablets, Thin Clients, Smartphones, Handhelds
- Local and Shared Printers
- Handsets
- Videoconferencing
- MAC Supplies

Software

- PC Operating Systems
- Utilities
- Print Management Tools
- Personal Productivity and Databases
- Mobile Device Management
- Email and Messaging
- Collaboration
- Content Services
- Softphones
- SaaS

Personnel

- Incident Resolution/ Prevention
- Service Request Fulfillment
- Engineering
- Management and Administration

Outsourcing

- Traditional and Cloud (Private and Public)

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End-User Applications

This includes the annual license and maintenance costs, as well as capital costs associated with new purchases and upgrades, for all software specified below:

- Personal Productivity
- Email/Messaging
- Unified Communications & Collaboration
- Mobility Management
- Content Services
- Softphones
- Software as a service (SaaS)
- Other Personal Applications

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IT Service Desk

- An IT Service Desk is defined as any single location that evenly distributes the receipt and/or placement of technical support calls or contacts to a predetermined group of support staff. The IT Service Desk consensus model examines IT efficiency and effectiveness with respect to the provisioning of remote Tier 0/Tier 1 support provided to end-users of IT services.
- Web-based self-help / self-healing intranet knowledgebase (T0) enables users to resolve their own problems, submit request for service, reset passwords etc. Fixed IT Service Desk (T1/T2) functions include call-taking agents and supervisors, with potentially tiered structure for passing contacts to more technical root cause investigators within the IT Service Desk team. Function handles all contacts from authorized end-users including calls, emails, web-based queries and requests and chat support for Tier 0 users.
- Annual IT Service Desk costs include the annual capital and operational expense, maintenance, installation and taxes, as appropriate, for all of hardware, software and outsourcing, in addition to personnel costs.

Hardware	Software	Personnel	Outsourcing
▪ Automated Call Distribution ▪ Interactive Voice Response ▪ Computer Telephony Integration ▪ Web-based Self-help/Self-healing	▪ Expert Knowledge Tools ▪ Management Tools ▪ Chat Software/Web Software ▪ Voice/IVR Software ▪ SaaS	▪ Agents ▪ Second-line Support ▪ Engineering ▪ Management and Administration	▪ Traditional and Cloud (Private and Public)

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Network

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Wide-Area Network (Data & Voice)

- Wide-Area Network Service: This subservice helps in the management and supply of inter-site connections and network infrastructure.
- Remote Access Service: This subservice helps to connect the internal network from a remote location with broadband or phone line access using a security token.
- Internet Connectivity Service: This subservice provides access to the internet.
- Intranet Connectivity Service: This subservice helps in the provision of the global network provided by third parties. This also includes management of network optimization devices.
- Annual Network cost includes the annual capital and operational expense, maintenance, installation and taxes, as appropriate, for all of hardware, software, transmission and outsourcing, in addition to personnel costs.

Hardware	Software	Transport	Personnel	Outsourcing
▪ Routers ▪ WAN Appliances ▪ PBX and IPT	▪ Data and Voice Network Management ▪ IP Address Management ▪ SaaS	▪ MPLS, Internet Access, Ethernet, Hybrid/xDSL/ Leased Lines, DWDM/Dark Fiber/ Satellite, Secure VPN Access ▪ Outbound and Inbound Usage ▪ Private Voice Networks ▪ Inter-data Center Connectivity	▪ Engineering ▪ Management and Administration	▪ Traditional and Cloud (Private and Public)

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Transport

Includes TO:

- Connectivity Bandwidth
- Voice Circuits
- DIDs
- Inbound 0800/0300
- Outbound
- Mobility Plans
- Private Network Connectivity

Hardware	Software	Transport	Personnel	Outsourcing
▪ Routers ▪ WAN Appliances ▪ PBX and IPT	▪ Data and Voice Network Management ▪ IP Address Management ▪ SaaS	▪ MPLS, Internet Access, Ethernet, Hybrid/xDSL/ Leased Lines, DWDM/Dark Fiber/ Satellite, Secure VPN Access ▪ Outbound and Inbound Usage ▪ Private Voice Networks ▪ Inter-data Center Connectivity	▪ Engineering ▪ Management and Administration	▪ Traditional and Cloud (Private and Public)

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Local-Area Data Network

- Local-Area Network Service: This subservice provides network access within the office premises.

Hardware	Software	Personnel	Outsourcing
▪ Switches and Appliances (Office LAN and Data Center LAN) ▪ Wireless Access Points/Controllers ▪ Load Balancers ▪ Network Management	▪ Network Management ▪ SaaS	▪ Engineering ▪ Management and Administration	▪ Traditional and Cloud (Private and Public)

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Applications

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Application Development & Support

Application Development and Support is comprised of:

- Software
  - Business Functionality Software Traditional Licenses, embedded maintenance and SaaS for software including but not limited to enterprise resource planning (ERP), customer relationship management (CRM), supply chain management (SCM), data management and analytics, and digital and externally focused applications.
  - Development and Support Software Traditional Licenses, embedded maintenance and SaaS for software including but not limited to languages/compilers/databases, development/testing tools and IT management software
- Personnel
  - Personnel includes developers, quality assurance and testing, and management and administration.
- Outsourcing
  - Application Development Outsourcing: Any situation in which the full operational responsibility for IT services is completely handed over to an external service provider.
  - Application Support Outsourcing — Stand-alone maintenance agreements, application management services)

Software	Personnel	Outsourcing
▪ Compilers ▪ Test Databases ▪ Development Tools ▪ Test Tools ▪ SaaS	▪ Developers ▪ Quality Assurance and Testing ▪ Management and Administration	▪ Traditional and Cloud (Private and Public)

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Application Development & Support

- Application Development and Support examines the efficiency of the IS programming groups that are creating or implementing new applications, adding new functionality to existing applications and providing programming support for these applications after they are installed and running in the production environment.
- Application Development
  - New code for a new application
  - Functional enhancements to current code that take more than two person-weeks
- Application Support
  - Support refers to the programming maintenance of currently operational computer applications.
  - Bug fixes of any size or duration
  - Maintenance of hard-coded data or tables (including field size changes) embedded within the programs (any size or duration)
  - Functional enhancements to current code that take less than two person-weeks
  - Any project that produces no new business functionality for the user.

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Governance & Service Management

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Governance & Service Management

- Governance & Service Management identifies service-optimized IT organizations which are growth enablers and a source of both operational and strategic differentiation. Here, the IT organizations constructively and proactively engage with the business to improve business operations to enrich enterprise performance.
- In order to drive business value, these IT organizations themselves run like a business, bringing out front-office capabilities. IT demonstrates financial discipline, transparency, and delivery of business value by managing an integrated view of technology cost and performance against defined business outcomes, which are formally captured in a strategic service portfolio. These IT organizations exhibit the following key characteristics of an implicit business-oriented consumer/provider relationship:
  - Understand customer's needs
  - Manage service and solution life cycle
  - Deliver solutions and services to customers
  - Governs internal IT operations and architecture to ensure strategic success

Software

- Architecture Tools
- IT Financial Management
- IT Service Management Tools
- Project Management and Planning Tools
- SaaS

Personnel

- Planning and Governance
- Architecture and Solution Strategy
- IT Service and Delivery Management

Outsourcing

- Traditional and Cloud (Private and Public)

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Governance & Service Management (1 of 3)

Governance and service management includes planning and governance, architecture and solution strategy, and IT service and delivery management.

- **Planning and Governance**
  - Executive Office & Administration: Office of the CIO, other cross-functional IT executives and their administrative support.
  - However, this excludes those IT managers that fit logically within the other Gartner service areas such as the CISO in IT Security, Data Center Managers, Network Managers, End-User Support Managers or Application Development and Support Managers.
  - Program Management: Orchestrates an active process of managing multiple workstreams or projects that need to meet business expectations according to a consistent methodology and standards, by focusing on tighter integration, proactive communication, control over resources and priorities.
  - Sourcing: Establishes practices and coordinates multiple suppliers of services (business services as well as IT services) and integrates them to provide a single business-facing IT organization. This function acts as the general contractor, and will assume strategic sourcing and vendor management responsibilities, including contract management, procurement policy and procedure administration, negotiation and performance management, including reporting.
  - Financial Management: Establishes the transparency of the relationship among cost, quality and business value so that it can be consistently measured and managed. This function is key to running IT like a business ensuring an understanding of IT delivery cost and competitiveness to external market offerings, competitive pricing of offerings, visibility to process and labor costs to price products and services, and communicates the value of IT.

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Governance & Service Management (2 of 3)

Governance and service management includes planning and governance, architecture and solution strategy, and IT service and delivery management.

- **Architecture and Solution Strategy**
  - Enterprise Architecture & Design: This function develops an overall vision for technology capabilities and requirements that is consistent with business needs and constraints while advancing the agenda of innovation.
  - Business Analysis: A key function to the IT business value proposition of the IT organization because of their ability to translate business ideas to implementable requirements. To optimize the effectiveness of this group, it is important to align them into a centralized structure with established standards, processes, and tools that fosters cross-unit knowledge and ideas.
  - This function participates in strategic activities such as conducting research, assessing viable innovation opportunities, collecting necessary information for prioritization decisions, managing business expectations during execution, and measuring business benefit after deployment.
  - Research and Development: This team performs activities in connection with technology innovation that align with business needs. Working very closely with business teams, other members of the Architecture and Solution Strategy function, as well as the Program Management function, the R&D function is tasked to focus on applied research and development of working prototypes for targeted priorities.
  - R&D is not often intended to yield immediate profit, and generally carries greater risk and an uncertain return on investment but aligned to enterprise strategy.

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Governance & Service Management (3 of 3)

Governance and service management includes planning and governance, architecture and solution strategy, and IT service and delivery management.

- **IT Service and Delivery Management**
  - Business Relationship Management: This is a senior team within the IT organization that has extensive business and industry experience. The business relationship managers are embedded in the business, typically aligned to specific business units or geographical regions and locations and expected to be the business optimization and innovation champions for their particular responsibilities, whether BU or location. They maintain a close, trusted relationship with the business to understand and provide input into strategy, plans and needs. They advise on innovation and technology enablement opportunities. In addition, they facilitate matching of business needs to product/service offerings and are catalysts in helping IT evolve its offerings. They work closely with the Planning & Governance office and the Architecture office on direction and planning. They engage the customers throughout the life cycle — from marketing of services/products, through demand and planning process, to delivery and support of product/service. In traditional business terms, they are analogous to an account executive function.
  - Product/Service Management: While Governance and Architecture functions set the overall direction, the execution of plans, products and services is part of the IT Service and Delivery Management function. This role must ensure that products and services are what the customers actually want and are willing to pay for. This group is responsible for determining the portfolio of products and services that IT will offer and at what price and quality levels to meet the needs of its market (for example, the enterprise). It owns the service portfolio, pricing (for chargebacks), establishes service-level agreements (SLAs), creates and manages the transactional catalog and generally conducts any benchmarking around IT organizational competitive-ness, efficiency and performance that might drive continuous improvement or outsourcing decisions.
  - Performance/Process Management: As a service broker and a business, IT needs to manage both its own performance and that of its suppliers in delivering needed services/products. This cross-organizational function is key to helping IT optimize change adoption, realize planned for benefits, and help the enterprise get the best possible return on its IT investment. Key responsibilities include improving visibility into service performance and more accurately measuring progress toward defined objectives and ensure compliance to SLAs through continuous assessment, evaluation, and refinement of core IT service processes.
  - Delivery Management: Delivery management in this context is the high level, executive function which operates cross-functionally to provide functional, technical and process leadership. This group is charged with leading the delivery effort to ensure solutions meet customer time frame, quality and outcome expectations. They collaborate with the Enterprise Architecture office to mitigate cross-platform technical and delivery risks before they become issues while preventing errors, omissions, defects and costly rework.

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IT Security, IT SC/DR, IT Operations Management

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IT Security

- IT Security is the discipline of designing, implementing and maturing security practices to protect critical business processes and IT assets across the enterprise. It covers:
  - Developing and maintaining effective program governance
  - Communicating and engaging successfully with all stakeholders
  - Defining a vision promoting desired security, risk management and business outcomes
  - Defining, communicating and enforcing security policies across the organization
  - Planning budgets and resourcing, including talent management and professional services
  - Assessing and improving program maturity and performance

Hardware	Software	Personnel	Outsourcing
▪ Firewall/Unified Threat Management Devices ▪ IDS/IPS Devices ▪ Radius/Proxy Servers ▪ Encryption Concentrators ▪ Email/Web Security Gateways	▪ Identity and Access Management ▪ Security Information and Event Management ▪ Antivirus/ Anti-spam/ Anti-malware ▪ URL/Content Filtering ▪ End-user Encryption ▪ Host IDS/IPS ▪ Firewall Software ▪ Vulnerability and Threat Detection ▪ Application Testing/ Scanning/Shielding ▪ SaaS	▪ Infrastructure Security ▪ Application Security ▪ Vulnerability Management and Security Analytics ▪ Security Governance, Risk Management and Compliance Management ▪ Management and Administration	▪ Traditional and Cloud (Private and Public)

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IT Service Continuity & Disaster Recovery (IT SC/DR)

IT Service Continuity/Disaster Recovery is defined as:

- The use of alternative network circuits to re-establish communications channels if the primary channels are disconnected or malfunctioning.
- The methods and procedures for returning a data center to full operation after a catastrophic interruption (e.g., including recovery of lost data).
- Note: For assets to be considered as in-scope for IT Service Continuity/Disaster Recovery (IT SC/DR), they are required to be in an active/passive state whereby production failover occurs to idle standby systems/location.

Hardware	Software	Personnel	Outsourcing
▪ IT Service Continuity/Disaster Recovery Assets: Mainframes, Servers, Storage, Facilities, Personal Computers and Telephones, Network Circuits and Equipment	▪ IT Service Continuity/Disaster Recovery Testing and Reporting Tools ▪ SaaS	▪ Engineering ▪ Management and Administration	▪ Traditional and Cloud (Private and Public)

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IT Service Continuity & Disaster Recovery (IT SC/DR)

IT Service Continuity/Disaster Recovery includes:

- Engineering
  - Functions include producing recovery plans for data center, workplace and network services designed to ensure that, following any major incident or sudden, unplanned calamitous event causing or potentially causing disruption of the service, IT services are provided to an agreed level within an agreed schedule.
  - It should be recognized also that IT SC/DR is only one component of Business Continuity Planning (BCP). The objective is to assist the business and BCP to minimize the disruption of essential business processes during and following a major incident. The process includes such activities as business impact analysis, risk analysis and risk management exercises, maintaining disaster recovery documentation, conducting periodic tests and audits, and negotiating contingency site arrangements. However, only include costs/FTEs related to IT personnel.
  - While there are other functions around disaster recovery/business continuity such as developing manual processes, and ensuring business unit personnel are able to function, they are not within the scope of this definition.

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IT Operations Management

- IT Operations Management provides on-site and/or remote IT Operations monitoring to gain insight into the historical, current and future availability and performance of IT systems, networks and applications, while also performing root cause analysis. Monitoring typically is performed in four categories: IT Infrastructure Monitoring (ITIM), Applications Performance Monitoring (APM), Artificial Intelligence for IT Operations (AIOps) and Network Performance Monitoring and Diagnostics (NPMD).

Software

- Data Center/Network Management
- Application Performance Monitoring Tools
- IT Infrastructure Monitoring Tools
- SaaS

Personnel

- Service Monitoring
- Remote Monitoring
- Management and Administration

Outsourcing

- Traditional and Cloud (Private and Public)

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IT Operations Management

Service Monitoring

- On-site operations monitoring and management including such tasks as system start/stops, monitoring system jobs, responding to console messages, detecting and recording of data center and network incidents and correction of production failures.
- Production control duties which maintain the integrity of the production environment, including turnover of applications from test into production after the systems have been developed and tested, ensuring that systems to be placed in the production environment meet certain standards, providing job procedural documentation such as scheduling requirements and rerun procedures, establishing and adjusting the batch job schedule, providing ongoing job monitoring and reviewing the service level of production jobs to improve quality and/or efficiency.
- Capacity management duties which ensure that adequate data center and network capacity is available at all times to meet the requirements of the business by balancing business demand with IT supply.

Remote Monitoring

- This is the same job description as Service Monitoring above but performed by staff in a remote location.

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Enterprise IT Maturity Assessment

Final Report

May 20, 2026

hydro one

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Table of Contents

01 Executive Summary

02 Methodology & Approach

03 Enterprise IT Maturity Assessment Analysis
- 3.1 Data & Analytics
- 3.2 Enterprise Applications
- 3.3 Program & Portfolio Management
- 3.4 Enterprise Architecture
- 3.5 Infrastructure & Operations

04 Enterprise IT Maturity Definitions for Functional Activities

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Executive Summary

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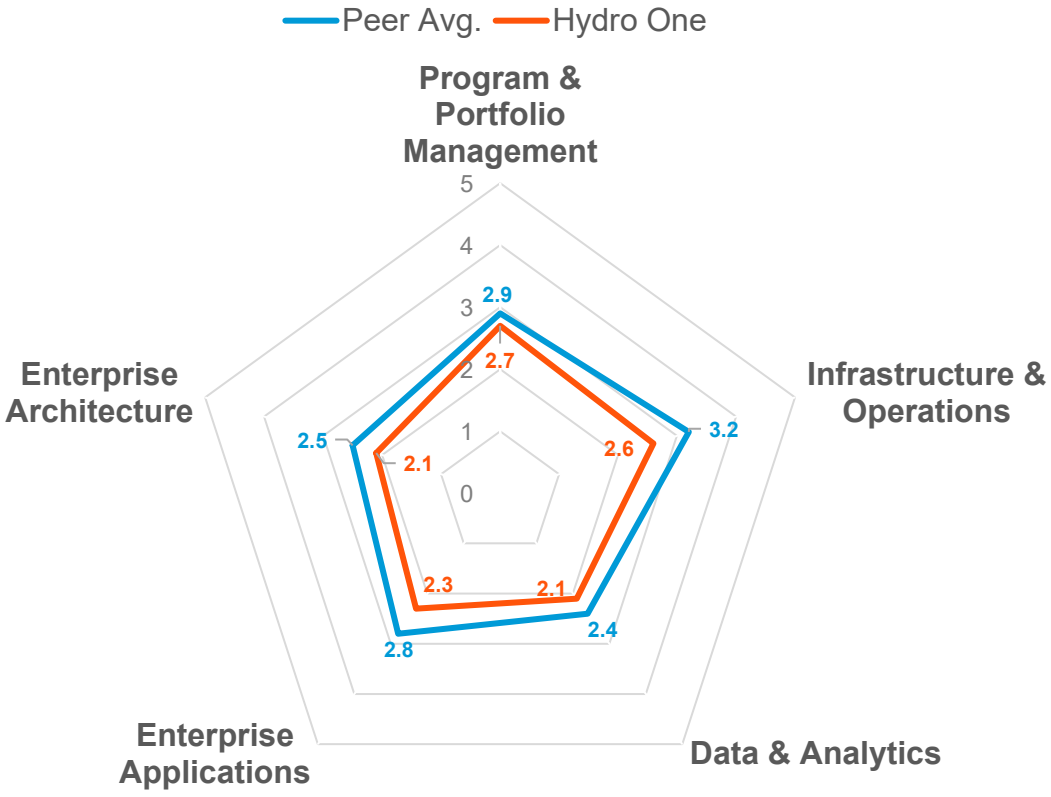
IT capability assessments showed that Hydro One's maturity across all domains are slightly lower than industry peers

- Hydro One was compared to a peer group of 8 to 60 organizations (depending on data available for each IT domain) from the energy and utilities industry.
- 118 functional activities across 5 IT domains were assessed by comparing Hydro One's current state to Gartner's best practices.
- Hydro One's IT maturity level across the 5 in-scope domains was 2.4 compared to 2.8 for the peer group. All in-scope domains reflected maturity levels that were slightly lower than the peer group averages.
- Within Hydro One, Program & Portfolio Management was the most mature domain at 2.7. Enterprise Architecture and Data & Analytics were the least mature at 2.1.
- Enterprise Architecture (EA) maturity assessment reflects an evaluation across the full breadth of Gartner's holistic EA model, including strong emphasis on business architecture, enterprise operating models, and organizational design influence. Historically, these areas have not been a primary focus of Hydro One's architecture mandate or investment; and as a result, shows a lower level of maturity. Instead, the EA function has been oriented toward technology rationalization, solution architecture, and enabling effective project and program delivery—areas that deliver tangible near- and mid-term value but are less heavily represented Gartner's maturity model scoring criteria.
- A lower level of maturity within Data & Analytics is driven by the results in the "create & maintain analytics content" and "manage the function" objectives. Hydro One's operating model is undergoing dedicated investment and transformation within Data & Analytics, with significant maturity improvements expected to commence in 2026. The current assessment reflects Hydro One's evolving maturity and capabilities as they begin this journey.
- Comparing current maturity levels to peer organizations provides external perspective, however it is more important to analyze the gaps between maturity and the importance of the activity for the organization in achieving its overall objectives (see next page).

Maturity Levels

Hydro One's Overall IT Maturity Level: 2.4

Peer Maturity Level: 2.8



Maturity scores are assessed on a scale from 1-5, with the score of 5 representing Gartner's best practices for the IT domain

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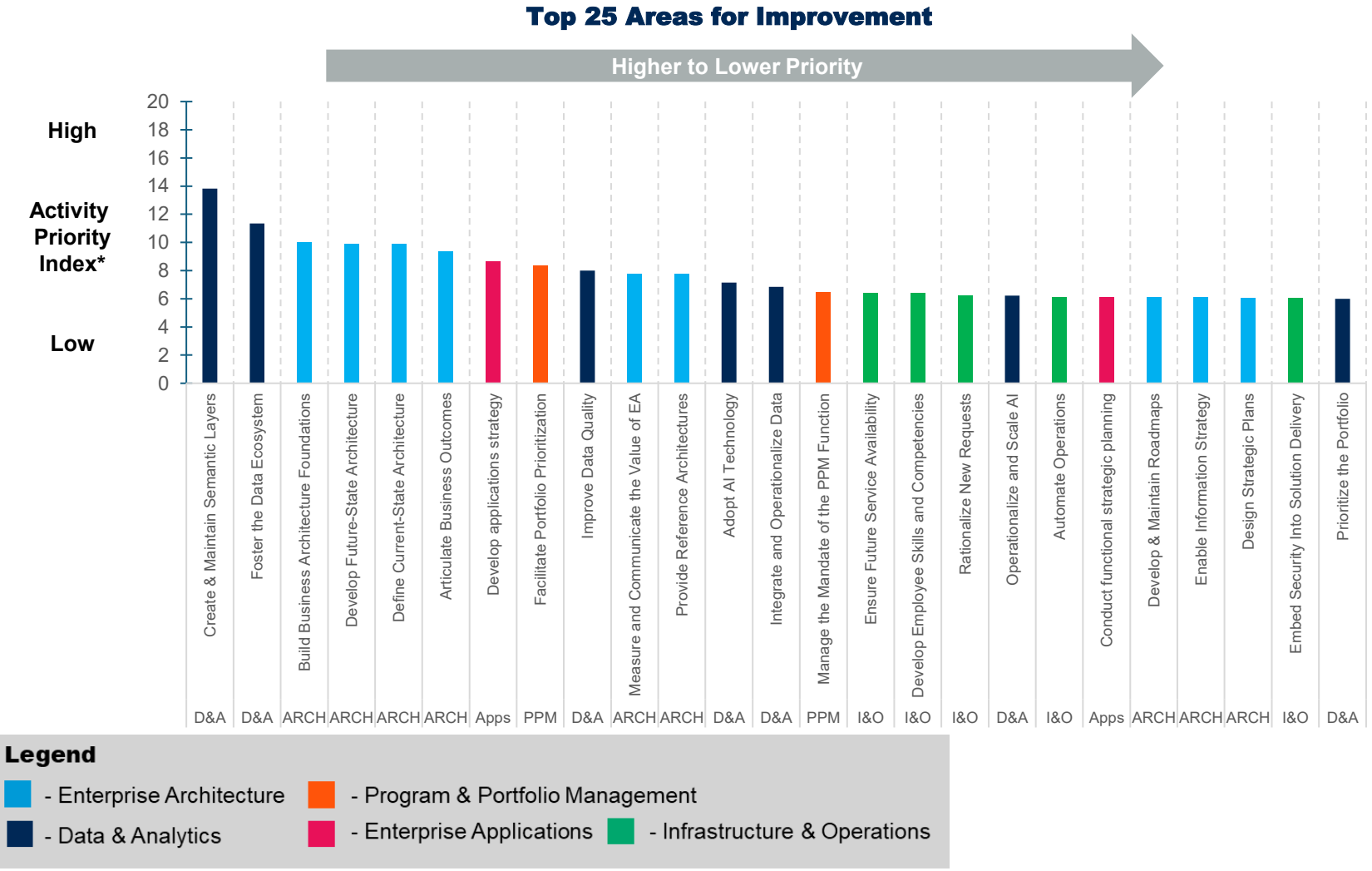
Based on maturity assessment results, opportunities for improvement exist in each domain

- 106 of 118 functional activities had a positive Activity Priority Index meaning there is value to Hydro One in improving the capability; each domain in scope had opportunities for improvement
- All in-scope domains had a number of functional activities identified in the **Top 25 Areas of Improvement**:
  - Enterprise Architecture (ARCH) = 9
  - Data & Analytics (D&A) = 7
  - Infrastructure & Operations (I&O) = 5
  - Program & Portfolio Management (PPM) = 2
  - Enterprise Applications (Apps) = 2
- When relative importance is considered, improvements to the maturity of the Data & Analytics and Enterprise Architecture domains would add comparatively more value to Hydro One



***Activity Priority Index: Activity Priority Index (API) for an activity is computed as importance minus maturity multiplied by its importance. A higher API score indicates a greater priority for improvement to the organization.**

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2.0
Methodology & Approach

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IT Maturity Assessment Methodology Overview

Gartner used its industry-leading IT maturity models (IT Score) to evaluate Hydro One's IT capabilities across the in-scope domains relative to peers. IT Score provides insights on maturity and importance to gain perspective on the highest priority activities to improve.

Maturity

- Measured on a scale ranging from 1 (low) to 5 (high), maturity measures how advanced an activity is relative to Gartner's best-practice research.

Importance

- Measured on a scale ranging from 1 (unimportant) to 5 (critical) based on participants' inputs, importance measures how important each activity is to the overall effectiveness in meeting objectives. Importance is assessed with respect to Hydro One's strategic objectives across the next 12 months.

Prioritization

- Activity priority index (API) identifies the activities that should be prioritized for improving maturity. It is defined as the average gap between importance and maturity and is computed for each activity and weighted by its average importance.

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Analysis Notes

- Hydro One conducted self assessments via Gartner's IT Score surveys to baseline current maturity and importance levels for each in scope domain
- Results were reviewed and calibrated across IT domains in working sessions with Gartner and Hydro One's subject matter experts

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IT Capability Maturity Assessment Methodology

- Maturity assessment results were collected via surveys using Gartner's proprietary IT Score Assessment Tool. Hydro One respondents for surveys were selected from Hydro One's IT management team, based on ownership and expertise in the particular domain. IT Maturity surveys evaluated 5 IT Domains, which are comprised of 25 Objectives and 119 Activities.

- Maturity levels are measured on a scale ranging from Level 1 (Lowest) to Level 5 (Highest),and depict how advanced Hydro One's development in a domain, function or activity is relative to Gartner's Best Practice Research. These maturity level descriptions are dependent on the specific domain being assessed and may be subject to yearly updates to reflect modern best practices.
- Maturity level results were compared to a peer group, which was selected based on survey responses from Energy and Utility companies.
- Requirement to meet Gartner's defined level of maturity, and subsequently, the IT survey questions evolve each year to reflect the changing industry standards as it pertains to IT service delivery worldwide. As a result, the changes in IT maturity scores year-over-year, may be a result of: 1) Changes in the levels of Hydro One's IT Service Delivery or 2) Evolving criteria required to meet a particular level of maturity as defined by Gartner.
- The IT Score Assessment Tool asks participants to answer a series of questions with "yes," "no," or "don't know.". A "yes" response indicates that a particular practice is both established and performed consistently, at least 80% of the time. This guidance may introduce subjectivity in year-over-year scenarios, especially when different individuals or new leadership complete the survey.

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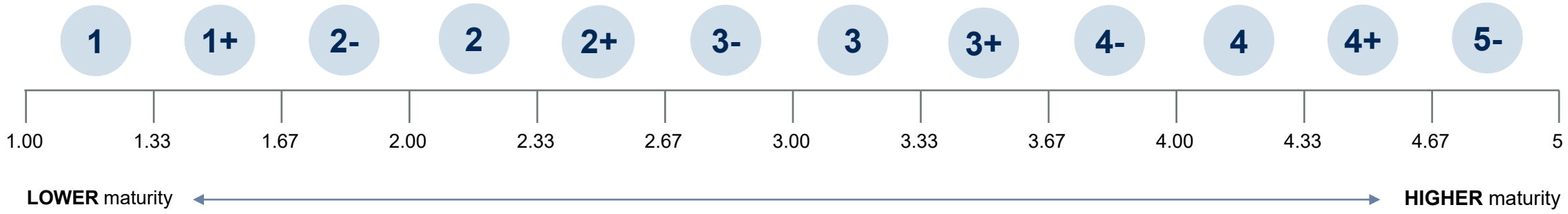
Maturity Score Scale

Maturity measures how advanced an organization's development is in a functional activity relative to Gartner's best practice research.

- Measured on a scale ranging from **1 (lower) to 5 (higher)**
- Refined with a **(+) or (–)** to indicate intermediate levels of maturity.
- Maturity is best defined as a range.



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IT Capability Maturity Assessment Methodology Details

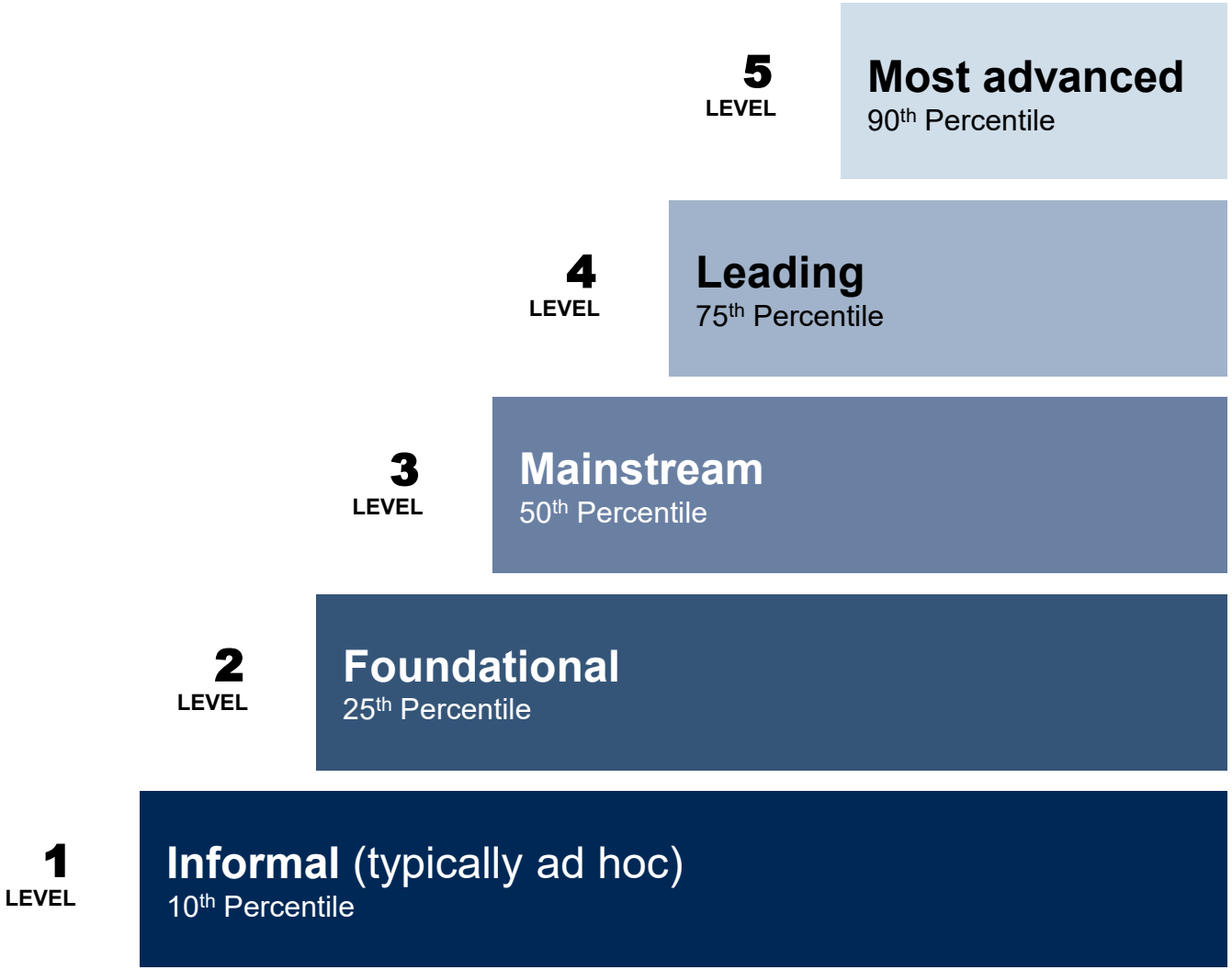
Survey instrument

The diagnostic assesses an IT Domain's (e.g., Applications, Infrastructure) performance along two dimensions: Importance and Maturity

- First, participants are asked to rank the key activities that a function performs as to how important that activity is to the success of the organization's business objectives.
- Second, participants are presented with statements that represent specific activities that the business function is expected to perform and indicate if the activity is being performed **at least 80% of the time**.

Based on an understanding of the activities that are performed, Gartner can determine the level of maturity for the function.

The 5 Levels are founded in best practice research based on Gartner's expertise and experience in the industry.



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3.0
Enterprise IT Maturity Assessment Analysis

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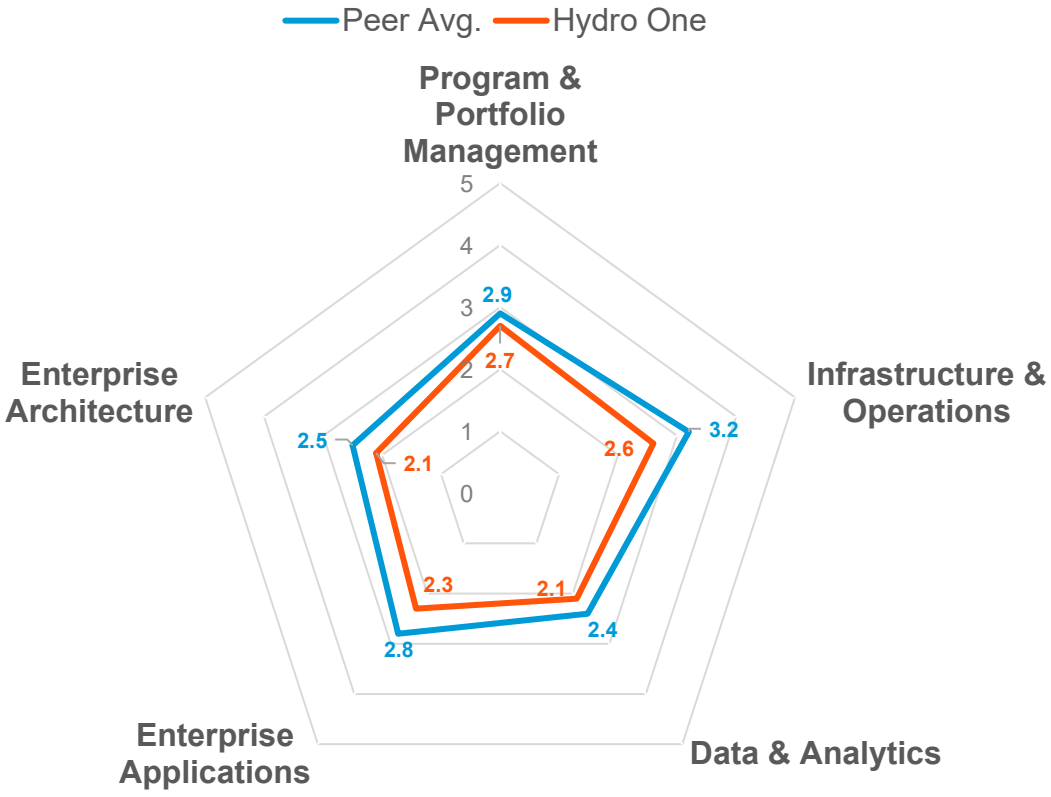
IT capability assessments showed that Hydro One's maturity across all domains are slightly lower than industry peers

- Hydro One was compared to a peer group of 8 to 60 organizations (depending on data available for each IT domain) from the energy and utilities industry.
- 118 functional activities across 5 IT domains were assessed by comparing Hydro One's current state to Gartner's best practices.
- Hydro One's IT maturity level across the 5 in-scope domains was 2.4 compared to 2.8 for the peer group. All in-scope domains reflected maturity levels that were slightly lower than the peer group averages.
- Within Hydro One, Program & Portfolio Management was the most mature domain at 2.7. Enterprise Architecture and Data & Analytics were the least mature at 2.1.
- Enterprise Architecture (EA) maturity assessment reflects an evaluation across the full breadth of Gartner's holistic EA model, including strong emphasis on business architecture, enterprise operating models, and organizational design influence. Historically, these areas have not been a primary focus of Hydro One's architecture mandate or investment; and as a result, shows a lower level of maturity. Instead, the EA function has been oriented toward technology rationalization, solution architecture, and enabling effective project and program delivery—areas that deliver tangible near- and mid-term value but are less heavily represented Gartner's maturity model scoring criteria.
- A lower level of maturity within Data & Analytics is driven by the results in the "create & maintain analytics content" and "manage the function" objectives. Hydro One's operating model is undergoing dedicated investment and transformation within Data & Analytics, with significant maturity improvements expected to commence in 2026. The current assessment reflects Hydro One's evolving maturity and capabilities as they begin this journey.
- Comparing current maturity levels to peer organizations provides external perspective, however it is more important to analyze the gaps between maturity and the importance of the activity for the organization in achieving its overall objectives (see next page).

Maturity Levels

Hydro One's Overall IT Maturity Level: 2.4

Peer Maturity Level: 2.8



Maturity scores are assessed on a scale from 1-5, with the score of 5 representing Gartner's best practices for the IT domain

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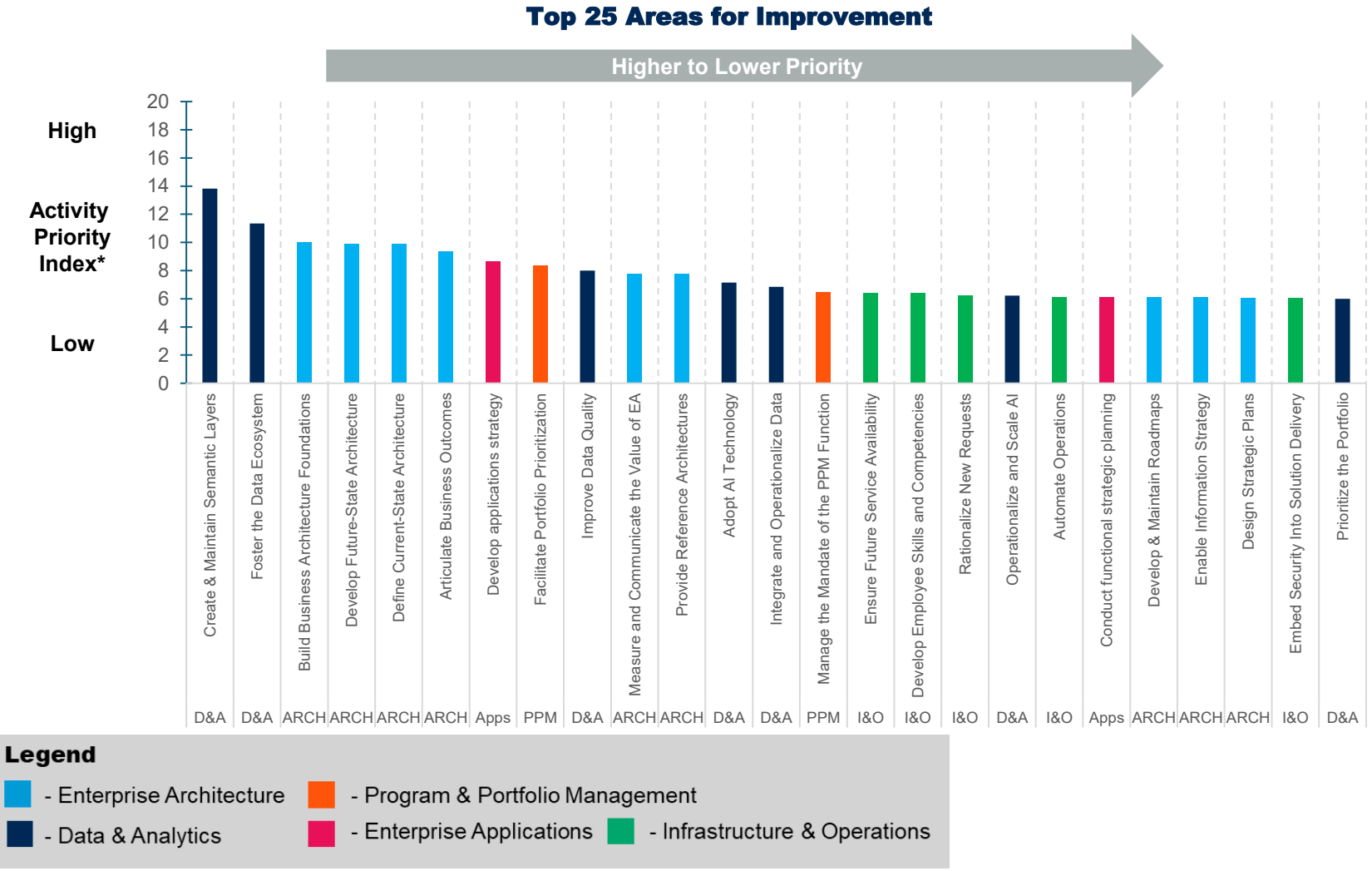
Based on maturity assessment results, opportunities for improvement exist in each domain

- 106 of 118 functional activities had a positive Activity Priority Index meaning there is value to Hydro One in improving the capability; each domain in scope had opportunities for improvement
- All in-scope domains had a number of functional activities identified in the **Top 25 Areas of Improvement**:
  - Enterprise Architecture (ARCH) = 9
  - Data & Analytics (D&A) = 7
  - Infrastructure & Operations (I&O) = 5
  - Program & Portfolio Management (PPM) = 2
  - Enterprise Applications (Apps) = 2
- When relative importance is considered, improvements to the maturity of the Data & Analytics and Enterprise Architecture domains would add comparatively more value to Hydro One



***Activity Priority Index: Activity Priority Index (API) for an activity is computed as importance minus maturity multiplied by its importance. A higher API score indicates a greater priority for improvement to the organization.**

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Hydro One's capability maturity results demonstrated maturity levels ranging from 2 to 3- across all domain areas

Domain	Enterprise Architecture 2	Infrastructure & Ops 2+	Data & Analytics 2	Enterprise Applications 2	Program & Portfolio Management 3-
Function Objectives	Structure Business Strategy 1+	Evaluate, Plan & Design 3-	Manage the Function 2-	Plan the Applications Portfolio Strategy 2	Partner With Stakeholders 3-
	Facilitate Innovation 2	Measure & Optimize 2	Advance AI Maturity 2+	Manage the Applications Portfolio 2	Manage Strategic & Other Portfolios 2
	Manage the Technology Portfolio 2-	Transition & Operate IT Services 2+	Create & Maintain Analytics Content 1+	Manage the Applications Function 2-	Manage Frameworks and Standards 3
	Enable Solutions Delivery 3-	Plan & Manage I&O Talent 3	Integrate & Manage Data 2-	Partner With Stakeholders 3-	Drive Transformation Initiatives 3
	Establish EA Frameworks and Tools 2+	Manage the Function of I&O 3-	Govern Data & Analytics Assets 3-		Enable Initiative Mngt & Delivery Roles 2-
	Manage and Evolve the EA Function 2-				Manage the PPM Function 3-

1 1+ 2- 2 2+ 3- 3 3+ 4- 4 4+ 5- 5

Lower Maturity ← → Higher Maturity

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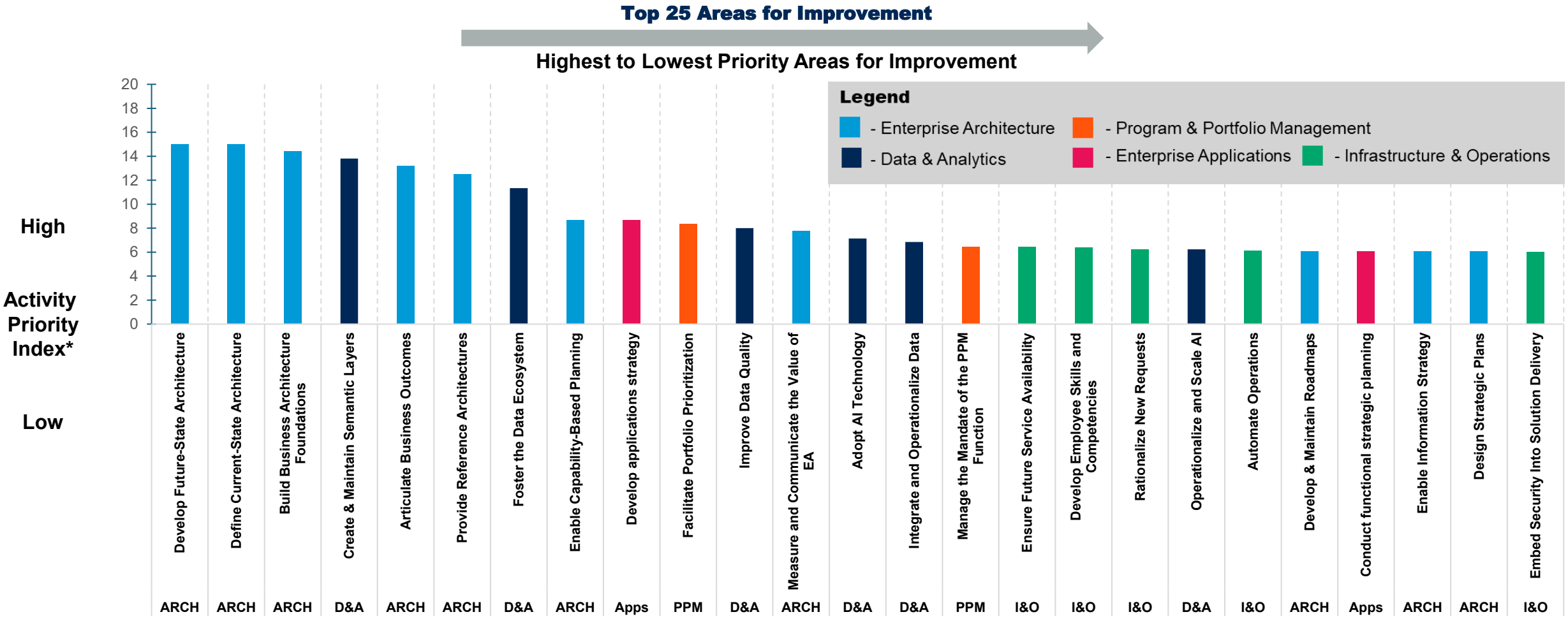
Top 25 Improvement Opportunities: Activity Priority Index (API)

The Activity Priority Index (API) represents an order of priority for the IT functions, based on which below are least mature and of greatest importance for Hydro One



*Activity Priority Index: Activity Priority Index (API) for an activity is computed as importance minus maturity multiplied by its importance. A higher API score indicates a greater priority for improvement to the organization.

3.1
Data & Analytics
IT Maturity Assessment

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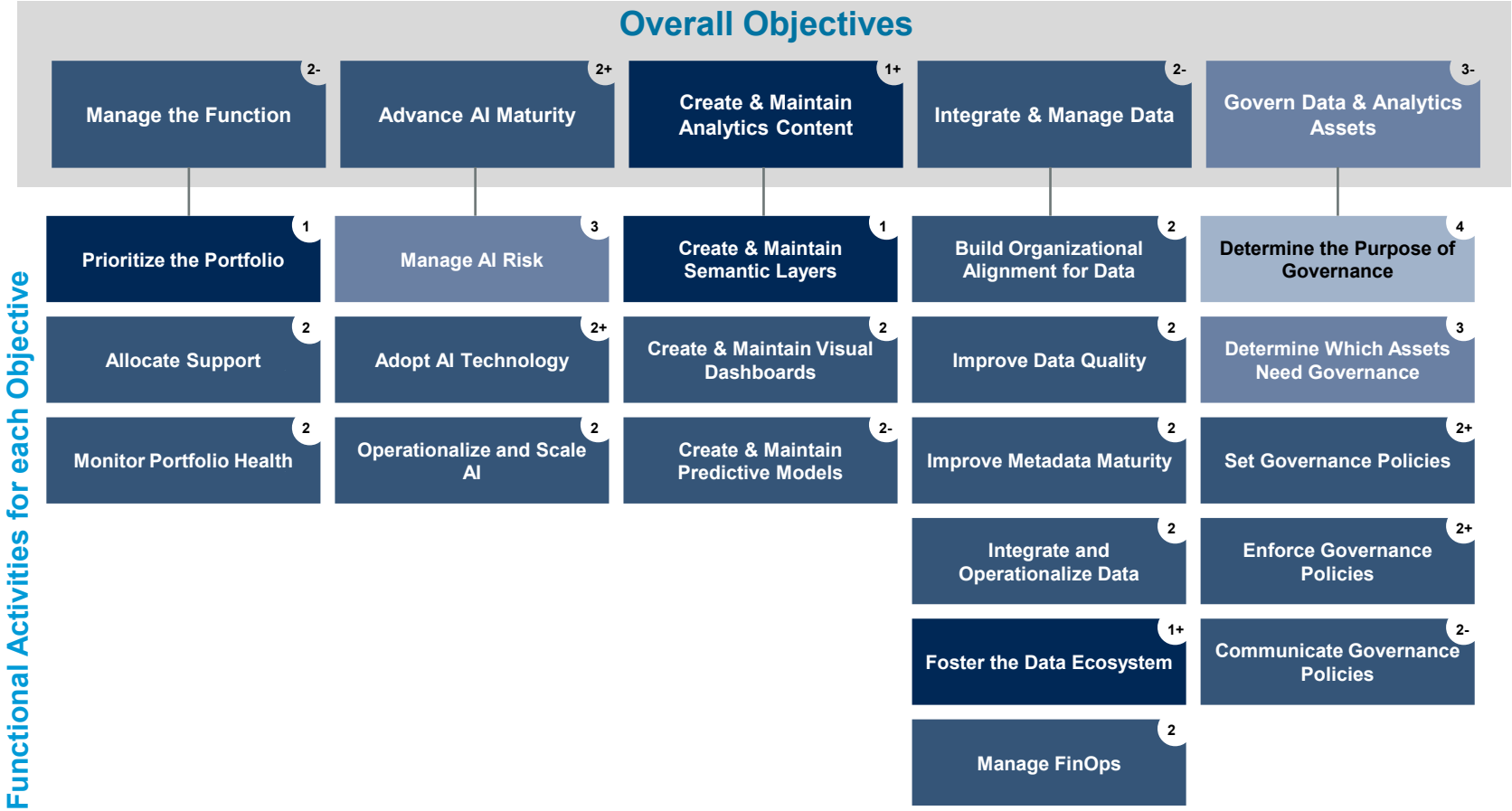
Data & Analytics
Maturity Levels of Objectives & Activities



Maturity Levels 1 2 3 4 5

n = 5

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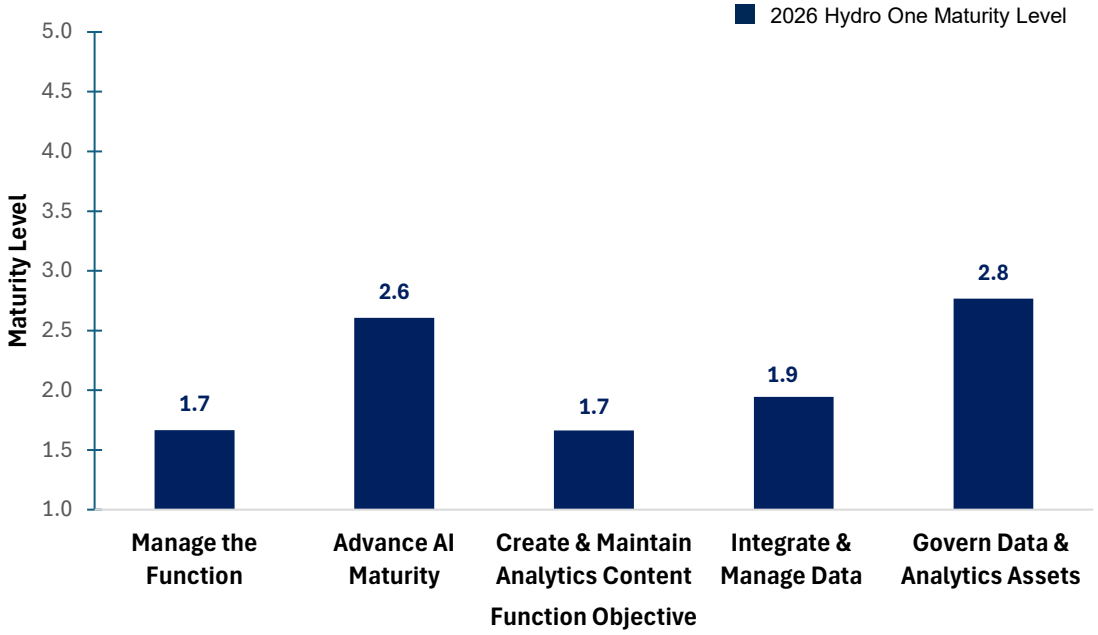
Data & Analytics

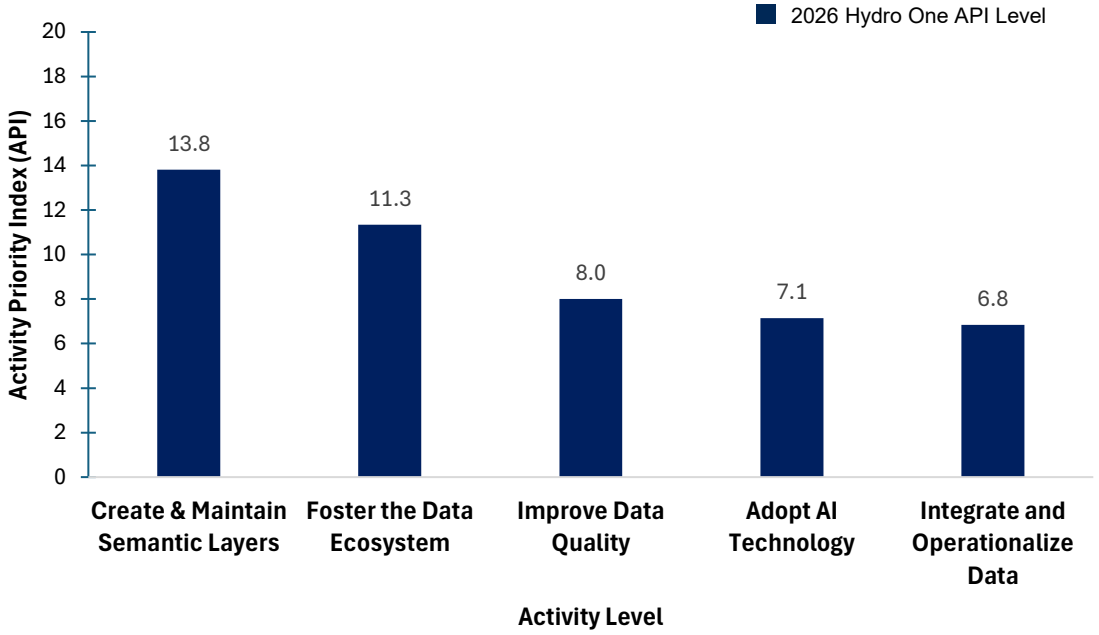
Data & Analytics Maturity Levels

Hydro One's Maturity Level: 2.1

Peer Maturity Level: 2.4



Data & Analytics Top 5 Activity Priority Index (API)



API order of priority is based on where the functions are least mature and of greater importance for Hydro One

(Highest to Lowest Priority Areas for Improvement)

Observations:

- Overall maturity for Data & Analytics is slightly lower than the peer benchmark
- The "Govern Data & Analytics Assets" function objective was the strongest maturity within Data & Analytics
- The "Create & Maintain Analytics Content" function objective was the least mature within Data & Analytics

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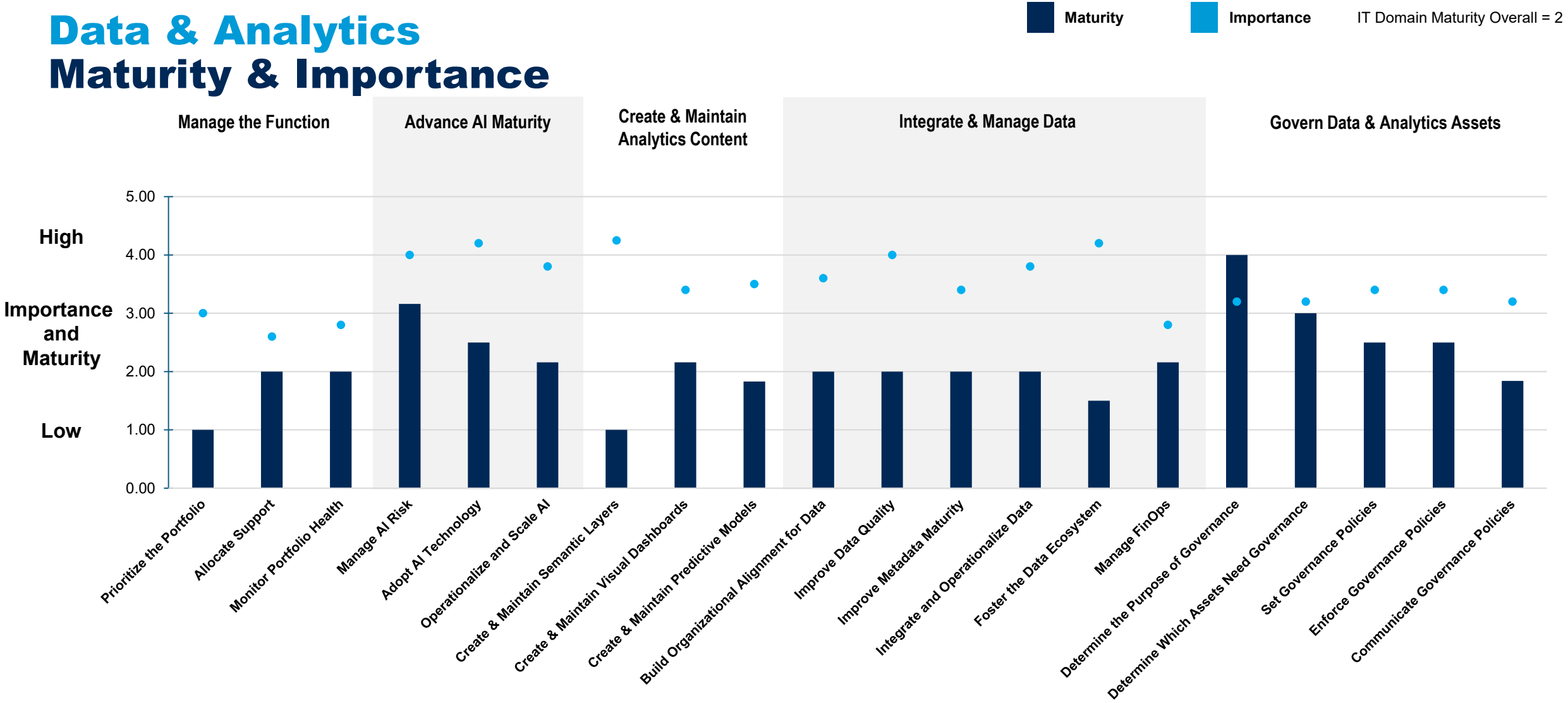
Data & Analytics
Maturity & Importance



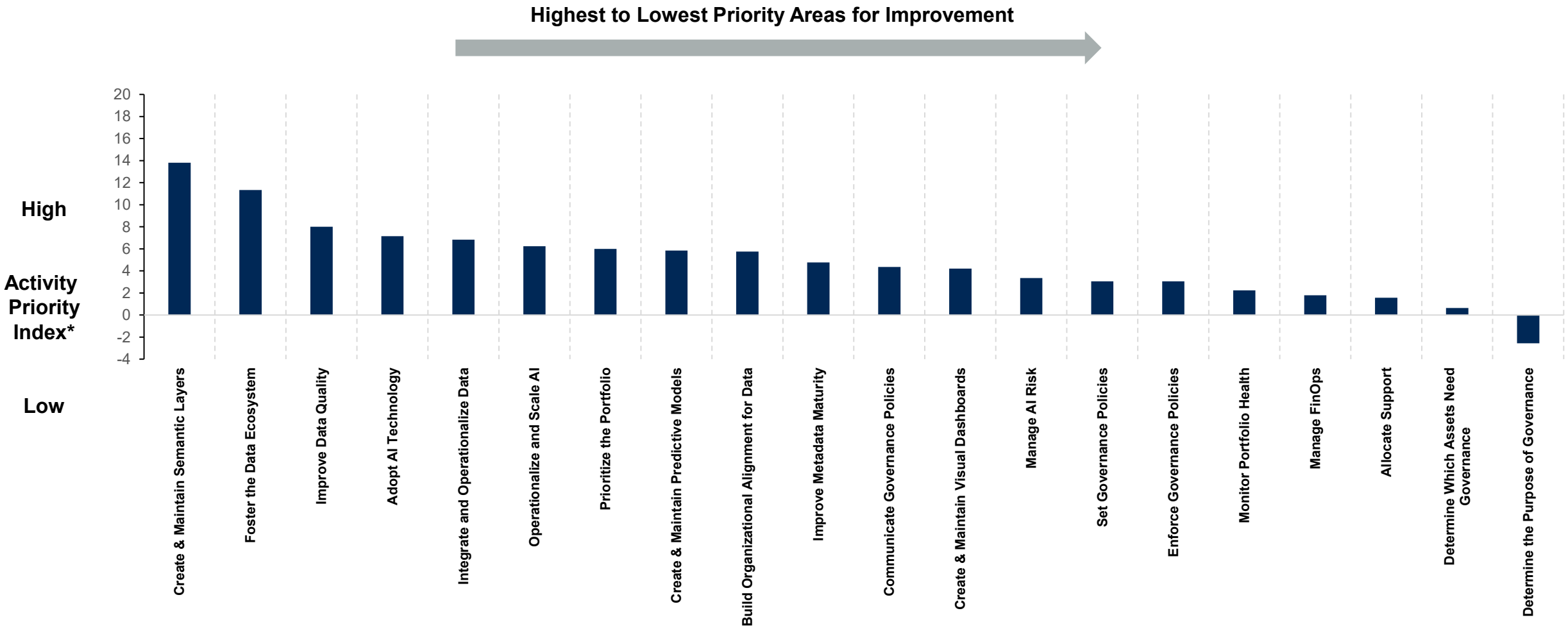
Lowest Maturity
- Prioritize the Portfolio
- Create & Maintain Semantic Layers
- Foster the Data Ecosystem

Highest Importance
- Create & Maintain Semantic Layers
- Adopt AI Technology
- Foster the Data Ecosystem

Importance: Measured on a scale ranging from 1 (Not Important) to 5 (Most Important). Importance measures how important each functional activity is to the overall effectiveness of your function in meeting its business objectives.

Data & Analytics
Activity Priority Index

The (API) identifies where the function is less mature in activities of greater importance.



***Activity Priority Index: Activity Priority Index (API) for an activity is computed as importance minus maturity multiplied by its importance. A higher API score indicates a greater priority for improvement to the organization.**

Data & Analytics (1 of 2)
Gartner Definition

Objective	Activity	Current Maturity	Maturity Level: Gartner Definition
Manage the Function	Prioritize the Portfolio	1.00	1: There is no process to evaluate data and analytic projects.
	Allocate Support	2.00	2: Teams are put in place to support D&A projects.
	Monitor Portfolio Health	2.00	2: Projects are monitored for accomplishment of key milestones.
Advance AI Maturity	Manage AI Risk	3.16	3: Once there is a problem, it is tackled in an ad hoc fashion.
	Adopt AI Technology	2.50	2: The data & analytics function has a structured approach to prioritize AI use cases based on business functions and workflows. The data & analytics function works with the project management team to establish and define a business case to leverage AI. 3: The data & analytics function has a technical strategy for data, infrastructure and tools to facilitate access/analysis of data for AI. The D&A function has built an architecture and platform to support various AI techniques (machine learning, natural language techniques and computer vision).
	Operationalize and Scale AI	2.16	2: Integration of AI models with an application workflow (manual or automated); model deployment is manual.
Create & Maintain Analytics Content	Create & Maintain Semantic Layers	1.00	1: There is no metrics store for easy reporting and analysis.
	Create & Maintain Visual Dashboards	2.16	2: Dashboards blend disparate data sources and are built to align organizational objectives.
	Create & Maintain Predictive Models	1.83	2: Predictive analytics are applied in targeted situations throughout the organization.

Data & Analytics (2 of 2)
Gartner Definition

Objective	Activity	Current Maturity	Maturity Level: Gartner Definition
Integrate & Manage Data	Build Organizational Alignment for Data	2.00	2: Data management leverages standard approaches for well-identified needs to meet production requirements.
	Improve Data Quality	2.00	2: Data quality jobs are performed when errors occur via simple data quality tools or homegrown batch jobs.
	Improve Metadata Maturity	2.00	2: Data assets are collected and cataloged in a data catalog on an ad hoc basis.
	Integrate and Operationalize Data	2.00	2: Isolated data integration practices are established by category of use case.
	Foster the Data Ecosystem	1.50	1: Data is limited to a single use. 2: Data can be shared locally with fixed agreed-upon semantics within a single site and context.
	Manage FinOps	2.16	2: Data ecosystem costs are being tracked; tracking is along agreed-upon metrics aligning cost and value.
Govern Data & Analytics Assets	Determine the Purpose of Governance	4.00	4: Governance is driven by business needs, not technical or data issues.
	Determine Which Assets Need Governance	3.00	3: IT identifies data assets that impact multiple business processes or outcomes. However, business leaders still take little interest.
	Set Governance Policies	2.50	2: Governance policies are recognized as discrete decisions. A coordinated effort is made to set governance policies consistently and proactively around the organization. 3: Certain governance policies, such as security, privacy or retention are assigned by key executives, even business leaders.
	Enforce Governance Policies	2.50	2: IT creates its own central team to handle "all things data" such as remediating data and interpreting policy. 3: Shared services, even within the business, is tasked with interpreting and enforcing data policy infractions and brainstorming a resolution.
	Communicate Governance Policies	1.84	2: Data & analytics governance efforts are made visible; they stand out as distinct work, separate from day-to-day business.

3.2
Enterprise Applications
IT Maturity Assessment

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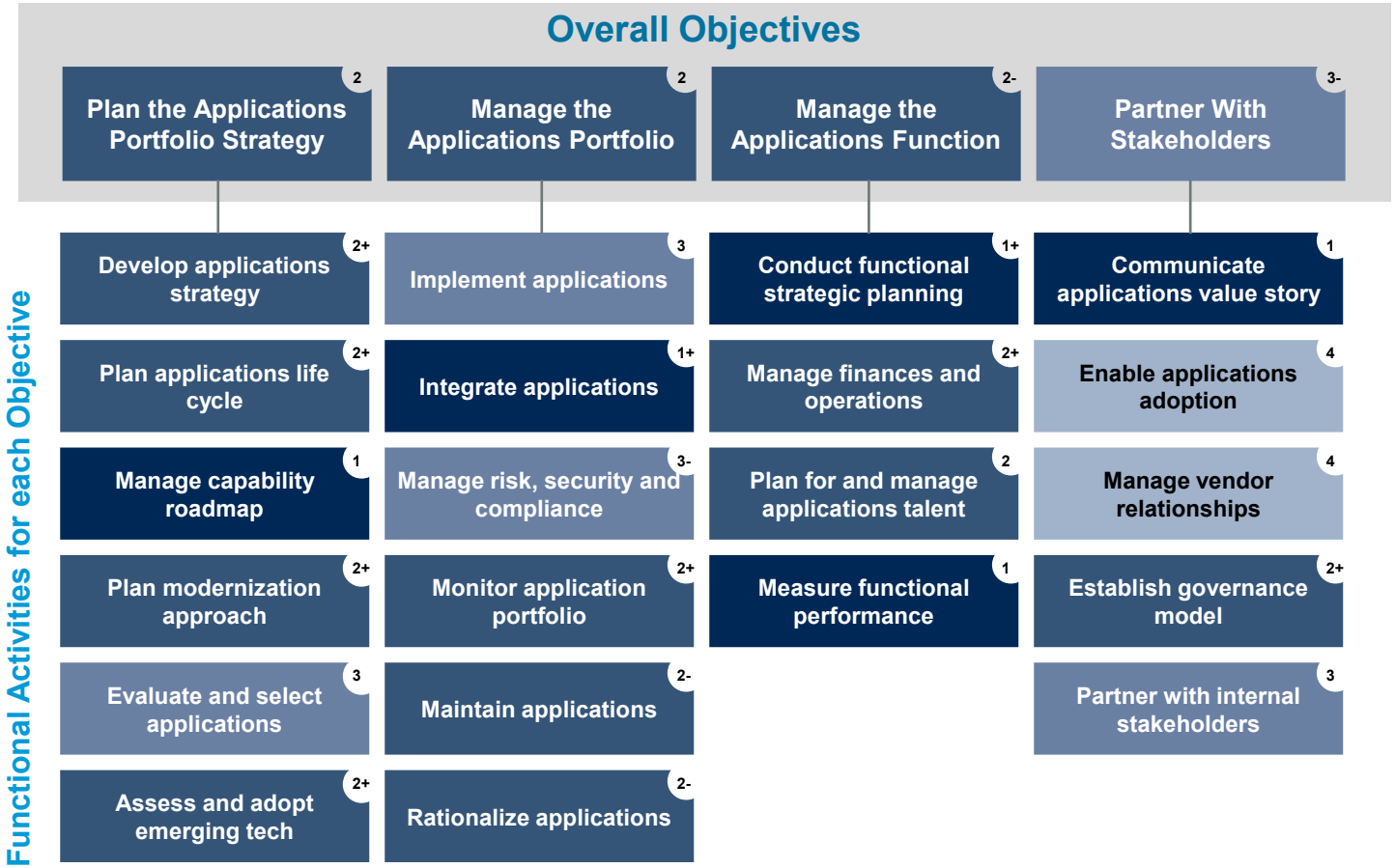
Enterprise Applications
Maturity Levels of Objectives & Activities



Maturity Levels 1 2 3 4 5

n = 6

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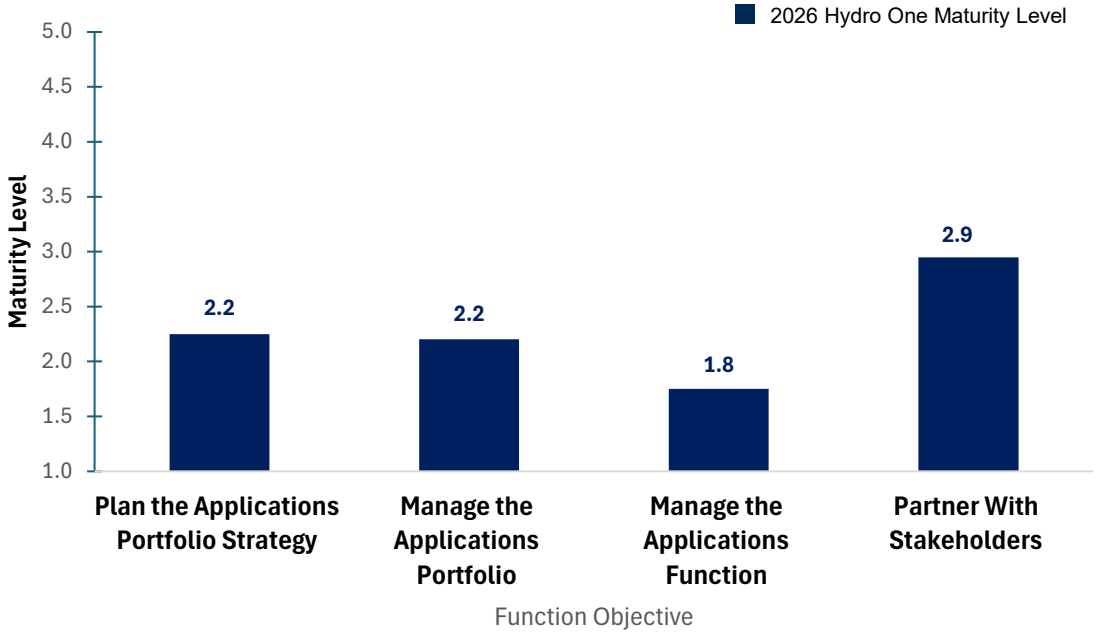
Enterprise Applications

Enterprise Applications Maturity Levels

Hydro One's Maturity Level: 2.3

Peer Maturity Level: 2.8



Enterprise Applications Top 5 Activity Priority Index (API)

API order of priority is based on where the functions are least mature and of greater importance for Hydro One

(Highest to Lowest Priority Areas for Improvement)

Observations:

- Overall maturity for Enterprise Applications is slightly lower than the peer benchmark
- The "Partner With Stakeholders" functional objective has the strongest maturity within Enterprise Applications
- The "Manage the Applications Function" objective was the least mature within Enterprise Applications

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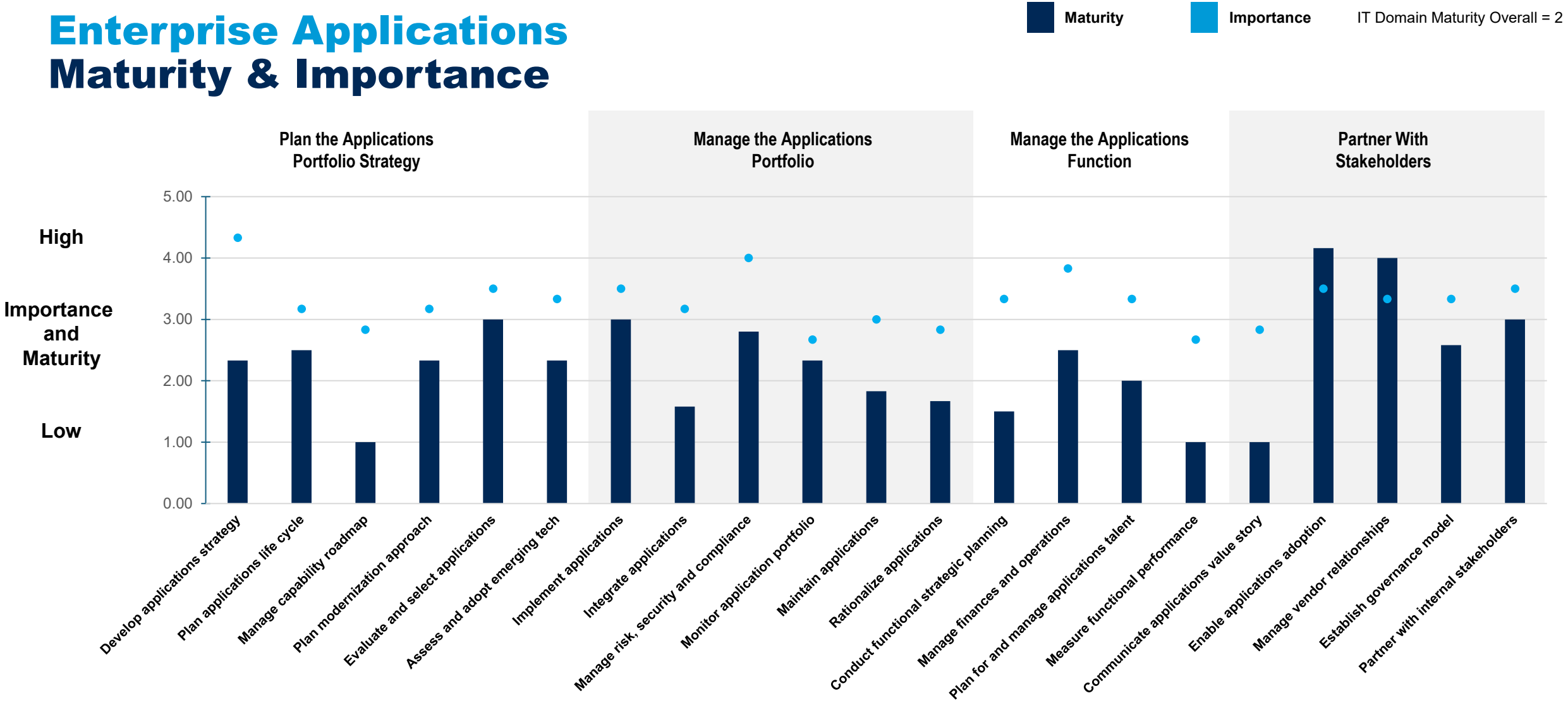
Enterprise Applications
Maturity & Importance



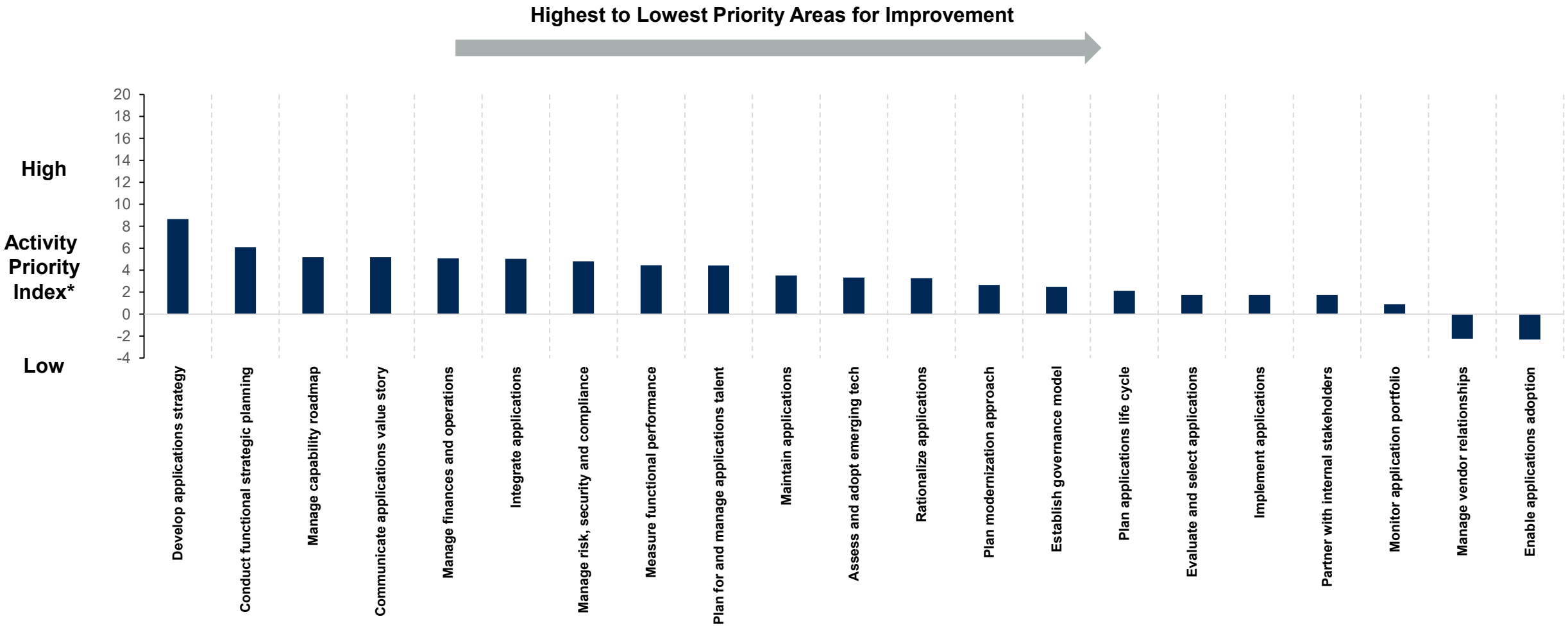
Lowest Maturity
- Manage capability roadmap
- Measure functional performance
- Communicate applications value story

Highest Importance
- Develop applications strategy
- Manage risk, security and compliance
- Manage finances and operations

Importance: Measured on a scale ranging from 1 (Not Important) to 5 (Most Important). Importance measures how important each functional activity is to the overall effectiveness of your function in meeting its business objectives.

Enterprise Applications
Activity Priority Index

The (API) identifies where the function is less mature in activities of greater importance.



***Activity Priority Index: Activity Priority Index (API) for an activity is computed as importance minus maturity multiplied by its importance. A higher API score indicates a greater priority for improvement to the organization.**

Enterprise Applications (1 of 3)
Gartner Definition

Objective	Activity	Current Maturity	Maturity Level: Gartner Definition
Plan the Applications Portfolio Strategy	Develop applications strategy	2.33	2: An ad hoc applications strategy is occasionally developed in response to immediate business pressures or specific initiatives, but it is informal, short-term and not broadly communicated.
	Plan applications life cycle	2.50	2: Application life cycle planning and prioritization are performed on a per-application basis, primarily driven by vendor timelines and recommendations. No formal roadmap exists 3: Application life cycle planning and prioritization align with business strategy, consider application health and fitness, and are linked to business capabilities and outcomes. A capabilities roadmap, consisting primarily of enhancement requests, is maintained, and the vendor product roadmap is monitored for alignment.
	Manage capability roadmap	1.00	1: Capability roadmap management is ad hoc or nonexistent; future-state vision and capability mapping are not defined and planning is reactive to immediate needs.
	Plan modernization approach	2.33	2: IT initiates and leads modernization projects, typically in response to urgent risks or technology obsolescence. Efforts are limited to specific platforms or technologies, with little business input or long-term planning.
	Evaluate and select applications	3.00	3: The enterprise applications team leads a structured, project-by-project evaluation process in collaboration with other IT groups, including enterprise architects, I&O and security. The process includes active business-stakeholder involvement, defined criteria for requirements and standards, preliminary ROI/TCO analysis, vendor ecosystem assessment, and formal vendor security and compliance documentation. Vendor proofs of concept (POCs) are conducted to validate critical product-management feature sets before final selection.
	Assess and adopt emerging tech	2.33	2: The enterprise applications team is responsible for evaluating and selecting emerging technologies for specific business domains or key projects, but processes are informal and focused on IT needs.

Enterprise Applications (2 of 3)
Gartner Definition

Objective	Activity	Current Maturity	Maturity Level: Gartner Definition
Manage the Applications Portfolio	Implement applications	3.00	3: A formal, organization wide methodology with governance forums, a dedicated change management team, stakeholder analysis and clear requirements, aligns implementations to business objectives, backed by a one-off premortem and milestone-based risk reviews.
	Integrate applications	1.58	1: There is no defined integration strategy, tools or ownership; integration is ad hoc and inconsistent. 2: Basic integration resources are available, with some recommended tools and macro-level sourcing policies. Applications teams address integration needs independently, with limited support.
	Manage risk, security and compliance	2.80	3: Standardized risk, security and compliance processes are established and enforced across all applications, with central oversight and regular assessments to ensure alignment with regulatory and business requirements.
	Monitor application portfolio	2.33	2: An inventory of applications with basic attributes exists, and the portfolio is reviewed irregularly, typically in response to specific needs or initiatives.
	Maintain applications	1.83	2: Basic maintenance processes, such as patching and urgent updates, exist and are applied inconsistently across applications; maintenance activities are typically reactive, driven by vendor recommendations or immediate needs, rather than being proactive to enable or support new capabilities.
	Rationalize applications	1.67	1: Application rationalization is ad hoc, occurring only to address immediate critical cost pressures, or when a vendor sunsets an application or essential features. 2: IT leads rationalization efforts, which are focused on short-term cost savings and typically target redundant or obsolete applications, especially when vendors are discontinuing support.

Enterprise Applications (3 of 3)
Gartner Definition

Objective	Activity	Current Maturity	Maturity Level: Gartner Definition
Manage the Applications Function	Conduct functional strategic planning	1.50	1: The organization does not have a formal or documented strategic plan for the applications function. 2: The IT strategic plan includes basic plans and objectives for applications but does not include a dedicated or detailed applications strategy.
	Manage finances and operations	2.50	2: The applications function maintains a budget for day-to-day operations, bases new capability funding on formal business cases and committee approval, and uses prior-year costs and consumption patterns to set maintenance and enhancement budgets. 3: The applications function consistently documents investment decision considerations, and coordinates its budget process with applications and business strategic planning.
	Plan for and manage applications talent	2.00	2: The applications function builds teams with the necessary combination of skills for current and emerging technologies, and regularly conducts technical skills-focused performance reviews and development planning across roles.
	Measure functional performance	1.00	1: The organization measures application performance informally or inconsistently, with limited use of structured metrics or reviews.
Partner With Stakeholders	Communicate applications value story	1.00	1: The applications function communicates value informally or reactively, with little structured evidence or messaging.
	Enable applications adoption	4.16	4: A cross-functional steering committee oversees major adoption initiatives, supported by a network of business champions or superusers to promote adoption and provide peer support.
	Manage vendor relationships	4.00	4: The applications function partners strategically with vendors (e.g., early access to tech and future roadmaps) to drive key business initiatives.
	Establish governance model	2.58	2: IT and business stakeholders recognize the need for an application management policy, process, and defined roles and responsibilities. 3: Policy, process and roles and responsibilities for application management have been clearly defined, but it is difficult to adapt to changing business needs. The applications function uses a COE governance model for strategic vendors and ownership is established through RACI processes.
	Partner with internal stakeholders	3.00	3: The applications function coordinates with other business functions when its activities may impact or require input from them.

3.3
Program & Portfolio Management
IT Maturity Assessment

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Program & Portfolio Management
Maturity Levels of Objectives & Activities

Maturity Levels 1 2 3 4 5

n = 5

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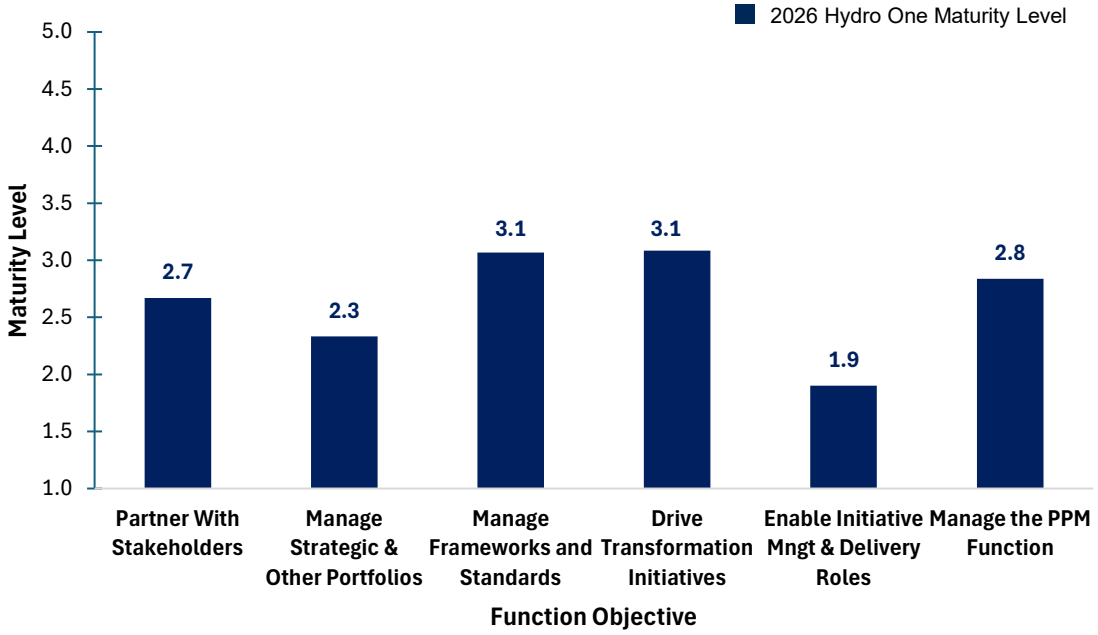
Program & Portfolio Management

Program & Portfolio Management Maturity Levels

Hydro One's Maturity Level: 2.7

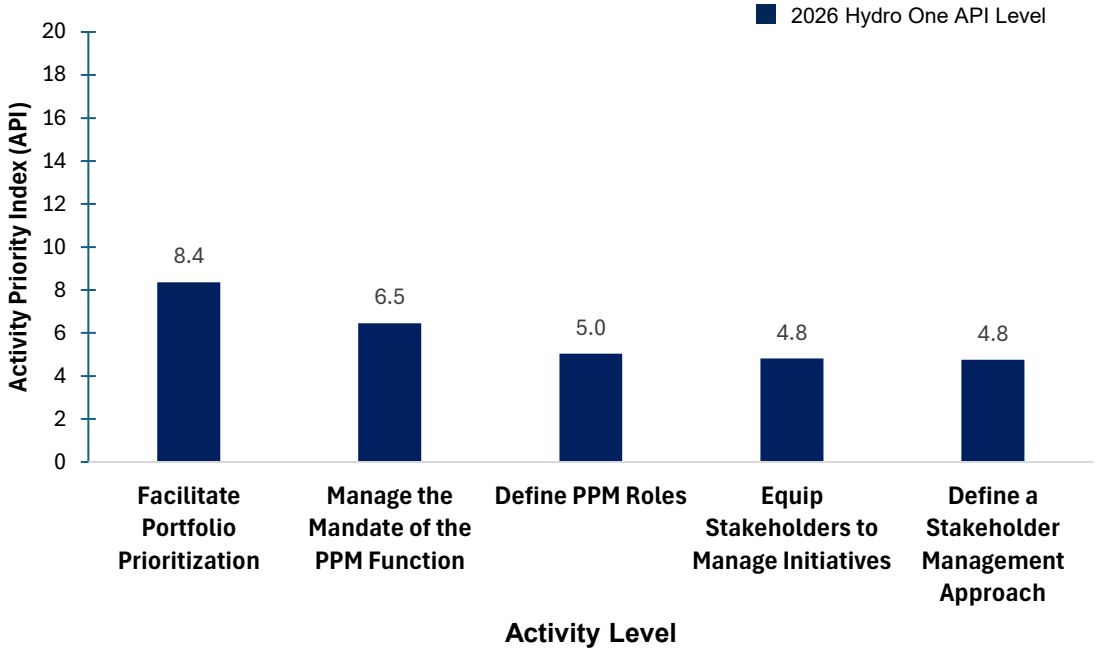
Peer Maturity Level: 2.9



Observations:

- Overall maturity for Program & Portfolio Management was slightly lower than the peer benchmark
- The "Enable Initiative Management & Delivery Roles" functional objective was the least mature within Program & Portfolio Management
- The "Drive Transformation Initiatives" functional objective was the most mature within Program & Portfolio Management

Program & Portfolio Management Top 5 Activity Priority Index (API)



API order of priority is based on where the functions are least mature and of greater importance for Hydro One

(Highest to Lowest Priority Areas for Improvement)

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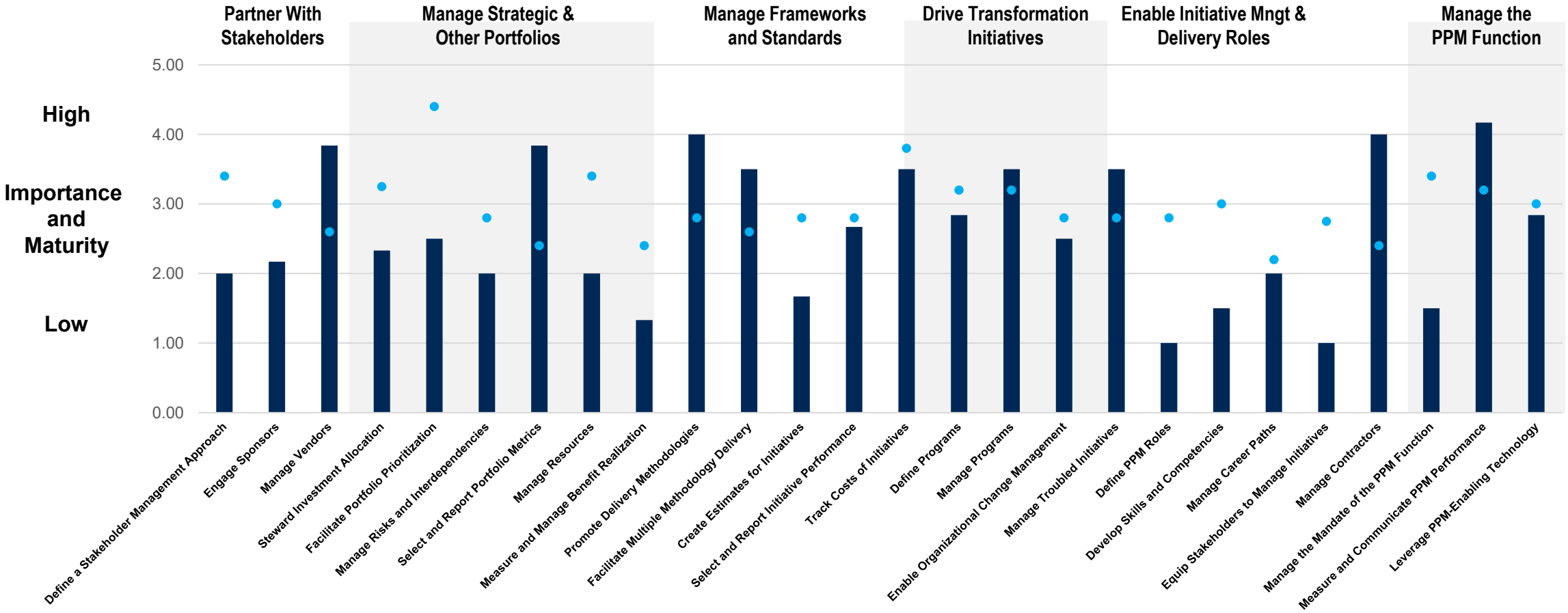
Program & Portfolio Management
Maturity & Importance

Maturity | Importance | IT Domain Maturity Overall = 3-



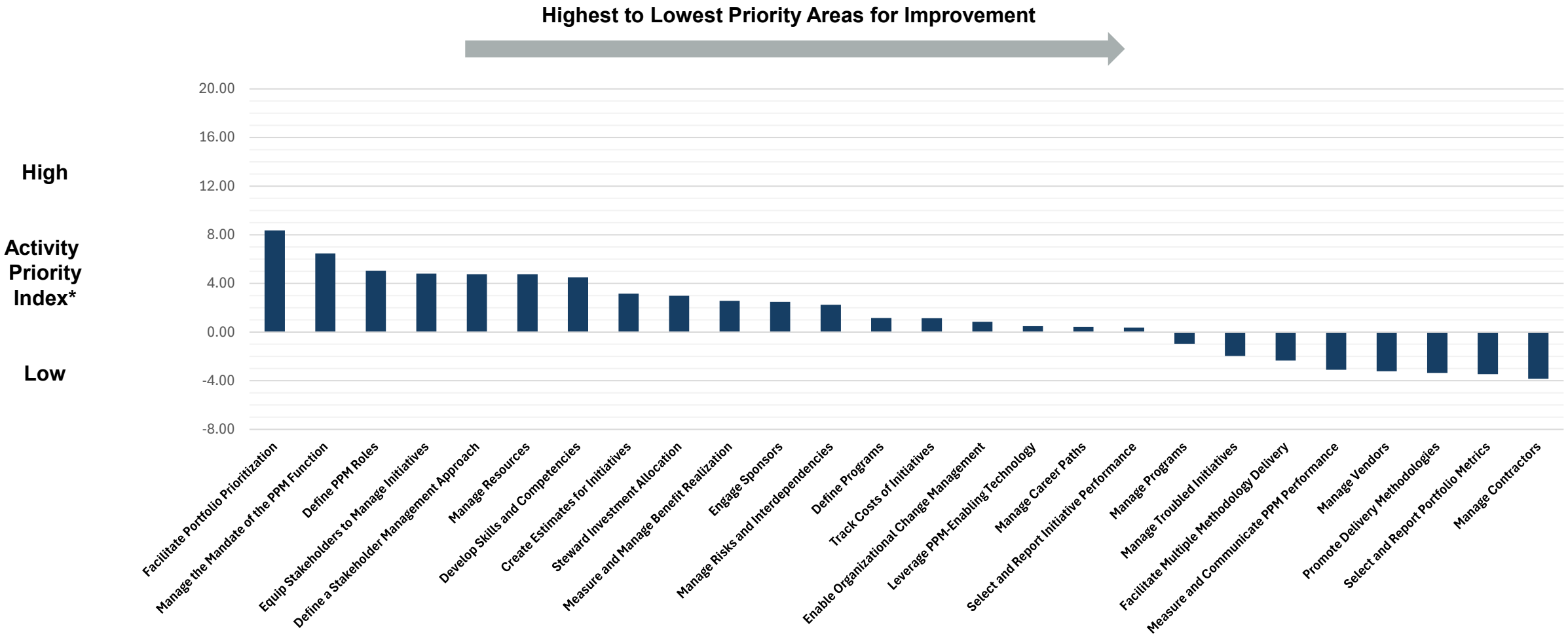
Lowest Maturity
- Equip Stakeholders to Manage Initiatives
- Define PPM Roles
- Measure and Manage Benefit Realization

Highest Importance
- Facilitate Portfolio Prioritization
- Track Costs of Initiatives
- Define a Stakeholder Management Approach

Importance: Measured on a scale ranging from 1 (Not Important) to 5 (Most Important). Importance measures how important each functional activity is to the overall effectiveness of your function in meeting its business objectives.

Program & Portfolio Management
Activity Priority Index

The (API) identifies where the function is less mature in activities of greater importance.



***Activity Priority Index: Activity Priority Index (API) for an activity is computed as importance minus maturity multiplied by its importance. A higher API score indicates a greater priority for improvement to the organization.**

Program & Portfolio Management (1 of 3)
Gartner Definition

Objective	Activity	Current Maturity	Maturity Level: Gartner Definition
Partner With Stakeholders	Define a Stakeholder Management Approach	2.00	2: The PPM function helps product, project, program or portfolio managers to clarify stakeholder roles and expectations before the initiation of the initiative.
	Engage Sponsors	2.17	2: The PPM function provides tools and guidance to help product, project, program or portfolio managers structure the sponsor engagement approach.
	Manage Vendors	3.84	4: The PPM function aims to boost vendor engagement using talent management strategies and flexes its vendor management approach to work more effectively with niche/emergent vendors.
Manage Strategic & Other Portfolios	Steward Investment Allocation	2.33	2: The PPM function provides guidance and tools to help stakeholders create detailed business cases for their proposed initiatives.
	Facilitate Portfolio Prioritization	2.50	2: Portfolio decision makers review all initiatives to prioritize those with a higher impact on the organization's strategic objectives. 3: The PPM function helps portfolio decision makers review and approve only those initiatives that require their consideration using standard evaluation criteria.
	Manage Risks and Interdependencies	2.00	2: The PPM function employs a standard framework to identify and manage common risks and interdependencies.
	Select and Report Portfolio Metrics	3.84	4: The PPM function tracks leading indicators of business benefit realization and external risks.
	Manage Resources	2.00	2: The PPM function provides tools and guidance to help managers track resource utilization for their initiatives.
	Measure and Manage Benefit Realization	1.33	1: The PPM function conducts benefit realization informally, if at all.

Program & Portfolio Management (2 of 3)
Gartner Definition

Objective	Activity	Current Maturity	Maturity Level: Gartner Definition
Manage Frameworks and Standards	Promote Delivery Methodologies	4.00	4: The PPM function enables a wide range of stakeholders to share lessons and best practices on newer methodologies.
	Facilitate Multiple Methodology Delivery	3.50	3: The PPM function helps assess the suitability of initiatives for different delivery methodologies. 4: The PPM function encourages the adoption of speed-generating techniques and defines metrics to track health of multimethodology initiatives.
	Create Estimates for Initiatives	1.67	2: The PPM function coaches project, product and resource managers and involves business stakeholders upfront to create and regularly update estimates of delivery costs, schedule and resources.
	Select and Report Initiative Performance	2.67	3: The PPM function uses standard metrics, tailors its reporting approach to fit context and need, and enables self-service tools for stakeholders.
	Track Costs of Initiatives	3.50	3: The PPM function defines standard frameworks to track the overall costs of initiatives. 4: The PPM function provides training to help project and product managers track and manage the costs of their initiatives.
Drive Transformation Initiatives	Define Programs	2.84	3: Programs are proactively defined to manage technical or resource dependencies related to a common business objective.
	Manage Programs	3.50	3: The PPM function uses a standard program management methodology and rolls up metrics to the program level. 4: The PPM function takes a program-centric view of resource allocation, budget reprioritization and design of the program manager role.
	Enable Organizational Change Management	2.50	2: The PPM function helps sponsors and project, product or program managers manage change at the product, project or program level. 3: The PPM function helps sponsors anticipate the barriers to change and tailor communication to different stakeholder segments.
	Manage Troubled Initiatives	3.50	3: The PPM function uses operational metrics to track issues, encourages staff to identify problems early, and tracks the use of recovery steps for troubled initiatives. 4: The PPM function uses predictive measures to pre-empt initiatives running into trouble and proactively identifies triggers for ending initiatives.

Program & Portfolio Management (3 of 3)
Gartner Definition

Objective	Activity	Current Maturity	Maturity Level: Gartner Definition
Enable Initiative Mngt & Delivery Roles	Define PPM Roles	1.00	1: The PPM function has formally documented job descriptions for some project and product management roles.
	Develop Skills and Competencies	1.50	1: The PPM function leaves the development of project and product management skills to the discretion of individual managers. 2: The PPM function familiarizes staff with industry standards and frameworks, and trains staff on project and product management process skills.
	Manage Career Paths	2.00	2: There are multiple informal career paths for PPM staff across the organization.
	Equip Stakeholders to Manage Initiatives	1.00	1: The PPM function provides business partners with informal management support of initiatives.
	Support Agile Delivery Teams	N/A	N/A
	Manage Contractors	4.00	4: The PPM function defines roles, responsibilities and competencies for key agile team roles, and provides multiple channels to learn and share best practices to close gaps.
Manage the PPM Function	Manage the Mandate of the PPM Function	1.50	1: The PPM function has an ad hoc approach to using and managing contractors. 2: The PPM function hires low-cost contractors for subject matter expertise and to meet spikes in demand.
	Measure and Communicate PPM Performance	4.17	4: The PPM function defines its activities as a set of services to meet the varied needs of stakeholders.
	Leverage PPM-Enabling Technology	2.84	3: The PPM function broadens technology use by using tools to aggregate and analyze demand and active work, and by starting to integrate with other enterprise IT systems.

3.4
Enterprise Architecture
IT Maturity Assessment

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Enterprise Architecture
Maturity Levels of Objectives & Activities

Maturity Levels 1 2 3 4 5

n = 6

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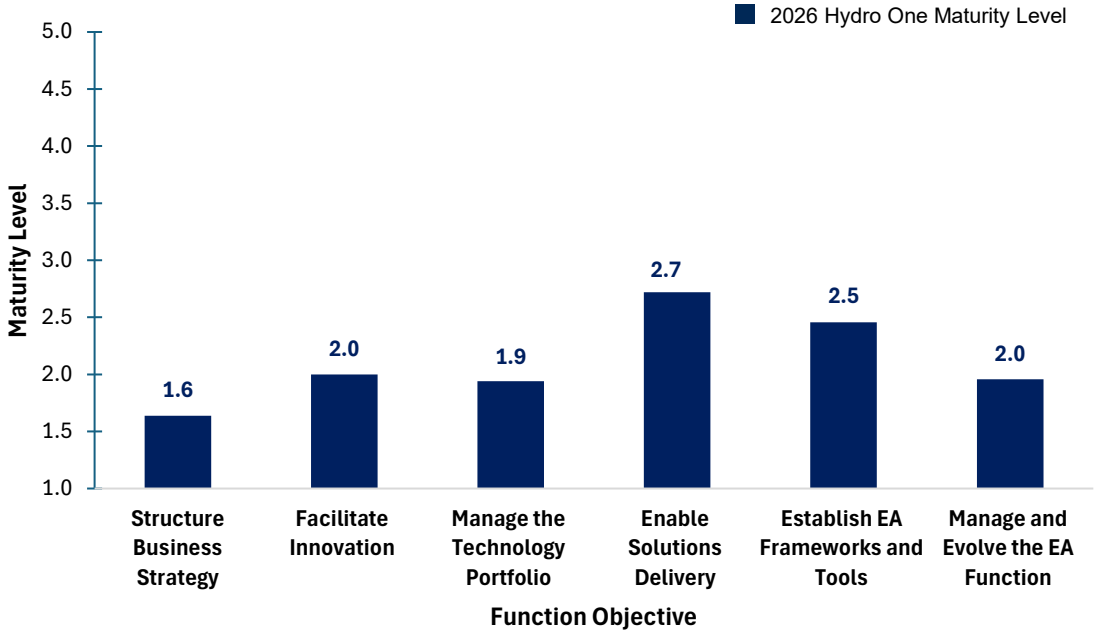
Enterprise Architecture

Enterprise Architecture Maturity Levels

Hydro One's Maturity Level: 2.1

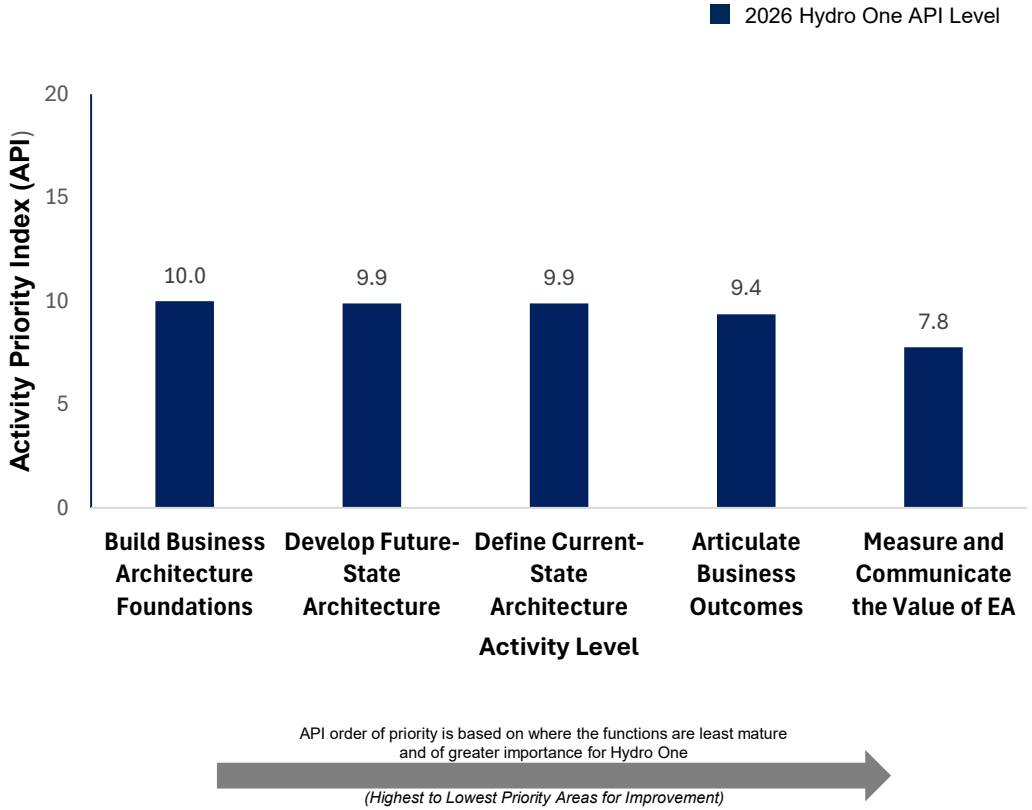
Peer Maturity Level: 2.5



Observations:

- Overall maturity for Enterprise Architecture was slightly lower than the peer benchmark
- The "Enable Solution Delivery" functional objective was the most mature within Enterprise Architecture
- The "Structure Business Strategy" functional objective was the least mature within Enterprise Architecture

Enterprise Architecture Top 5 Activity Priority Index (API)



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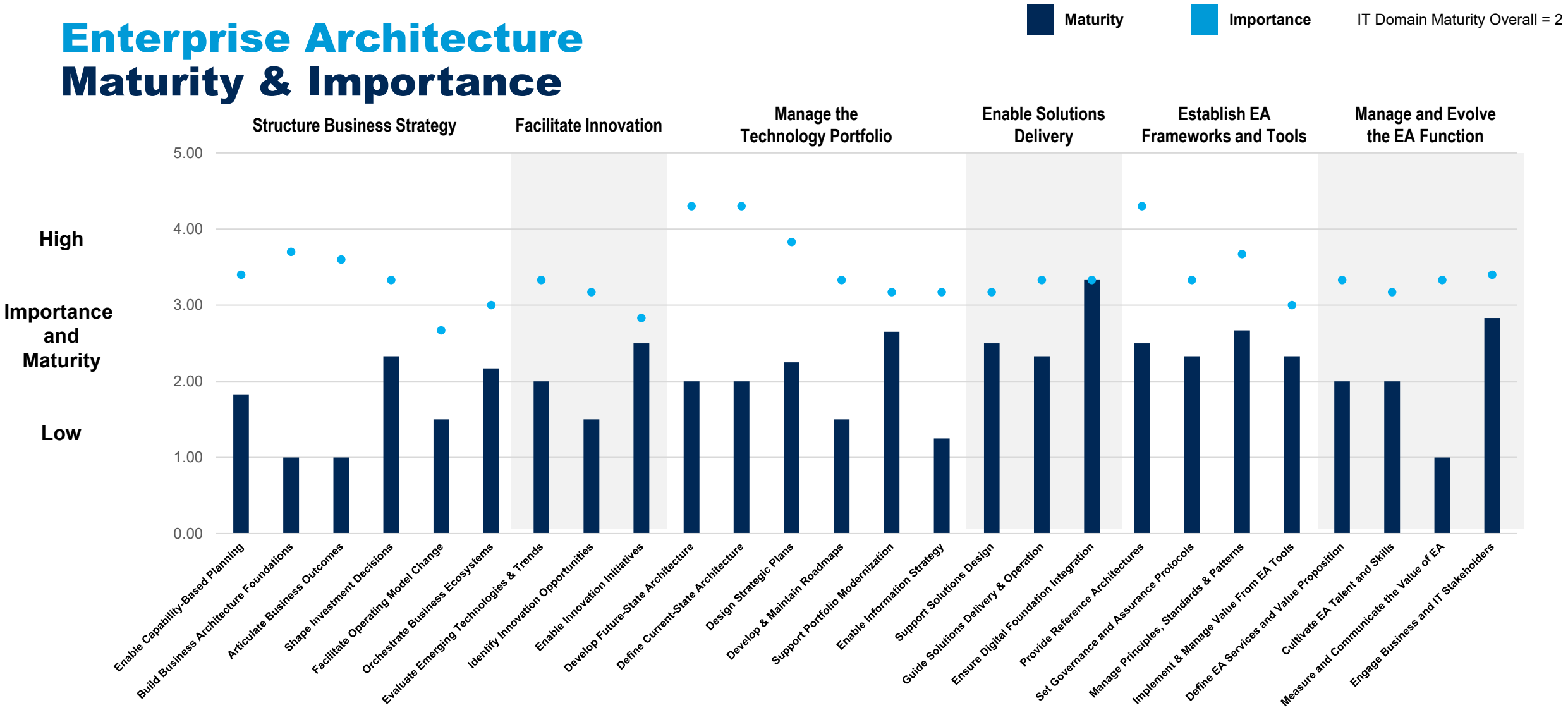
Enterprise Architecture
Maturity & Importance



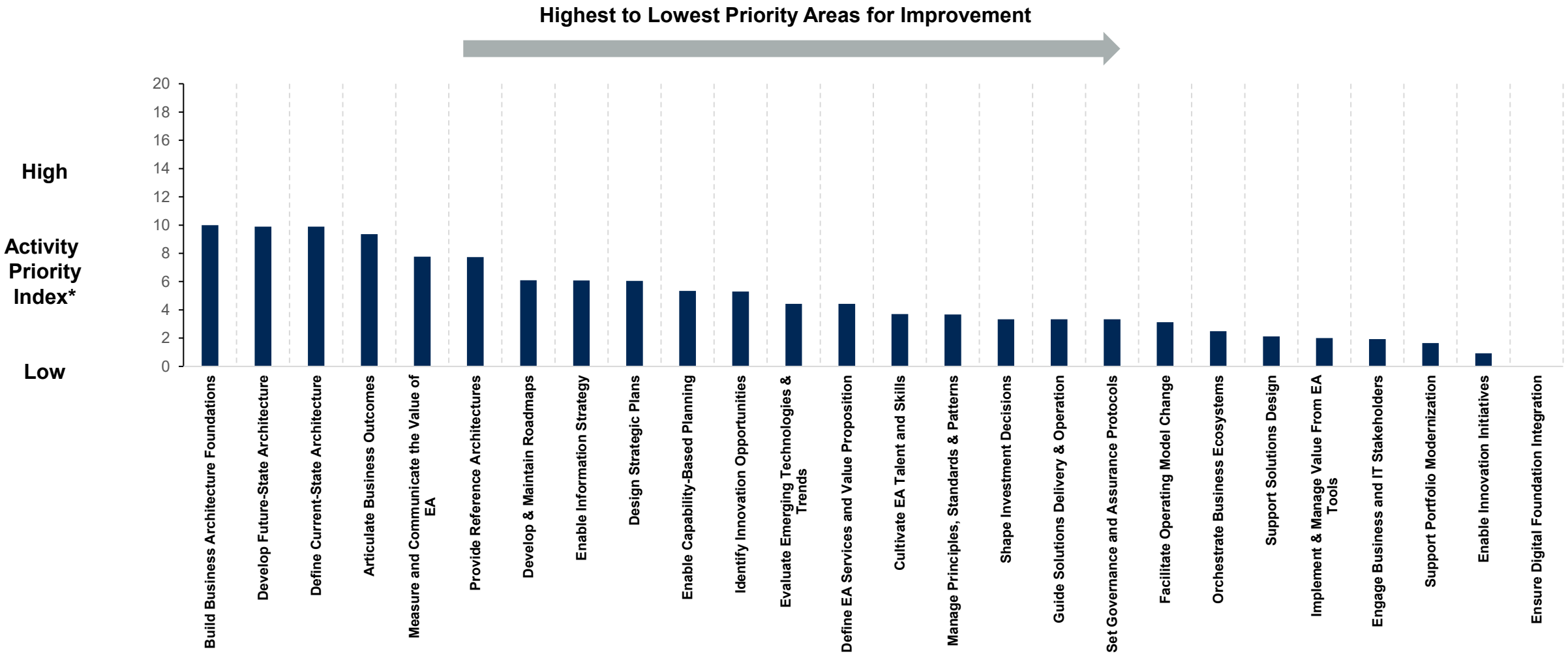
Lowest Maturity
- Build Business Architecture Foundations
- Articulate Business Outcomes
- Measure and Communicate the Value of EA

Highest Importance
- Develop Future-State Architecture
- Define Current-State Architecture
- Provide Reference Architectures

Importance: Measured on a scale ranging from 1 (Not Important) to 5 (Most Important). Importance measures how important each functional activity is to the overall effectiveness of your function in meeting its business objectives.

Enterprise Architecture
Activity Priority Index

The (API) identifies where the function is less mature in activities of greater importance.



***Activity Priority Index: Activity Priority Index (API) for an activity is computed as importance minus maturity multiplied by its importance. A higher API score indicates a greater priority for improvement to the organization.**

Enterprise Architecture (1 of 3)
Gartner Definition

Objective	Activity	Current Maturity	Maturity Level: Gartner Definition
Structure Business Strategy	Enable Capability-Based Planning	1.83	2: EA identifies some future-state technology capabilities that can support business objectives.
	Build Business Architecture Foundations	1.00	1: EA has no or few business architecture capabilities or artifacts, but is completely focused on technology architecture.
	Articulate Business Outcomes	1.00	1: EA does not identify business outcomes, but is completely focused on technology.
	Shape Investment Decisions	2.33	2: EA advises on individual investments and the investment portfolio for business and IT stakeholders.
	Facilitate Operating Model Change	1.50	1: EA has no business and operating model expertise, but provides perspectives to business and IT stakeholders on an ad hoc basis, if at all. 2: EA has some capabilities to assess impacts of trends and disruptions on business or operating model, and offers mainly technology-focused advice to stakeholders.
	Orchestrate Business Ecosystems	2.17	2: EA collaborates with procurement and vendor management to build end-to-end technology services ecosystems.
Facilitate Innovation	Evaluate Emerging Technologies & Trends	2.00	2: EA identifies and evaluates some emerging technologies for incremental optimization of existing IT portfolio.
	Identify Innovation Opportunities	1.50	1: EA identifies innovation opportunities on an ad hoc basis, if at all. 2: EA assesses innovation opportunities for technical fit with the future state on a regular basis with stakeholders.
	Enable Innovation Initiatives	2.50	2: EA provides support for technology innovation including ideation, implementation and integration. 3: EA works with business and IT stakeholders to facilitate the innovation process and to engage at various stages in the process based on organizational need.

Enterprise Architecture (2 of 3)
Gartner Definition

Objective	Activity	Current Maturity	Maturity Level: Gartner Definition
Manage the Technology Portfolio	Develop Future-State Architecture	2.00	2: EA supports stakeholders/business units by compiling artifacts and developing future-state technology plans.
	Define Current-State Architecture	2.00	2: EA inventories major enterprise applications and infrastructure.
	Design Strategic Plans	2.25	2: EA informs technology strategic plans regarding integration, applications, information, systems and processes using accepted practices.
	Develop & Maintain Roadmaps	1.50	1: EA maintains technology roadmaps that reflect collected input from stakeholders. 2: EA applies a formal process to roadmap how technology initiatives support business capabilities, while tracking project or product costs, benefits, risks and interdependencies.
	Support Portfolio Modernization	2.65	3: EA has a comprehensive view across the technology stack and advises IT delivery teams on sunset or update decisions based on an analysis of costs and benefits and business needs.
	Enable Information Strategy	1.25	1: EA documents disparate data sources, sets standards and provides governance for information.
Enable Solutions Delivery	Support Solutions Design	2.50	2: EA facilitates design efforts to ensure technology solutions abide by some technology standards and meet project expectations. 3: EA provides development teams with enterprise-level guidance through design patterns and triages involvement in projects or products based on business impact.
	Guide Solutions Delivery & Operation	2.33	2: EA engages with development teams across the delivery life cycle through a stage-gated process to review compliance with internal standards.
	Ensure Digital Foundation Integration	3.33	3: EA manages digital foundation technology standards and principles at minimum shared data and application platforms and services (APIs) capabilities.

Enterprise Architecture (3 of 3)
Gartner Definition

Objective	Activity	Current Maturity	Maturity Level: Gartner Definition
Establish EA Frameworks and Tools	Provide Reference Architectures	2.50	2: EA develops use cases to demonstrate the value of frameworks and to justify investment. Usage is in support of technology projects, focusing on gathering artifacts, documentation and modeling. 3: EA applies frameworks for principles and technology reference models and to deliver a metamodel of the enterprise to best support future- and current-state architecture.
	Set Governance and Assurance Protocols	2.33	2: EA defines a governance framework including principles, standards, reference models and a means for review, such as an architecture review board.
	Manage Principles, Standards & Patterns	2.67	3: EA engages directly with delivery teams through architecture councils to ensure principle and standards adherence and the application of patterns, and outlines clear steps for granting exceptions.
	Implement & Manage Value From EA Tools	2.33	2: EA develops use cases to demonstrate the value of tools and to justify investment. Usage is in support of technology projects, focusing on gathering artifacts, documentation and modeling.
Manage and Evolve the EA Function	Define EA Services and Value Proposition	2.00	2: EA works with IT leadership to collaboratively define a clear mandate for EA. EA identifies all IT stakeholders who contribute to enterprise architecture.
	Cultivate EA Talent and Skills	2.00	2: The EA leader formally defines the enterprise architect roles and identifies talent that aligns with those roles.
	Measure and Communicate the Value of EA	1.00	1: EA has no formal measurement or metrics to assess its performance.
	Engage Business and IT Stakeholders	2.83	3: EA engages with IT executives to make architectural decisions that support business outcomes and seeks occasional input from stakeholders outside IT and external partners such as vendors.

3.5 Infrastructure & Operations

IT Maturity Assessment

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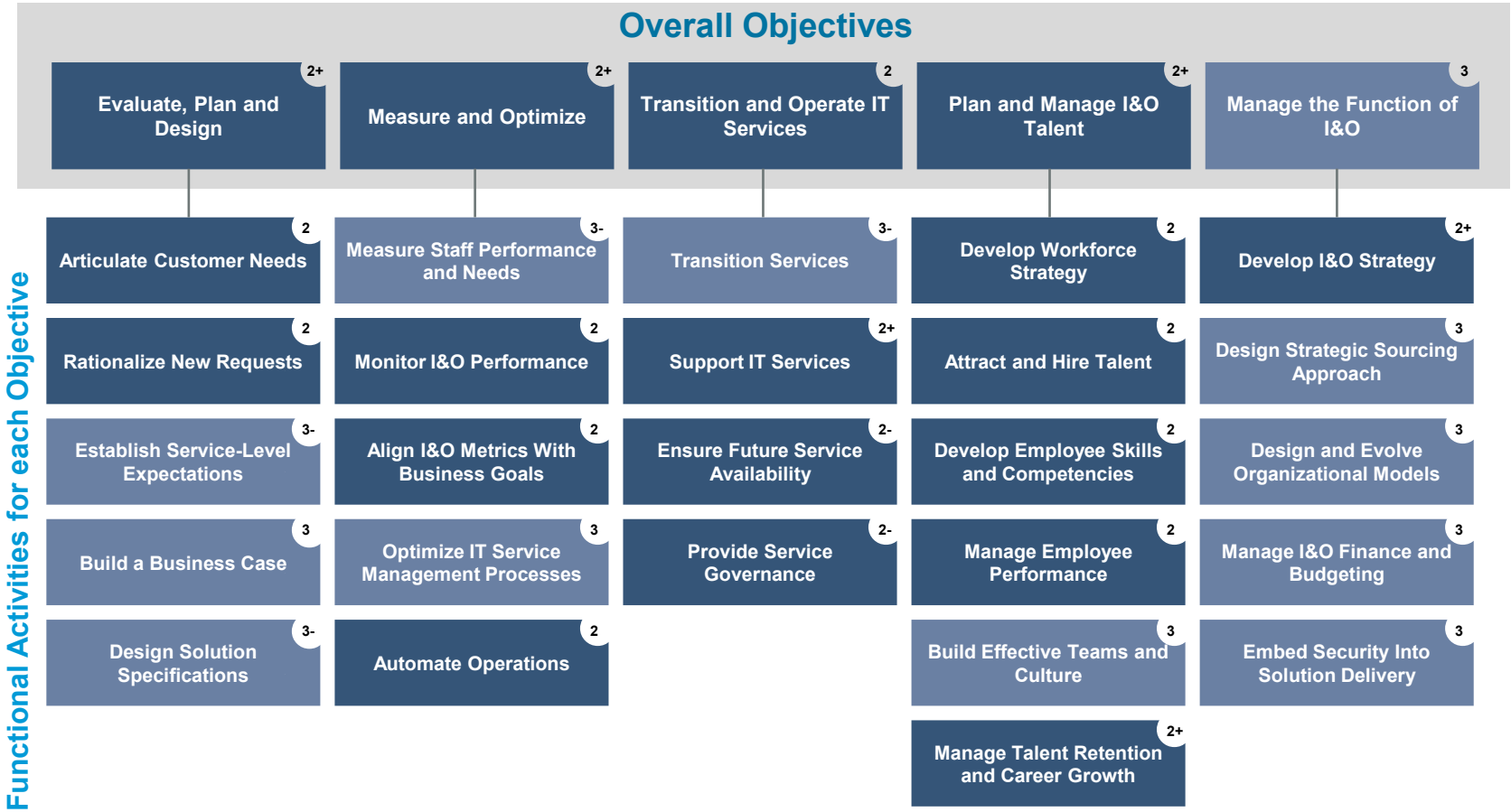
Infrastructure & Operations
Maturity Levels of Objectives & Activities



Maturity Levels 1 2 3 4 5

n = 6

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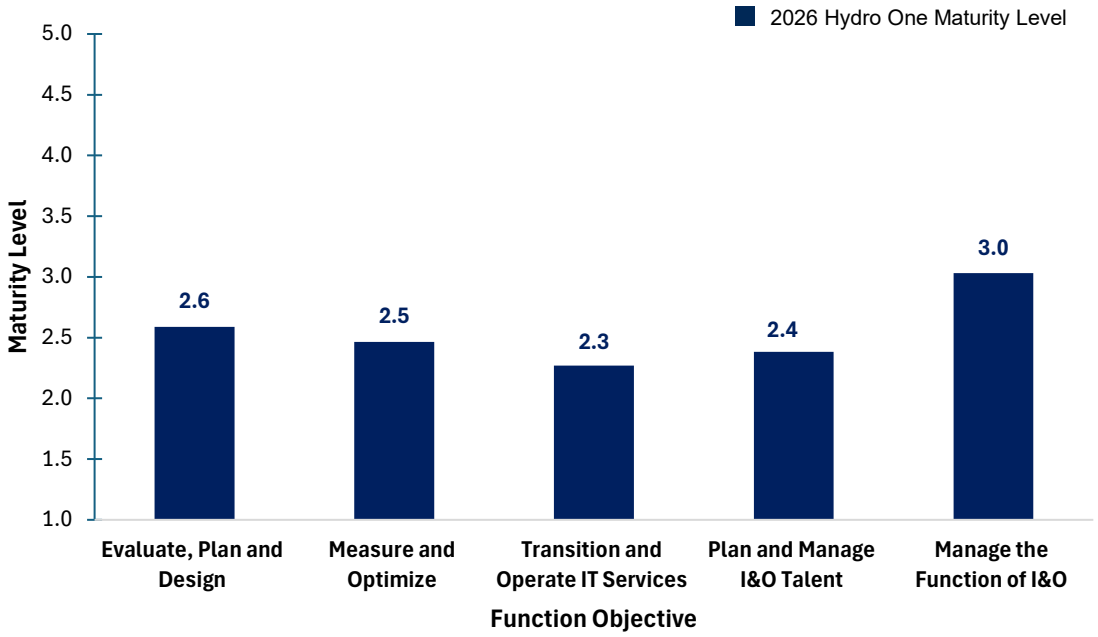
Infrastructure & Operations

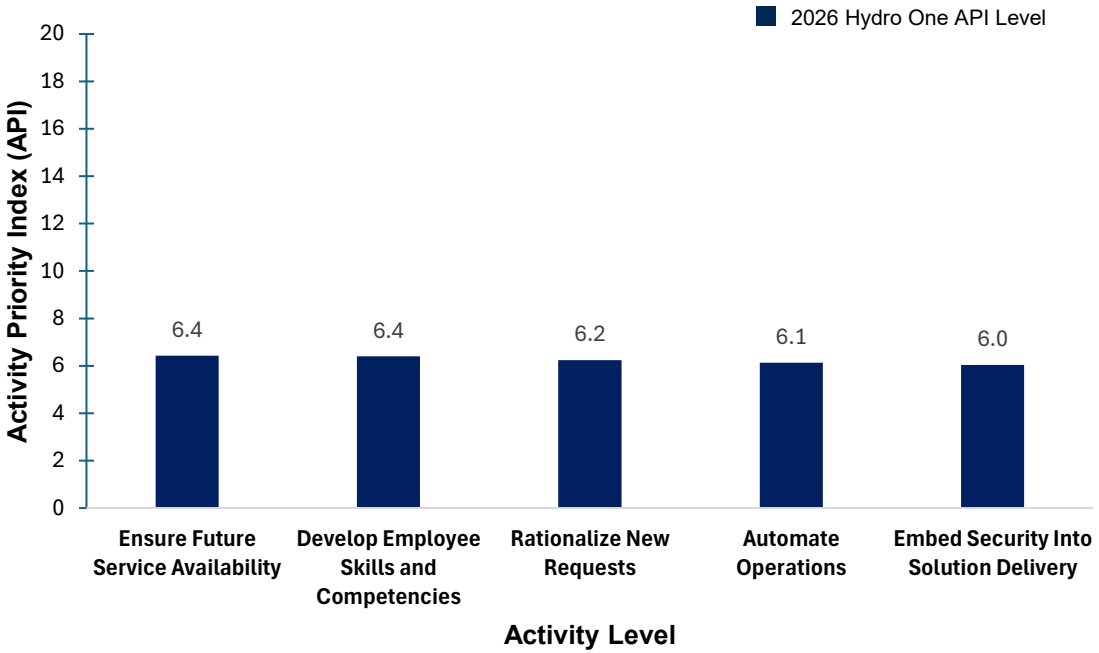
Infrastructure & Operations Maturity Levels

Hydro One's Maturity Level: 2.6

Peer Maturity Level: 3.2



Infrastructure & Operations Top 5 Activity Priority Index (API)



API order of priority is based on where the functions are least mature and of greater importance for Hydro One

(Highest to Lowest Priority Areas for Improvement)

Observations:

- Overall maturity for Infrastructure & Operations is slightly lower than the peer benchmark
- The "Manage the Function of I&O" functional objective was the most mature within Infrastructure & Operations
- The "Transition and Operate IT Services" functional objective level was the least mature within Infrastructure & Operations

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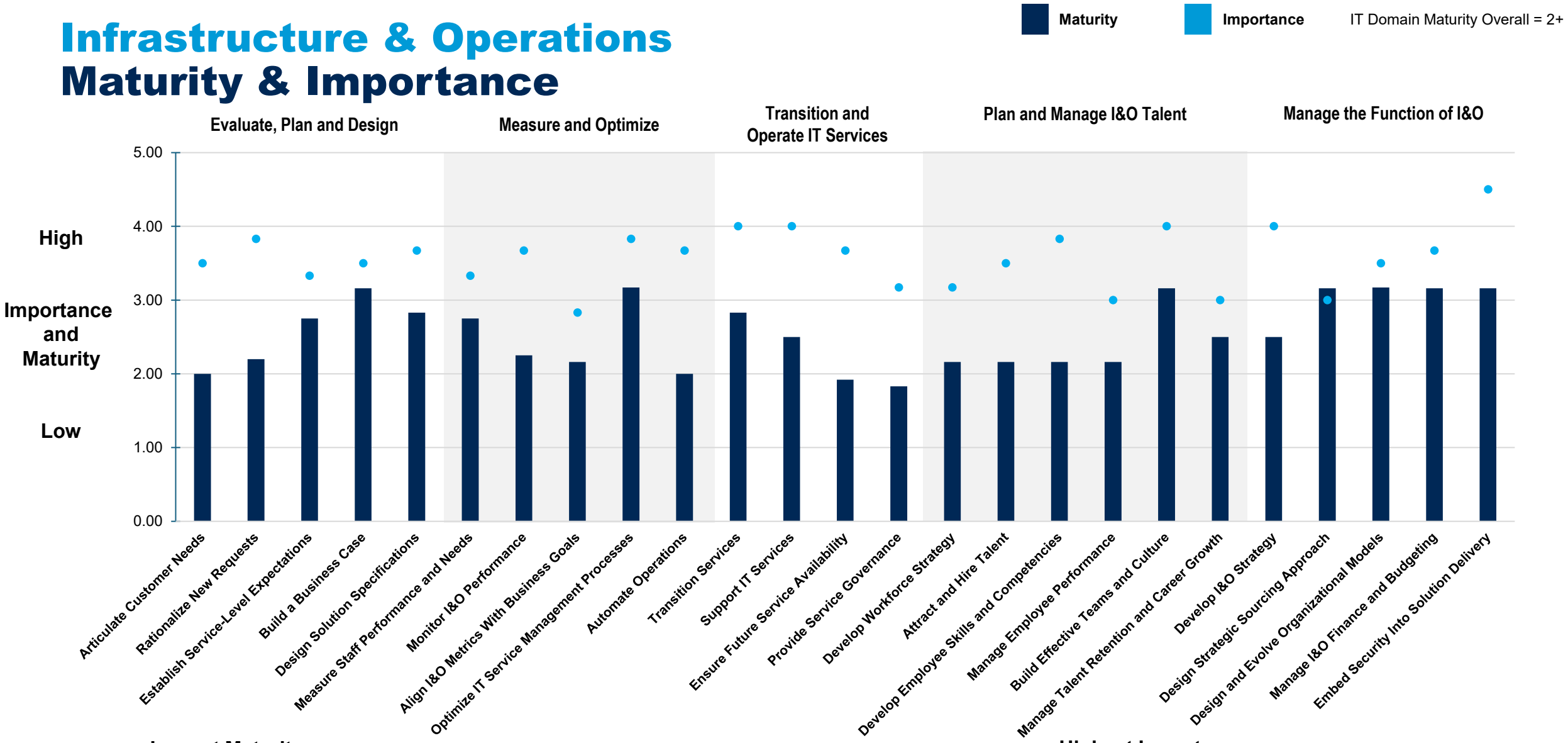
Infrastructure & Operations
Maturity & Importance



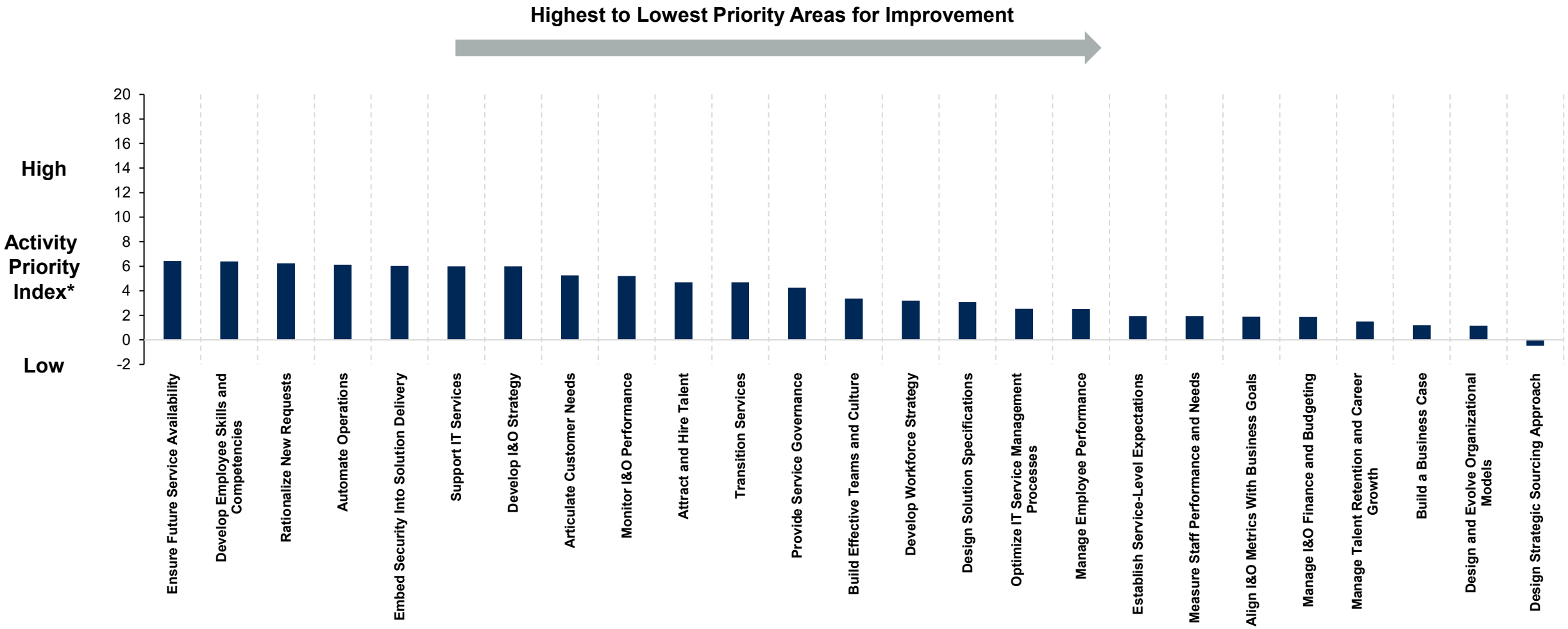
Lowest Maturity
- Provide Service Governance
- Ensure Future Service Availability
- Articulate Customer Needs

Highest Importance
- Embed Security Into Solution Delivery
- Transition Services
- Build Effective Teams and Culture

Importance: Measured on a scale ranging from 1 (Not Important) to 5 (Most Important). Importance measures how important each functional activity is to the overall effectiveness of your function in meeting its business objectives.

Infrastructure & Operations
Activity Priority Index

The (API) identifies where the function is less mature in activities of greater importance.



***Activity Priority Index: Activity Priority Index (API) for an activity is computed as importance minus maturity multiplied by its importance. A higher API score indicates a greater priority for improvement to the organization.**

Infrastructure & Operations (1 of 3)
Gartner Definition

Objective	Activity	Current Maturity	Maturity Level: Gartner Definition
Evaluate, Plan and Design	Articulate Customer Needs	2.00	2: Technology and architecture are predominant design drivers. Value is a function of technology indicators and measures.
	Rationalize New Requests	2.20	2: Internal IT discussions and review occur when evaluating technical investments. Only key/major projects are rationalized against current offerings.
	Establish Service-Level Expectations	2.75	3: Service levels for primary systems and applications are defined. Stakeholders help set performance levels for key projects.
	Build a Business Case	3.16	3: A business case is developed for business-impacting projects with a defined resource plan. Determining business value and ROI is difficult.
	Design Solution Specifications	2.83	3: Solution specifications are done for all projects and coordinated at an enterprise IT level based on business requirements.
Measure and Optimize	Measure Staff Performance and Needs	2.75	3: Staff or staff hours are associated with applications or projects, and individuals are evaluated according to objective I&O metrics for which they have some responsibility.
	Monitor I&O Performance	2.25	2: Metrics are defined and monitored within IT technology functions and used primarily for outage detection and troubleshooting, with occasional reporting.
	Align I&O Metrics With Business Goals	2.16	2: I&O performance goals are linked indirectly to business goals, and I&O reports performance to business units in a reactive manner.
	Optimize IT Service Management Processes	3.17	3: IT service management is formalized across the organization with documented responsibilities.
	Automate Operations	2.00	2: Some recurring tasks with predefined workflows are automated within infrastructure silos.

Infrastructure & Operations (2 of 3)
Gartner Definition

Objective	Activity	Current Maturity	Maturity Level: Gartner Definition
Transition and Operate IT Services	Transition Services	2.83	2: A service-based approach is adopted, but key service-based requirements may not be included due to time, quality or cost constraints.
	Support IT Services	2.50	2: Core ITSM processes (incident and change) and a help desk function are in place, but few metrics are captured and the level of support remains variable, with a reliance on a hero-oriented culture 3: I&O uses a process-based approach, with cross-functional processes and a service desk with a second and third line. Metrics that track IT performance provide governance.
	Ensure Future Service Availability	1.92	2: IT assets are identified and planning disciplines (e.g., capacity, disaster recovery and monitoring) are in place but unlikely to be standardized across I&O, resulting in outages.
	Provide Service Governance	1.83	2: Processes and metrics are available but are neither comprehensive nor analyzed for trends and patterns.
Plan and Manage I&O Talent	Develop Workforce Strategy	2.16	2: I&O workforce plans identify short-term staffing needs to inform head count plans for the coming fiscal period.
	Attract and Hire Talent	2.16	2: I&O leaders provide HR with job descriptions and skills definitions as requested.
	Develop Employee Skills and Competencies	2.16	2: I&O builds staff competencies through formalized and specialized skills development certification programs.
	Manage Employee Performance	2.16	2: I&O employee performance management involves annual calibration of employee performance against centrally mandated criteria.
	Build Effective Teams and Culture	3.16	3: I&O creates teams with a mix of technical and business skills, fostering an environment of recognition within and across teams and a process-centric mindset.
	Manage Talent Retention and Career Growth	2.50	2: I&O career progression planning is largely ladder-based progression. Retention efforts are limited to centrally managed activities. 3: I&O provides career progression information such as sample career paths and basic leadership skills training. Retention planning is formal and systematic.

Infrastructure & Operations (3 of 3)
Gartner Definition

Objective	Activity	Current Maturity	Maturity Level: Gartner Definition
Manage the Function of I&O	Develop I&O Strategy	2.50	2: Set priorities based loosely on IT-level objectives. 3: Define strategies influenced by business strategy and include forward-looking plans for resources and technologies.
	Design Strategic Sourcing Approach	3.16	3: Base sourcing decisions on enterprise needs, cost optimization and categorized vendors. Determine solutions in collaboration with other IT teams.
	Design and Evolve Organizational Models	3.17	3: Pilot cross-functional teams for increased collaboration across silos.
	Manage I&O Finance and Budgeting	3.16	3: Focus on IT objectives and manage the budget based on technology spend requirements.
	Embed Security Into Solution Delivery	3.16	3: Define controls to comply with security policies and procedures to manage the risk of security infringements. Monitor and manage all systems and services.

4.0 Enterprise IT Maturity Definitions for Functional Activities

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4.1
Data & Analytics
Maturity Definitions

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Maturity Level Definitions: Manage the Function

Level 1	Level 2	Level 3	Level 4	Level 5
Prioritize the Portfolio				
There is no process to evaluate data and analytic projects.	Projects are evaluated to estimate how many full-time equivalents they will require.	Projects are evaluated to determine if there is acceptable data quality to proceed.	Projects are tested as prototypes in a protected sandbox environment before significant resources are allocated for them.	The data & analytics function promotes the most promising projects out of a sandbox to a broader pilot and eventually a production deployment.
Allocate Support				
There is no consistent process to manage projects.	Teams are put in place to support D&A projects.	Stakeholders include a cross-functional team that blends various skills.	Product managers are used throughout the project from prototype to production.	Projects are executed using an organizational model that balances responsibilities between centralized and decentralized teams.
Monitor Portfolio Health				
There is no process to monitor project success.	Projects are monitored for accomplishment of key milestones.	Usage and adoption statistics of projects are tracked and made available.	User satisfaction for D&A projects is tracked and communicated.	Compliance with established service level agreements is tracked and communicated.

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Maturity Level Definitions: **Advance AI Maturity**

Level 1	Level 2	Level 3	Level 4	Level 5
Manage AI Risk				
Haven't thought about responsible AI or AI risk.	Regulations exist for what is permissible and what is not around AI.	Once there is a problem, it is tackled in an ad hoc fashion.	Principles and guidelines are followed to ensure responsible use of technology and data leads to business value.	A formal risk assessment, followed by a go/no-go or changes for each use case.
Adopt AI Technology				
The organization lacks a process to start AI projects.	The data & analytics function has a structured approach to prioritize AI use cases based on business functions and workflows. The data & analytics function works with the project management team to establish and define a business case to leverage AI.	The data & analytics function has a technical strategy for data, infrastructure and tools to facilitate access/analysis of data for AI. The D&A function has built an architecture and platform to support various AI techniques (machine learning, natural language techniques and computer vision).	The data & analytics function has built reusable AI components (models, core services, low-code/no-code/code) as part of supporting multiple AI roles and business functions.	The data & analytics function has a multidisciplinary team to provide AI products, services and resource pool through an internal marketplace. The data science teams support the development and deployment of models within production environment using an ad hoc deployment process.
Operationalize and Scale AI				
Building data science & AI models in a PoC or lab environment without integration into production applications or business workflow.	Integration of AI models with an application workflow (manual or automated); model deployment is manual.	Automation is in place with a CI/CD pipeline - MLOps (data science ML tool or open source).	Support for multiple AI pipelines through the framework of AI engineering (DataOps, MLOps, DevOps).	Composable system design is used, with reusable components, an ensemble of AI (composite) and AI model governance (observability, responsible AI).

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Maturity Level Definitions: Create & Maintain Analytics Content

Level 1	Level 2	Level 3	Level 4	Level 5
Create & Maintain Semantic Layers				
There is no metrics store for easy reporting and analysis.	Analytic data models are created by IT to facilitate reporting and analysis by clearly defining dimensional attributes and measures.	Analytic data models are created by IT and business to facilitate reporting and analysis by clearly defining dimensional attributes and measures.	User are empowered to combine data from modeled and nonmodeled sources.	Analytic data models are open to work with multiple platforms and applications.
Create & Maintain Visual Dashboards				
Dashboards are not widely used. There is no common process to build them.	Dashboards blend disparate data sources and are built to align organizational objectives.	Departments and business units are enabled to build their own dashboards. Also, dashboards include geospatial and location intelligence capabilities.	Dashboards adopt best practices in data visualization; dashboards are embedded into applications to provide intelligence at a particular point in the workflow of a business process.	Dashboards include real-time data integration and predictive analytics.
Create & Maintain Predictive Models				
There is little use of predictive analytics in the organization.	Predictive analytics are applied in targeted situations throughout the organization.	Advanced analytics are built using a variety of data from inside and outside the company. New processes are put in place to collect the right data to build predictive models.	Advanced analytic models are embedded into business processes to enable activities such as times series analysis, forecasting and granular segmentation. Models are continuously monitored for accuracy.	Data scientists are deployed across all advanced analytic initiatives promoting best practices such as ensemble modeling and sharing a library of advanced algorithmic capabilities.

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Maturity Level Definitions: Integrate & Manage Data (1 of 2)

Level 1	Level 2	Level 3	Level 4	Level 5
Build Organizational Alignment for Data				
Data is managed on a use-case-by-use-case basis.	Data management leverages standard approaches for well-identified needs to meet production requirements.	Data management, in addition to standard approaches, adopts new techniques using best-fit engineering to accommodate additional use cases.	Data management clearly articulates how to combine standard base approaches and best-fit engineering.	Data management decisions are informed by metadata (e.g., data usage, audit and statistics, lineage).
Improve Data Quality				
There is no program in place to improve data quality.	Data quality jobs are performed when errors occur via simple data quality tools or homegrown batch jobs.	Data quality is required for broader business initiatives and is part of enterprisewide data governance program.	Data quality is an ongoing strategic initiative and the value of high-quality data is demonstrated by significant returns on investment.	Data quality processes are autonomously embedded and integrated into critical business workflows rather than individual tasks.
Improve Metadata Maturity				
Data assets are not cataloged.	Data assets are collected and cataloged in a data catalog on an ad hoc basis.	Data assets are cataloged and managed in alignment with the data and analytics strategy.	Data catalogs indicate the trust level of each data asset.	Data catalogs indicate the level of value each data asset brings to the organization.
Integrate and Operationalize Data				
Data is integrated in a point-to-point fashion as required by each project, using a single style of data integration, such as ETL.	Isolated data integration practices are established by category of use case.	Data integration practices combine multiple styles of integration to adapt to changing demands within a single use case.	Data integration practices allow for shareability across multiple use cases.	Data integration practices coordinate data delivery across use cases by leveraging a robust metadata foundation.

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Maturity Level Definitions: Integrate & Manage Data (2 of 2)

Level 1	Level 2	Level 3	Level 4	Level 5
Foster the Data Ecosystem				
Data is limited to a single use.	Data can be shared locally with fixed agreed-upon semantics within a single site and context.	Data semantics can be shared regionally and mapped over various sources and applications.	Data can be shared enterprisewide with fixed semantics to ensure shareability of consistent, centrally governed data.	Data sharing is resolved based on the usage context and can combine all of the previous levels of shareability at the local, regional and enterprise levels.
Manage FinOps				
Data ecosystems costs are not being monitored nor planned for. Remediation plans happen as an afterthought.	Data ecosystem costs are being tracked; tracking is along agreed-upon metrics aligning cost and value.	Data ecosystem costs are being analyzed for root cause analysis leading performance management recommendations.	Data ecosystem costs are being predicted based on consumption patterns and planned consumption growth when adding users, data and new use cases.	Data ecosystem performance improvement recommendations activities are automated by leveraging augmented FinOps capabilities and predictive cost assessments.

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Maturity Level Definitions: Govern Data & Analytics Assets (1 of 2)

Level 1	Level 2	Level 3	Level 4	Level 5
Determine the Purpose of Governance				
The purpose of D&A governance is not clarified.	The data & analytics function recognizes a clear distinction between data governance and data management. Business and IT are starting to talk about issues, mostly at the event or data level.	Executive support exists and funding provided for a enterprise effort.	Governance is driven by business needs, not technical or data issues.	Governance is a business capability embeded in data-driven D&A strategies.
Determine Which Assets Need Governance				
Data governance is mostly reactive when business processes fail.	Sporadic plans are set up in response to leaders acknowledging systemic issues in data assets.	IT identifies data assets that impact multiple business processes or outcomes. However, business leaders still take little interest.	Business and IT teams work collaboratively to identify data assets that need to be governed.	Each data asset's governance needs is clearly articulated. For example, each asset describes its governance policy for data ethics, privacy and quality.
Set Governance Policies				
There is no coordination of governance policies. Data problems are "fixed" as a reaction to problems that arise.	Governance policies are recognized as discrete decisions. A coordinated effort is made to set governance policies consistently and proactively around the organization.	Certain governance policies, such as security, privacy or retention are assigned by key executives, even business leaders.	There is a recognition that data governance policies impact and depend on each other. As a result, governance policies such as data quality, ethics and availability are reconciled in a coordinated fashion taking these dependencies into account.	Governance policies are set automatically in context to specific business outcomes and goals set by the organization.

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Maturity Level Definitions: Govern Data & Analytics Assets (2 of 2)

Level 1	Level 2	Level 3	Level 4	Level 5
Enforce Governance Policies				
Because data governance policies are not set properly and there is no enforcement. Data is just "fixed" when something breaks.	IT creates its own central team to handle "all things data" such as remediating data and interpreting policy.	Shared services, even within the business, is tasked with interpreting and enforcing data policy infractions and brainstorming a resolution.	Business stewards the enforcement of governance policies, but IT handles most of the exceptions.	Governance policies are transparent and embedded in the day-to-day work of business users.
Communicate Governance Policies				
The data and analytics function doesn't communicate about governance activities.	Data & analytics governance efforts are made visible; they stand out as distinct work, separate from day-to-day business.	IT monitors performance of data and analytics governance efforts and reports back to the business. Focus is on tactical measures of success such as number of data quality clean-ups.	Advocacy for data governance thrives in the business that now sponsors and drives numerous governance efforts.	All aspects of governance are effectively instrumented by measures that are publicly available.

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4.2
Enterprise Applications
Maturity Definitions

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Maturity Level Definitions: Plan the Applications Portfolio Strategy (1 of 3)

Level 1	Level 2	Level 3	Level 4	Level 5
Develop applications strategy				
No formal, unified applications strategy exists.	An ad hoc applications strategy is occasionally developed in response to immediate business pressures or specific initiatives, but it is informal, short-term and not broadly communicated.	A formal applications strategy is documented, periodically reviewed and communicated to relevant stakeholders. The strategy aligns with overall IT strategy and addresses current business needs.	The multiyear applications strategy is informed by a comprehensive analysis of the application portfolio, cloud strategy, the vendor and integration landscape, and external trends. It is proactively updated and aligned with evolving business priorities, with input from both IT and business leaders.	The applications strategy is co-created in partnership with business, IT and I&O stakeholders. It is fully aligned with enterprise and cloud strategy and continuously refined to drive innovation and long-term value.
Plan applications life cycle				
The applications organization does not plan or prioritize the applications life cycle; activities are reactive and ad hoc.	Application life cycle planning and prioritization are performed on a per-application basis, primarily driven by vendor timelines and recommendations. No formal roadmap exists.	Application life cycle planning and prioritization align with business strategy, consider application health and fitness, and are linked to business capabilities and outcomes. A capabilities roadmap, consisting primarily of enhancement requests, is maintained, and the vendor product roadmap is monitored for alignment.	Application life cycle plans and priorities incorporate opportunities for emerging technologies and innovations over the next 2-5 years. A capabilities roadmap is maintained and aligned with vendor product roadmaps.	Leveraging input from business users in beta testing programs, the organization proactively plans and prioritizes application life cycles to support multiple future business scenarios, each with distinct life cycle strategies and priorities. A capabilities roadmap looking 3-5 years ahead is actively maintained.
Manage capability roadmap				
Capability roadmap management is ad hoc or nonexistent; future-state vision and capability mapping are not defined and planning is reactive to immediate needs.	A basic capability inventory is maintained and future-state vision is defined only at a high level; capability mapping is informal and updated sporadically.	Capabilities are mapped and classified at multiple levels of specificity; a structured process exists for updating the roadmap, but scenario planning and interdependency analysis are limited.	Scenario planning and automated data gathering inform the roadmap; robust governance ensures alignment with business and IT strategy and the roadmap incorporates composable architecture principles.	Capability roadmap management is continuous and data-driven, leveraging advanced analytics and cross-domain insights to optimize for agility and business value.

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Maturity Level Definitions: Plan the Applications Portfolio Strategy (2 of 3)

Level 1	Level 2	Level 3	Level 4	Level 5
Plan modernization approach				
Modernization of legacy systems is ad hoc, reactive and only undertaken to eliminate unacceptable risk in a single system. Decisions are made without a structured framework, and there is minimal business involvement.	IT initiates and leads modernization projects, typically in response to urgent risks or technology obsolescence. Efforts are limited to specific platforms or technologies, with little business input or long-term planning.	Modernization initiatives are jointly led by business and IT, targeting business-driven outcomes and risk reduction within key business domains. Decisions begin using structured frameworks (e.g., 5R), and prioritization considers risk and business value.	Legacy system modernization is integrated into enterprise business transformation programs. Efforts are aligned with strategic business objectives, supporting innovation and agility. Modernization decisions leverage the full range of 5R options and impact is measured and communicated across the enterprise.	Modernization of legacy systems is an ongoing, structured discipline with dedicated resources and continuous investment from IT and business stakeholders. It is embedded in enterprise governance and involves continuous evaluation and evolution to meet changing business and technology requirements. Decisions are made using formal frameworks (e.g., 5R), and outcomes are measured, reviewed and optimized.
Evaluate and select applications				
Application evaluation and selection are entirely reactive and ad hoc, typically undertaken by isolated teams or business units. No other IT, security or business team is involved; no formal criteria or decisions are documented.	Application evaluation and selection are primarily driven by perceived business needs, with minimal involvement from IT risk, enterprise architecture or enterprise applications teams. Decisions focus on technical fit or immediate business needs rather than long-term strategy, and ROI/total cost of ownership (TCO) benchmarks are inconsistently or never applied.	The enterprise applications team leads a structured, project-by-project evaluation process in collaboration with other IT groups, including enterprise architects, I&O and security. The process includes active business-stakeholder involvement, defined criteria for requirements and standards, preliminary ROI/TCO analysis, vendor ecosystem assessment, and formal vendor security and compliance documentation. Vendor proofs of concept (POCs) are conducted to validate critical product-management feature sets before final selection.	Application evaluation and selection are governed by dedicated IT and business resources working jointly to ensure alignment with IT strategy, I&O and enterprise architecture considerations. The process is guided by a documented framework for requirements, standards and strategic fit, with decisions made in coordination with formal business-stakeholder involvement. Evaluation and selection activities are integrated with broader enterprise transformation or optimization initiatives, ensuring long-term alignment with organizational goals.	Application evaluation and selection is a continuous, disciplined selection capability. Dedicated IT and business resources proactively scan for new opportunities and periodically reassess existing applications against evolving business needs. A documented enterprisewide framework ensures ongoing alignment and repeatability.

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Maturity Level Definitions: Plan the Applications Portfolio Strategy (3 of 3)

Level 1	Level 2	Level 3	Level 4	Level 5
Assess and adopt emerging tech				
The enterprise applications function has no defined approach to evaluating or adopting emerging technologies; any adoption is ad hoc, driven by immediate needs within isolated projects.	The enterprise applications team is responsible for evaluating and selecting emerging technologies for specific business domains or key projects, but processes are informal and focused on IT needs.	The enterprise applications function follows a well-defined process for evaluating and adopting emerging technologies at the business unit or division level, ensuring alignment with both IT and business requirements.	The enterprise applications function has an established, organizationwide process for evaluating, selecting and adopting emerging technologies. This process is fully integrated with business strategy and ensures consistent use across the enterprise.	The enterprise applications function continuously evolves its approach to emerging technologies. It leverages a dedicated innovation lab to assess and pilot emerging technologies and proactively engages with external partners and ecosystems to drive innovation and value.

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Maturity Level Definitions: Manage the Applications Portfolio (1 of 3)

Level 1	Level 2	Level 3	Level 4	Level 5
Implement applications				
Implementations are reactive and siloed, with no dedicated leadership or change roles, spotty communication, opportunistic resourcing and virtually no risk planning — failures come as unwelcome surprises.	Basic templates and checklists guide projects inconsistently across teams; communications and resource estimates exist but are ad hoc, and risks are logged but not actively monitored.	A formal, organizationwide methodology — with governance forums, a dedicated change management team, stakeholder analysis and clear requirements — aligns implementations to business objectives, backed by a one-off premortem and milestone-based risk reviews.	Implementations are characterized by continuous improvement cycles and evaluated by adoption KPIs; change readiness assessments and two-way feedback loops drive communications; resource pools and vendor SLAs are actively managed, risks are continuously monitored, and contingencies are in place.	Leadership fosters an agile approach with a product mindset for implementing new features. Communications are real time, personalized and co-created. Resources adapt dynamically through a center of excellence (COE) and strategic partnerships. Automated risk intelligence, combined with postmortems, drives relentless innovation.
Integrate applications				
There is no defined integration strategy, tools or ownership; integration is ad hoc and inconsistent.	Basic integration resources are available, with some recommended tools and macro-level sourcing policies. Applications teams address integration needs independently, with limited support.	A centralized integration team provides strategy, delivery services and support for selected strategic tools. Common patterns and guidelines are established and a formal sourcing strategy is managed.	A centrally governed integration platform offers applications teams shared technology infrastructure, education and engagement. The integration team proactively supports and facilitates integration across the organization.	Integration is pervasive and self-service, empowering IT and business users with role-based access to a robust, centrally managed platform. The integration function continuously aligns with business strategy and drives innovation and empowerment across all personas.

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Maturity Level Definitions: Manage the Applications Portfolio (2 of 3)

Level 1	Level 2	Level 3	Level 4	Level 5
Manage risk, security and compliance				
Application risk, security and compliance are managed reactively and inconsistently, with no formal policies or processes.	Basic risk, security and compliance policies exist but are applied inconsistently across applications. Responsibility is largely decentralized and dependent on individual teams.	Standardized risk, security and compliance processes are established and enforced across all applications, with central oversight and regular assessments to ensure alignment with regulatory and business requirements.	Application risk, security and compliance are proactively managed using automated tools, continuous monitoring and regular training. The organization anticipates and responds to emerging threats and regulatory changes.	Application risk, security and compliance are fully embedded into the application life cycle and business strategy, with advanced analytics empowering IT and business users. The organization leads in adopting best practices and continuously improves its posture in alignment with business goals.
Monitor application portfolio				
There is no complete or accurate inventory of applications in the portfolio.	An inventory of applications with basic attributes exists, and the portfolio is reviewed irregularly, typically in response to specific needs or initiatives.	Responsibility for monitoring the application portfolio is clearly assigned and regular assessments are conducted, including evaluation of business alignment and application fitness.	Portfolio assessment results are routinely shared and discussed with business stakeholders, with a clear understanding of how portfolio health impacts business operations.	The applications function actively partners with business stakeholders, including strategic portfolio management and EA, to monitor and actively manage applications as assets, continuously evaluating technical debt, business value and overall portfolio fitness.
Maintain applications				
Application maintenance is reactive and undocumented; issues are addressed only if and when they arise.	Basic maintenance processes, such as patching and urgent updates, exist and are applied inconsistently across applications; maintenance activities are typically reactive, driven by vendor recommendations or immediate needs, rather than being proactive to enable or support new capabilities.	Standardized and documented maintenance processes are established and consistently followed, with regular updates, patches, and performance monitoring to ensure reliability, security, and alignment with business needs.	Maintenance activities are supported by proactive monitoring to minimize downtime. A multiyear strategy with key vendors guides long-term planning, technical debt is actively managed and continuous documentation for cloud-based apps is in place.	Maintenance is fully integrated with business strategy and supported by continuous improvement practices. A multiyear strategy with key vendors guides long-term planning, technical debt is managed proactively and continuous documentation is in place for cloud-based apps.

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Maturity Level Definitions: Manage the Applications Portfolio (3 of 3)

Level 1	Level 2	Level 3	Level 4	Level 5
Rationalize applications				
Application rationalization is ad hoc, occurring only to address immediate critical cost pressures, or when a vendor sunsets an application or essential features.	IT leads rationalization efforts, which are focused on short-term cost savings and typically target redundant or obsolete applications, especially when vendors are discontinuing support.	Rationalization is driven by a collaborative business and IT team. It aims to optimize costs and standardize processes within specific business domains, often in response to vendor changes or consolidation opportunities.	Application rationalization is embedded in broader business transformation initiatives, supporting strategic cost reduction and process standardization across the enterprise, including proactive responses to vendor roadmaps.	Application rationalization is a continuous, disciplined process with dedicated resources and ongoing funding. It ensures the portfolio remains cost-effective, up-to-date and aligned with enterprisewide business process standardization.

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Maturity Level Definitions: Manage the Applications Function (1 of 2)

Level 1	Level 2	Level 3	Level 4	Level 5
Conduct functional strategic planning				
The organization does not have a formal or documented strategic plan for the applications function.	The IT strategic plan includes basic plans and objectives for applications but does not include a dedicated or detailed applications strategy.	The applications function conducts structured, annual planning exercises to define and document a strategic plan, explicitly deciding trade-offs between long-term objectives and immediate needs.	The applications function uses a structured process with predefined triggers to revisit and adapt the strategic plan in response to internal and external changes.	The applications function formally defines and regularly assesses metrics on the success of its functional strategy. The strategic plan includes the function's role in advancing business-led technology delivery.
Manage finances and operations				
The organization has ad hoc or informal application financial management, with little to no structured budgeting or investment decision processes.	The applications function maintains a budget for day-to-day operations, bases new capability funding on formal business cases and committee approval, and uses prior-year costs and consumption patterns to set maintenance and enhancement budgets.	The applications function consistently documents investment decision considerations, and coordinates its budget process with applications and business strategic planning.	Product managers own and are accountable for ongoing budget decisions, funding is allocated to business capability-aligned product lines based on value and predefined triggers are used to readjust funding in response to business environment changes.	The organization uses value stream mapping to guide funding and budgeting, updates budget forecasts based on actual consumption, and separates capital and operational expenses to inform resource allocation decisions.
Plan for and manage applications talent				
The organization manages application staffing and skills needs in an ad hoc manner, with minimal structured planning or development processes.	The applications function builds teams with the necessary combination of skills for current and emerging technologies, and regularly conducts technical skills-focused performance reviews and development planning across roles.	Career paths for vertical progression within role families are defined, development programs address leadership and cross-functional skills, and managers are accountable for coaching and staff development through metrics and feedback.	The applications function periodically refines its workforce strategy to align with changing business demands, and career paths are designed to promote lateral and cross-functional moves across role families and functions.	A well-defined process forecasts future role and skill needs using internal supply and demand data to guide staff development, and the effectiveness of training programs is regularly measured to drive continuous improvement.

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Maturity Level Definitions: Manage the Applications Function (2 of 2)

Level 1	Level 2	Level 3	Level 4	Level 5
Measure functional performance				
The organization measures application performance informally or inconsistently, with limited use of structured metrics or reviews.	The applications function uses historical data to set KPI targets and holds regular meetings to discuss KPI performance and action plans.	Application scorecards include regularly reviewed and updated financial and project performance metrics, ensuring alignment with business and IT changes.	Application scorecards feature high-quality, consistently measured data and composite metrics that provide a balanced, overall view of performance.	Application scorecards emphasize business impact and strategic contribution and include predictive metrics that enable proactive, forward-looking planning.

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Maturity Level Definitions: Partner With Stakeholders (1 of 2)

Level 1	Level 2	Level 3	Level 4	Level 5
Communicate applications value story				
The applications function communicates value informally or reactively, with little structured evidence or messaging.	The applications function provides evidence of value delivered only when specifically requested by stakeholders.	A set of performance and effectiveness metrics is regularly communicated to stakeholders, and the function clearly articulates how IT investments and costs translate into business value.	The applications function uses scorecards to demonstrate its contribution to enterprise goals and communicates the strategic plan to business partners regarding their goals.	The applications function employs targeted analysis to tailor business outcome-based results to address the specific objectives of different stakeholders.
Enable applications adoption				
The organization manages application adoption informally (e.g., through self-service or on-the-job training), with limited or ad hoc stakeholder involvement.	Stakeholder groups are formally identified for each major application deployment.	Stakeholder champions/influencers participate in planning sessions for application rollouts, and adoption plans include tailored communication and training for different stakeholder groups.	A cross-functional steering committee oversees major adoption initiatives, supported by a network of business champions or superusers to promote adoption and provide peer support.	Dedicated enablement and change management roles or teams partner with stakeholders throughout the application life cycle to maximize adoption success.
Manage vendor relationships				
The applications function interacts with vendor account teams on a reactive basis.	The applications function engages proactively with customer success teams from vendors.	The applications function works in alignment with SPVM (sourcing, procurement and vendor management) and SPM (strategic portfolio management) on vendors that span domain areas.	The applications function partners strategically with vendors (e.g., early access to tech and future roadmaps) to drive key business initiatives.	The applications function serves as the business' representative, communicating organizational needs to vendors to ensure business capabilities are met.

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Maturity Level Definitions: Partner With Stakeholders (2 of 2)

Level 1	Level 2	Level 3	Level 4	Level 5
Establish governance model				
The organization has informal or inconsistent governance for application management, with unclear policies, processes or roles. Application ownership is ad hoc, with no responsible, accountable, consulted and informed (RACI) processes.	IT and business stakeholders recognize the need for an application management policy, process, and defined roles and responsibilities.	Policy, process and roles and responsibilities for application management have been clearly defined, but it is difficult to adapt to changing business needs. The applications function uses a COE governance model for strategic vendors and ownership is established through RACI processes.	The applications function has a formally documented mandate or charter, and governance policies, processes and roles are well-understood and consistently adhered to throughout the organization.	Governance enables business-led technology initiatives and fosters frictionless collaboration between IT and business, driving positive business outcomes aligned with the applications strategy. The applications function uses a COE governance model for portfolios of related applications and formal ownership practices are established for all applications.
Partner with internal stakeholders				
The applications function interacts with internal stakeholders (e.g., sourcing, procurement and vendor management leaders, infrastructure leaders, leaders of application users) as required, typically in a reactive manner.	The applications function interacts with internal stakeholders proactively but on an inconsistent and ad hoc basis.	The applications function coordinates with other business functions when its activities may impact or require input from them.	The applications function partners with finance to monitor the business value and risks of investments and collaborates with stakeholders to align metrics with business goals and address any gaps.	The applications function and business stakeholders share a common vision and accountability, with empowered cross-functional teams co-creating solutions that drive innovation and business value.

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4.3
Program & Portfolio Management
Maturity Definitions

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Maturity Level Definitions: Partner With Stakeholders

Level 1	Level 2	Level 3	Level 4	Level 5
Define a Stakeholder Management Approach				
The PPM function provides limited guidance on identifying and engaging stakeholders, if any.	The PPM function helps product, project, program or portfolio managers to clarify stakeholder roles and expectations before the initiation of the initiative.	The PPM function helps product, project, program or portfolio managers classify their stakeholders based on their influence and build personal relationships with influential stakeholders.	The PPM function helps product, project, program or portfolio managers classify their stakeholders based on their communication styles and challenge stakeholder assumptions when necessary.	The PPM function provides tools and guidance to streamline and simplify the engagement experience of stakeholders.
Engage Sponsors				
Sponsor engagement relies on the skills and practices of individual PMs (i.e., product, project, program or portfolio managers).	The PPM function provides tools and guidance to help product, project, program or portfolio managers structure the sponsor engagement approach.	The PPM function defines sponsor responsibilities and helps product, project, program or portfolio managers capture sponsor expectations.	The PPM function actively tracks sponsor engagement.	The PPM function provides onboarding and drives the effectiveness of sponsors, and helps product, project, program or portfolio managers tailor sponsor engagements.
Manage Vendors				
The PPM function engages with vendors in an ad hoc and informal manner.	The PPM function applies a consistent framework to manage vendors, tracking vendor behavior to improve vendor partnerships.	The PPM function triages effort based on the vendor's strategic significance and risk profile, and defines triggers for exiting unhealthy vendor partnerships.	The PPM function aims to boost vendor engagement using talent management strategies and flexes its vendor management approach to work more effectively with niche/emergent vendors.	The PPM function enables business partners to manage their own vendor relationships, and partners with vendors to create joint growth opportunities.

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Maturity Level Definitions: Manage Strategic & Other Portfolios (1 of 2)

Level 1	Level 2	Level 3	Level 4	Level 5
Steward Investment Allocation				
The PPM function does not support investment allocation or supports it only informally.	The PPM function provides guidance and tools to help stakeholders create detailed business cases for their proposed initiatives.	The PPM function provides flexibility for sponsors to choose business case rigor based on the characteristics of the initiative.	The PPM function shifts its support from a project- to portfolio-centric approach and collaborates with key business and IT stakeholders to define business-capability-informed, flexible funding models.	The PPM function collaborates with key stakeholders to curate the decision input relevant to support organization investment decisions.
Facilitate Portfolio Prioritization				
Portfolio decision makers approve proposals on a first-come, first-served basis.	Portfolio decision makers review all initiatives to prioritize those with a higher impact on the organization's strategic objectives.	The PPM function helps portfolio decision makers review and approve only those initiatives that require their consideration using standard evaluation criteria.	The PPM function's support enables portfolio decision makers to align roadmaps with organization objectives, define a target portfolio structure based on the relative importance of business capabilities and reprioritize as the investment roadmap changes.	The PPM function measures each initiative's relative contribution to business capabilities and collaborates with key portfolio decision makers in making prioritization and sequencing decisions.
Manage Risks and Interdependencies				
The PPM function manages risks and interdependencies informally.	The PPM function employs a standard framework to identify and manage common risks and interdependencies.	The PPM function provides coaching to other delivery staff on when and how to vary risk management rigor.	The PPM function frequently seeks input on risk to achieving business outcomes from a diverse set of stakeholders and establishes risk-escalation rules.	The PPM function identifies, tracks and communicates interdependencies across multiple portfolios to support portfolio decisions.

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Maturity Level Definitions: Manage Strategic & Other Portfolios (2 of 2)

Level 1	Level 2	Level 3	Level 4	Level 5
Select and Report Portfolio Metrics				
The PPM function leaves performance management to the discretion of project, product or program managers.	The PPM function tracks operational metrics at the initiative level and rolls them up to report on overall portfolio health.	The PPM function aggregates, tracks and reports a mix of standard operational and benefit metrics.	The PPM function tracks leading indicators of business benefit realization and external risks.	The PPM function defines metrics to assess progress against product line objectives.
Manage Resources				
The PPM function defines resource management techniques informally, if at all.	The PPM function provides tools and guidance to help managers track resource utilization for their initiatives.	The PPM function uses a dedicated resource management tool and proactively identifies resource interdependencies across initiatives to reduce bottlenecks.	The PPM function proactively maps and maintains skills to identify substitutes for bottlenecked roles.	The PPM function adopts a cross-business-unit, portfolio-level view of resources, and coaches sponsors and project and product managers on effective resource management.
Measure and Manage Benefit Realization				
The PPM function conducts benefit realization informally, if at all.	The PPM function helps business partners estimate expected benefits by creating a taxonomy of financial and nonfinancial benefit metrics.	The PPM function adjusts benefit-tracking rigor based on the characteristics of the initiative and establishes a benefit-realization assessment process.	The PPM function partners with sponsors to define and monitor leading indicators of benefit realization.	The PPM function tracks benefits realization beyond discrete projects or products, at the value stream or portfolio level.

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Maturity Level Definitions: Manage Frameworks and Standards (1 of 2)

Level 1	Level 2	Level 3	Level 4	Level 5
Promote Delivery Methodologies				
The PPM function's delivery methodology is defined informally, if at all.	The PPM function defines a standard delivery methodology allowing flexibility based on size and complexity of initiative.	The PPM function collects feedback, through multiple channels, on process and methodology improvement areas from a broad set of stakeholders.	The PPM function enables a wide range of stakeholders to share lessons and best practices on newer methodologies.	The PPM function adopts multiple engagement postures and supports organizational efforts to increase adoption of newer delivery methods and simplify end-to-end solution-delivery processes.
Facilitate Multiple Methodology Delivery				
The PPM function has no formal approach to support multimethodology portfolios.	The PPM function builds a standard vocabulary and establishes documentation requirements for each methodology.	The PPM function helps assess the suitability of initiatives for different delivery methodologies.	The PPM function encourages the adoption of speed-generating techniques and defines metrics to track health of multimethodology initiatives.	The PPM function establishes processes and roles to orchestrate multimethodology delivery and defines the flexible funding models necessary for multimethodology portfolios.
Create Estimates for Initiatives				
Delivery and resource managers use their own techniques to create estimates of the delivery cost, schedule and resource needs of their initiatives.	The PPM function coaches project, product and resource managers and involves business stakeholders upfront to create and regularly update estimates of delivery costs, schedule and resources.	The PPM function tailors its estimation and level of support depending on the characteristics of the initiative and uses input from experienced estimators to improve the accuracy of its estimates.	The PPM function uses data from comparable initiatives from multiple sources to help its staff build scenarios and make future estimates more accurate .	The PPM function enables others in the organization to produce high-quality estimates and explores artificial intelligence to improve the accuracy of its own estimates.

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Maturity Level Definitions: Manage Frameworks and Standards (2 of 2)

Level 1	Level 2	Level 3	Level 4	Level 5
Select and Report Initiative Performance				
The PPM function tracks the performance of initiatives informally, with no standard metrics in place.	The PPM function formally tracks and reports operational metrics along with some success metrics.	The PPM function uses standard metrics, tailors its reporting approach to fit context and need, and enables self-service tools for stakeholders.	The PPM function enables better stakeholder decision making by tracking business outcome metrics and regularly revisiting its dashboard of metrics for actionability and continued relevance.	The PPM function tracks and reports leading indicators of benefits realization.
Track Costs of Initiatives				
The organization does not have a formal approach to manage the costs of initiatives.	The PPM function defines a standard approach to regularly track and report on the delivery costs of initiatives.	The PPM function defines standard frameworks to track the overall costs of initiatives.	The PPM function provides training to help project and product managers track and manage the costs of their initiatives.	The PPM function offers distinct cost-tracking services and manages both the direct and indirect costs of managing initiatives.

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Maturity Level Definitions: Drive Transformation Initiatives (1 of 2)

Level 1	Level 2	Level 3	Level 4	Level 5
Define Programs				
Programs are defined around a stakeholder or organizational unit, or defined informally, on an ad hoc basis.	Programs are reactively defined, bottom up, by grouping existing projects that contribute to a common business objective.	Programs are proactively defined to manage technical or resource dependencies related to a common business objective.	Programs are defined top-down to support business capabilities and are assessed on measurable business outcomes.	Programs are defined top-down as part of an adaptive ecosystem of internal and external parties and center on evolving business outcomes.
Manage Programs				
The PPM function has an informal approach to managing programs.	The PPM function formally defines the program manager role and uses a project-centric approach to program management.	The PPM function uses a standard program management methodology and rolls up metrics to the program level.	The PPM function takes a program-centric view of resource allocation, budget reprioritization and design of the program manager role.	The PPM function defines the shared responsibilities of program managers and business partners, and aligns program manager incentives with business outcomes.
Enable Organizational Change Management				
The PPM function leaves change management to the discretion of individual sponsors or project, product or program managers.	The PPM function helps sponsors and project, product or program managers manage change at the product, project or program level.	The PPM function helps sponsors anticipate the barriers to change and tailor communication to different stakeholder segments.	The PPM function sequences change initiatives and adjusts change management approaches to drive adoption.	The PPM function builds change management as a capability by equipping employees to act as partners in change management.

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Maturity Level Definitions: Drive Transformation Initiatives (2 of 2)

Level 1	Level 2	Level 3	Level 4	Level 5
Manage Troubled Initiatives				
The PPM function does not have a standard approach to identifying and managing troubled initiatives.	The PPM function collaborates with stakeholders to identify problems, build consensus on required recovery steps for the initiative, and coordinate recovery efforts.	The PPM function uses operational metrics to track issues, encourages staff to identify problems early, and tracks the use of recovery steps for troubled initiatives.	The PPM function uses predictive measures to pre-empt initiatives running into trouble and proactively identifies triggers for ending initiatives.	The PPM function provides recovery services for troubled initiatives across the organization.

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Maturity Level Definitions: Enable Initiative Mngt & Delivery Roles (1 of 2)

Level 1	Level 2	Level 3	Level 4	Level 5
Define PPM Roles				
The PPM function has formally documented job descriptions for some project and product management roles.	The PPM function uses detailed job descriptions that include competency requirements to inform interview guides and promotion criteria for every role.	The PPM function sets and periodically recalibrates objectives and responsibilities for each project and product management role.	The PPM function establishes performance criteria that reward soft skills and leadership behaviors among project and product staff.	The PPM function redesigns select project and product roles based on the needs of emerging solution-delivery practices.
Develop Skills and Competencies				
The PPM function leaves the development of project and product management skills to the discretion of individual managers.	The PPM function familiarizes staff with industry standards and frameworks, and trains staff on project and product management process skills.	The PPM function develops staff's process skills through formal mentoring, on-the-job learning, and knowledge sharing.	The PPM function provides training and coaching to develop staff's soft skills and leadership behaviors.	The PPM function provides development opportunities and creates an environment that encourages soft skills and leadership behaviors.
Manage Career Paths				
There is no defined career path for PPM staff in the organization.	There are multiple informal career paths for PPM staff across the organization.	The PPM function formally defines a standard career path for PPM staff and clear criteria for progression.	The PPM function maps learning and development experiences to enhance the soft skills and leadership behaviors necessary for progression, and provides multiple career-path options for its staff.	The PPM function defines transition paths for its staff to align with new and emerging business-driven, product-centric operating models (e.g., those focusing on value streams or business capabilities).

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Maturity Level Definitions: Enable Initiative Mngt & Delivery Roles (2 of 2)

Level 1	Level 2	Level 3	Level 4	Level 5
Equip Stakeholders to Manage Initiatives				
The PPM function provides business partners with informal management support of initiatives.	The PPM function reactively provides tools, templates and coaching to help business partners independently manage initiatives.	The PPM function proactively provides tools, templates and informal coaching to business partners who manage initiatives independently.	The PPM function dedicates PM resources and provides targeted services to help business partners manage initiatives.	The PPM function optimizes for business-led product, project or program management by identifying company employees most suited to manage initiatives on their own and offering support when required through multiple engagement postures.
Support Agile Delivery Teams				
The PPM function does not provide any formal support to agile teams.	The PPM function provides tools, templates and standard methodology guidelines for agile initiatives.	The PPM function defines processes, roles and deliverables to coordinate agile work.	The PPM function defines roles, responsibilities and competencies for key agile team roles, and provides multiple channels to learn and share best practices to close gaps.	The PPM function enables agile teams to deliver continuous value focused on customer expectations (e.g., business capabilities and speed).
Manage Contractors				
The PPM function has an ad hoc approach to using and managing contractors.	The PPM function hires low-cost contractors for subject matter expertise and to meet spikes in demand.	The PPM function works with vendor management, HR and other stakeholders to proactively tailor its onboarding and performance management approach to accommodate the use of contractors.	The PPM function proactively plans for the use of contractors based on forecast portfolio size and mix.	The PPM function uses contractors as part of an ecosystem of full- and part-time employees, contractors and external service providers to deliver the set of services required to meet stakeholder needs.

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Maturity Level Definitions: Manage the PPM Function

Level 1	Level 2	Level 3	Level 4	Level 5
Manage the Mandate of the PPM Function				
The PPM function's mandate is defined informally.	The PPM function has a formally documented mandate.	The PPM function regularly solicits feedback on its mandate from stakeholders, and translates this mandate into clear and actionable goals for its staff.	The PPM function defines its activities as a set of services to meet the varied needs of stakeholders.	The PPM function reshapes its mandate or temporarily flexes the way it engages with key stakeholders to align with the evolving priorities of the digital business.
Measure and Communicate PPM Performance				
The PPM function uses an informal and reactive approach to measure its performance and communicates metrics when requested by sponsors or stakeholders.	The PPM function reports basic initiative-level metrics to stakeholders at regular intervals.	The PPM function tracks the function's performance against operational and strategic objectives and provides customized reports to stakeholders.	The PPM function tracks leading indicators to measure and report the likelihood of delivering the initiatives' business benefits.	The PPM function assesses its ability to enable delivery of business outcomes and communicates its performance using value stories.
Leverage PPM-Enabling Technology				
The PPM function relies heavily on tools at hand, such as spreadsheets, email and file sharing; no or minimal use of dedicated PPM technologies.	The PPM function uses best-of-breed, dedicated PPM tools offering project status reporting and dashboard creation capabilities.	The PPM function broadens technology use by using tools to aggregate and analyze demand and active work, and by starting to integrate with other enterprise IT systems.	The PPM function leverages technology to provide end-to-end process coverage, from strategy planning to day-to-day execution, to enable improved decision making.	The PPM function experiments with advanced technology (such as conversational artificial intelligence) and integration capabilities to support multimethodology portfolios and workflows.

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4.4
Enterprise Architecture
Maturity Definitions

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Maturity Level Definitions: Structure Business Strategy (1 of 2)

Level 1	Level 2	Level 3	Level 4	Level 5
Enable Capability-Based Planning				
EA does not apply any capability-based analysis, but is completely focused on technology assets.	EA identifies some future-state technology capabilities that can support business objectives.	EA facilitates the definition of future-state technology capabilities and is able to link them to business objectives.	EA facilitates business and IT executives in identifying and realizing future-state business and technology capabilities.	Capability-based strategic planning is embedded in the business and operating models.
Build Business Architecture Foundations				
EA has no or few business architecture capabilities or artifacts, but is completely focused on technology architecture.	EA develops key business architecture deliverables used in pockets or in prescribed areas of the organization.	EA establishes a formalized business architecture. Key business architecture deliverables are used to help define and drive business outcomes.	EA uses business architecture to understand and develop business and operating models. EA informs strategy execution.	EA uses business architecture to inform business strategy development. EA guides business outcomes and investment decisions.
Articulate Business Outcomes				
EA does not identify business outcomes, but is completely focused on technology.	EA engages with business partners to define targeted business outcomes.	EA analyzes and informs the prioritization and trade-offs of targeted business outcomes.	EA provides recommendations to business leaders and product owners on ongoing initiatives and new targeted business outcomes.	EA dynamically calibrates targeted business outcomes based on changes to business strategy.

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Maturity Level Definitions: Structure Business Strategy (2 of 2)

Level 1	Level 2	Level 3	Level 4	Level 5
Shape Investment Decisions				
EA provides informal input on investment decision making, if at all.	EA advises on individual investments and the investment portfolio for business and IT stakeholders.	EA guides enterprise investment strategy by cataloging current capabilities and developing roadmaps for investments.	EA provides functional, technical and financial analysis on business and technology opportunities to guide investment decisions.	EA proposes investments and returns analysis for identified opportunities, including business and operating model implications.
Facilitate Operating Model Change				
EA has no business and operating model expertise, but provides perspectives to business and IT stakeholders on an ad hoc basis, if at all.	EA has some capabilities to assess impacts of trends and disruptions on business or operating model, and offers mainly technology-focused advice to stakeholders.	EA has a comprehensive view of the business and operating model and is able to identify implications based on modernization or transformation initiatives.	EA acts as an internal management consultant to executives to guide business and operating model changes through defined business and technology strategies.	EA uses its own consulting offerings and experience to support executives to shape new business and operating models.
Orchestrate Business Ecosystems				
EA initiates ecosystem ideas on an ad hoc basis, if at all.	EA collaborates with procurement and vendor management to build end-to-end technology services ecosystems.	EA orchestrates technology partners within the vendor ecosystem through principles, standards and services.	EA supports business and IT executives to initiate, build and deliver value through business ecosystems.	EA partners with business and technology executives to initiate and orchestrate value from and across ecosystems.

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Maturity Level Definitions: Facilitate Innovation

Level 1	Level 2	Level 3	Level 4	Level 5
Evaluate Emerging Technologies & Trends				
EA assesses emerging technologies in a reactive ad hoc way, if at all.	EA identifies and evaluates some emerging technologies for incremental optimization of existing IT portfolio.	EA tracks and evaluates emerging technologies for existing and new business capabilities and services, and assesses potential impact of nontechnology trends.	EA formally defines a process to identify, track and evaluate technology and nontechnology trends for their contribution to or impact on business and operating models.	EA drives the realization of benefits from and responses to technology and nontechnology trends and disruptions across the enterprise, on a continuous basis.
Identify Innovation Opportunities				
EA identifies innovation opportunities on an ad hoc basis, if at all.	EA assesses innovation opportunities for technical fit with the future state on a regular basis with stakeholders.	EA assesses innovation opportunities for impact on business outcomes and formally prioritizes opportunities for innovation in collaboration with stakeholders.	EA proactively and systematically reviews innovation opportunities and presents them to stakeholders.	EA collaboratively contextualizes innovative business and operating models for the enterprise to identify competitive opportunities.
Enable Innovation Initiatives				
EA supports innovation initiatives on an ad hoc basis, if at all.	EA provides support for technology innovation including ideation, implementation and integration.	EA works with business and IT stakeholders to facilitate the innovation process and to engage at various stages in the process based on organizational need.	EA sets up pathways to help business partners experiment, scale and integrate the best ideas for innovation and supports ideation through tactics such as design thinking.	EA advises business partners or innovation leaders to rapidly test their ideas, build prototypes, then integrate and scale the best ideas for targeted business outcomes.

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Maturity Level Definitions: Manage the Technology Portfolio (1 of 2)

Level 1	Level 2	Level 3	Level 4	Level 5
Develop Future-State Architecture				
EA creates future-state architectures for technology only, per initiative, using Office tools.	EA supports stakeholders/business units by compiling artifacts and developing future-state technology plans.	EA coordinates with stakeholders to create an enterprise future-state plan across technology domains and/or business areas.	EA regularly recalibrates the future-state plan based on criticality of business capabilities and technical debt.	EA consults with business leaders and external partners to make the future-state plan responsive to external factors and changing investment priorities.
Define Current-State Architecture				
EA documents major IT assets on an ad hoc basis, if at all.	EA inventories major enterprise applications and infrastructure.	EA documents the entire IT portfolio and dependencies between technology and business capabilities.	EA assesses impact of current and proposed technology investments on complexity of the overall IT portfolio.	EA assesses ability of the current technology portfolio to support business capabilities and create opportunities for new or improved capabilities.
Design Strategic Plans				
EA supports technology strategy development on a per request basis, if at all.	EA informs technology strategic plans regarding integration, applications, information, systems and processes using accepted practices.	EA shapes technology strategic plans based on business strategy with inputs from internal and external factors.	EA calibrates technology strategic plans in response to business needs while informing business strategic plans with technical considerations.	EA influences enterprise digital strategy in response to trend analysis, future planning and external environment factors.

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Maturity Level Definitions: Manage the Technology Portfolio (2 of 2)

Level 1	Level 2	Level 3	Level 4	Level 5
Develop & Maintain Roadmaps				
EA creates some technology roadmaps, on a per domain basis, but does not manage against it, if at all.	EA maintains technology roadmaps that reflect collected input from stakeholders.	EA applies a formal process to roadmap how technology initiatives support business capabilities, while tracking project or product costs, benefits, risks and interdependencies.	EA continuously reviews and refreshes roadmaps that reflect multiple time horizons and business scenarios designed to improve or maintain capability health.	EA uses roadmaps to define capability gaps and business change events to automatically trigger revisions and provide scenario-driven guidance to help business partners respond to market disruptions.
Support Portfolio Modernization				
EA acts on incidents and problems to identify and recommend technology updates, if at all.	EA regularly performs an analysis of opportunities for technology portfolio rationalization and makes complexity reduction recommendations.	EA has a comprehensive view across the technology stack and advises IT delivery teams on sunset or update decisions based on an analysis of costs and benefits and business needs.	EA tracks how existing technologies support business capabilities and targeted outcomes and makes recommendations based on opportunity cost and impact on speed to value.	EA engages executives on technology advancements when triggers indicate a change in business needs or environmental factors such as market disruptions or regulatory requirements.
Enable Information Strategy				
EA has no information architecture, only limited views on data and its use.	EA documents disparate data sources, sets standards and provides governance for information.	EA defines enterprise information management goals and activities.	EA works to align the information management strategy to support business and IT strategies.	EA extends existing capabilities (e.g., ability to attain, use, analyze information) to drive competitive advantage and opportunities for disruption.

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Maturity Level Definitions: Enable Solutions Delivery

Level 1	Level 2	Level 3	Level 4	Level 5
Support Solutions Design				
EA provides technology-focused advice on an ad hoc basis, or limited to some large projects, if at all.	EA facilitates design efforts to ensure technology solutions abide by some technology standards and meet project expectations.	EA provides development teams with enterprise-level guidance through design patterns and triages involvement in projects or products based on business impact.	EA helps development teams apply a customer-centric lens to solution design and supporting architectural decisions for improved usability.	EA helps business partners and solutions development teams to collaborate better using design thinking approaches.
Guide Solutions Delivery & Operation				
EA focuses on developing technology solutions itself, does not provide any architectural guidance to a wider architect community, if at all.	EA engages with development teams across the delivery life cycle through a stage-gated process to review compliance with internal standards.	EA provides packaged guidance to keep solutions development and delivery on track with targeted business outcomes, and manage risk to business processes and operations.	EA provides tailored solution development, implementation and operation guidance based on project, product, or process criticality and business impact.	Solution design, delivery and operations are embedded in the business and operating models, warranted through self-service tools that reduce architectural friction and increase speed of delivery.
Ensure Digital Foundation Integration				
EA provides integration guidance on an ad hoc basis, if at all.	EA works with delivery teams to identify integration needs and uses legacy (point-to-point or platform-based) approaches to address integration needs.	EA manages digital foundation technology standards and principles at minimum shared data and application platforms and services (APIs) capabilities.	EA ensures solutions are build on and integrate with digital foundations, comprising of platforms and reusable services, and managed against business outcomes.	EA ensures composable application architecture building blocks, including APIs, data, AI, and platforms, are widely accessible to rapidly deliver new products and features.

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Maturity Level Definitions: Establish EA Frameworks and Tools (1 of 2)

Level 1	Level 2	Level 3	Level 4	Level 5
Provide Reference Architectures				
EA does not apply any frameworks or uses parts of existing frameworks focused on technology architecture only.	EA develops use cases to demonstrate the value of frameworks and to justify investment. Usage is in support of technology projects, focusing on gathering artifacts, documentation and modeling.	EA applies frameworks for principles and technology reference models and to deliver a metamodel of the enterprise to best support future- and current-state architecture.	EA uses frameworks that include business, information and technology architecture models and deliver on business and technology strategy and outcomes, capabilities and roadmaps.	EA extends and customizes frameworks strategically to meet dynamic organization-specific needs.
Set Governance and Assurance Protocols				
EA has not defined any formal principles, models or standards to guide solution delivery and operation.	EA defines a governance framework including principles, standards, reference models and a means for review, such as an architecture review board.	EA aligns the governance framework with IT strategy and includes business context and cross-functional perspectives in strategic review of technology standards.	EA connects governance with enterprise digital strategy by means of a forum like a strategy review board and analyzes exceptions to review and update standards.	EA consults with stakeholders to track how models impact business outcomes and the technology portfolio, and sets triggers to update governance as the digital investment priorities evolve.
Manage Principles, Standards & Patterns				
There are no formalized principles or standards, and EA relies on personal mandates or positions to direct decisions.	EA establishes formal processes and ownership to review principles and standards adherence and relies on SMEs from across the firm to support compliance efforts and identify patterns.	EA engages directly with delivery teams through architecture councils to ensure principle and standards adherence and the application of patterns, and outlines clear steps for granting exceptions.	EA promotes principles, standards and patterns by offering self-service tools, highlighting business benefits such as speed and innovation, and accelerating remediation for granted exceptions.	EA embeds principles, standards and patterns within delivery workflows to improve speed and ease of adherence and preempt need to enforce standards adherence.

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Maturity Level Definitions: Establish EA Frameworks and Tools (2 of 2)

Level 1	Level 2	Level 3	Level 4	Level 5
Implement & Manage Value From EA Tools				
EA uses Office Tools (ppt, doc, xls) to collect architectural artifacts, if at all.	EA develops use cases to demonstrate the value of tools and to justify investment. Usage is in support of technology projects, focusing on gathering artifacts, documentation and modeling.	EA assesses tool utility holistically to best support future- and current-state architecture, and to provide reports and dashboards to business and IT stakeholders.	EA supports a wide community of business and IT stakeholders and delivery teams to identify, collaborate and deliver on current and future-state architectures, product and project outcomes.	EA extends and customizes tools strategically to meet dynamic organization-specific needs.

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Maturity Level Definitions: Manage and Evolve the EA Function (1 of 2)

Level 1	Level 2	Level 3	Level 4	Level 5
Define EA Services and Value Proposition				
EA focuses on stakeholder satisfaction without a formal mandate or clarity on the role.	EA works with IT leadership to collaboratively define a clear mandate for EA. EA identifies all IT stakeholders who contribute to enterprise architecture.	EA defines and regularly communicates its remit and artifacts to the broader IT organization and regularly meets with IT leadership and business partners.	EA regularly assesses the relevance, impact and alignment of its remit to business strategy. EA targets business stakeholders who make architecturally significant decisions with consultative advice.	EA actively collaborates with business strategy leadership and provides recommendations and policies for business strategy, goals, and objectives.
Cultivate EA Talent and Skills				
EA uses existing EA role descriptions, if any at all.	The EA leader formally defines the enterprise architect roles and identifies talent that aligns with those roles.	A formal chief enterprise architect manages the talent pool of enterprise, business and overall IT architects by addressing missing or incomplete skills and competencies.	The chief enterprise architect leads career pathing, builds stretch or rotational opportunities and conducts succession planning to evolve the talent bench.	Architectural thinking and business and technology skills are embedded in the Enterprise Architecture discipline and recognized by business and IT partners.
Measure and Communicate the Value of EA				
EA has no formal measurement or metrics to assess its performance.	EA measures performance based on qualitative feedback from IT stakeholders and internally focused activity and efficiency metrics.	EA measures performance through enterprise adoption of EA guidelines and collects feedback from business partners.	EA measures performance by its contribution to business objectives, using metrics that are aligned to business KPIs.	EA measures performance by its impact on quantitative measures related to business outcomes (cost, speed and growth).

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Maturity Level Definitions: Manage and Evolve the EA Function (2 of 2)

Level 1	Level 2	Level 3	Level 4	Level 5
Engage Business and IT Stakeholders				
EA engages limited IT stakeholders on an ad hoc basis, if at all.	EA regularly interacts with senior IT stakeholders about infrastructure changes and applications development to drive reuse and delivery consistency.	EA engages with IT executives to make architectural decisions that support business outcomes and seeks occasional input from stakeholders outside IT and external partners such as vendors.	EA formally and regularly engages business leaders to ensure that architecturally significant decisions support business outcomes.	EA leaders consult executives on enterprise digital strategy through business strategy sessions and develop an architectural mindset in executive stakeholders to help them make technology decisions.

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4.5
Enterprise Architecture
Maturity Definitions

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Maturity Level Definitions: Evaluate, Plan and Design (1 of 2)

Level 1	Level 2	Level 3	Level 4	Level 5
Articulate Customer Needs				
Project requirements are informally defined and generally a function of technology stacks.	Technology and architecture are predominant design drivers. Value is a function of technology indicators and measures.	Design discussions include some concept of customer need and value. Desired outcomes remain technically focused. Involvement and feedback loops are informal/as needed.	Customers are identified for most projects. Business stakeholder and/or product owners' participation is required for major projects.	The customer and target need is clearly identified and addressed for each project/initiative. Collaboration with stakeholders is ongoing and dynamic.
Rationalize New Requests				
I&O projects are unique efforts and generally do not require rationalization. There is no formal portfolio or catalog to reference as a point of comparison.	Internal IT discussions and review occur when evaluating technical investments. Only key/major projects are rationalized against current offerings.	The process of rationalizing requests against current offerings has some formal structure, but approvals are determined by individual managers.	The concept of a service portfolio is emerging, and all major projects are rationalized for overlaps and duplications in the existing service structure or service portfolio.	New proposals are rationalized against the entire services portfolio. Projects are approved based on how they augment or improve current offerings. Success metrics are defined and publicly articulated.
Establish Service-Level Expectations				
Service levels are defined and monitored informally, if at all.	Service levels are defined and monitored in terms of technology performance parameters (e.g., availability).	Service levels for primary systems and applications are defined. Stakeholders help set performance levels for key projects.	Service levels that support critical business processes are defined and monitored in terms of their impact on user experience and critical workflows.	Service levels are defined collaboratively with business stakeholders, based on business outcomes. Metrics are tied to financial impact and business outcomes (speed and agility).

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Maturity Level Definitions: Evaluate, Plan and Design (2 of 2)

Level 1	Level 2	Level 3	Level 4	Level 5
Build a Business Case				
I&O project spend is justified as part of a budgeting or planning process often with no business case required.	IT builds business cases for larger projects. For most I&O projects, technology expenses are the primary point of justification.	A business case is developed for business-impacting projects with a defined resource plan. Determining business value and ROI is difficult.	Business stakeholders are actively involved in using feedback loops to create each business case. Project value is expressed in terms of ROI or price for performance.	Business cases are fully collaborative efforts between IT and business stakeholders. ROI or price for performance is calculated for all projects/investment. Intrinsic value can offset financial return.
Design Solution Specifications				
Specifications are defined at the point-solution level.	Solution specifications are done solely for large projects by technical domain experts with a focus on technical requirements.	Solution specifications are done for all projects and coordinated at an enterprise IT level based on business requirements.	Solution specifications are done at an enterprise IT level in collaboration with business partners.	Solution specifications are created based on business outcomes in an agile, iterative manner.

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Maturity Level Definitions: Measure and Optimize (1 of 2)

Level 1	Level 2	Level 3	Level 4	Level 5
Measure Staff Performance and Needs				
Staff are assigned to tasks in a reactive manner and evaluated based on successes or failures at high-visibility activities.	Staff is assigned to specific technologies or I&O processes, and individuals are measured on criteria specific to those categories.	Staff or staff hours are associated with applications or projects, and individuals are evaluated according to objective I&O metrics for which they have some responsibility.	Staff is associated with specific IT services based on matching skill sets with documented responsibilities and authority.	Staff is proactively shifted between IT services based on demand, with training and future staffing levels adjusted based on business outcomes.
Monitor I&O Performance				
Metrics are collected within technology functions on an ad hoc basis for troubleshooting.	Metrics are defined and monitored within IT technology functions and used primarily for outage detection and troubleshooting, with occasional reporting.	Metrics and KPIs are defined according to I&O needs, benchmarked against industry averages and used for resource justification, with automated data collection and reporting.	Operational KPIs are cross-silo and linked to service levels associated with applications and projects, with automated reports for external users and trending used for resource planning.	KPIs are linked to business outcomes with predictive analytics and visualization used for automated, real-time internal and external reporting.
Align I&O Metrics With Business Goals				
I&O metrics are used strictly internally by the I&O organization.	I&O performance goals are linked indirectly to business goals, and I&O reports performance to business units in a reactive manner.	I&O is informed of business goals associated with applications and projects and generates periodic status and performance reports to the business in standard formats.	SLAs are selected by the business on an application or service level, and I&O provides regular performance reports to the business including show back of I&O costs.	I&O service levels are incorporated into business decision processes, with continuous measurements of end-user satisfaction and automated real-time reporting to business stakeholders.

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Maturity Level Definitions: Measure and Optimize (2 of 2)

Level 1	Level 2	Level 3	Level 4	Level 5
Optimize IT Service Management Processes				
Processes are tribal and not documented.	Some basic processes focused on activities are defined within technology silos.	IT service management is formalized across the organization with documented responsibilities.	Core service management processes are defined with process roles assigned and metrics to monitor process success.	Service management processes are part of a larger process orientation focused on the delivery of business-valued services.
Automate Operations				
Scripting is used tactically by individuals to automate repetitive tasks.	Some recurring tasks with predefined workflows are automated within infrastructure silos.	Automation is used to perform frequently repeated tasks, and staff has access to training on automation tools.	Automation is a distinct discipline within I&O, with close collaboration with applications teams for continuous delivery processes.	Agile or DevOps toolsets are in place to respond to business demands, and automation driven by artificial intelligence is being explored.

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Maturity Level Definitions: Transition and Operate IT Services (1 of 2)

Level 1	Level 2	Level 3	Level 4	Level 5
Transition Services				
Projects are handed over to I&O with limited supporting documentation or understanding of what needs to be managed or supported.	Technical functionality is delivered, but many service and nonfunctional requirements are not delivered.	A service-based approach is adopted, but key service-based requirements may not be included due to time, quality or cost constraints.	A clear and robust service design process is in place, incorporating complete requirements. DevOps automation delivers business value quickly and effectively.	Service design and transition processes are continually optimized. DevOps and agile methods are predominant, and business value is continually delivered.
Support IT Services				
I&O is primarily technology-centric and reactive to incidents and outages, with no formal processes or procedures in place.	Core ITSM processes (incident and change) and a help desk function are in place, but few metrics are captured and the level of support remains variable, with a reliance on a hero-oriented culture.	I&O uses a process-based approach, with cross-functional processes and a service desk with a second and third line. Metrics that track IT performance provide governance.	I&O uses a service-based approach, with integrated ITSM and operational management tools. Key process owner, service owner and product owner roles are in place.	Support is focused on delivering business outcomes with strong governance based on business-focused metrics. Automation is used to augment this approach.
Ensure Future Service Availability				
I&O is a technology-focused organization, and attention is paid to services, enhancing availability and planning for future growth is informal.	IT assets are identified and planning disciplines (e.g., capacity, disaster recovery and monitoring) are in place but unlikely to be standardized across I&O, resulting in outages.	Assets are inventoried, and tools are in place to discover, monitor and manage the estate. Outages due to poor planning are reduced, and I&O is better able to manage service growth.	Asset relationships are developed and stored in a CMDB; the estate is monitored at the service level; and measures are in place to manage the estate and deliver higher availability and stability.	A business focus is in place that results in effective service mapping, and activities that are carried out (such as capacity and service continuity) are comprehensive and assessed from a business rather than IT perspective.

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Maturity Level Definitions: Transition and Operate IT Services (2 of 2)

Level 1	Level 2	Level 3	Level 4	Level 5
Provide Service Governance				
Review and reporting of services or processes is informal and tends to be focused at the silo level.	Processes and metrics are available but are neither comprehensive nor analyzed for trends and patterns.	Policies, procedures and standards are defined and in place, along with key governance roles.	All processes, services and vendors are actively monitored and subject to continual improvements through effective governance.	Governance is focused on business outcomes and regular service reviews, and business-focused dashboards are in place to demonstrate IT's value.

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Maturity Level Definitions: Plan and Manage I&O Talent (1 of 2)

Level 1	Level 2	Level 3	Level 4	Level 5
Develop Workforce Strategy				
I&O reacts to in-the-moment workforce needs.	I&O workforce plans identify short-term staffing needs to inform head count plans for the coming fiscal period.	I&O workforce plans respond to staffing needs and incorporate plans for skills and competency development based on skills gap assessments.	I&O workforce plans contain forward-looking talent forecasts addressing skills gaps and incorporate plans for emerging technical expertise and promoting diversity and inclusion in I&O.	I&O strategic workforce plans incorporate a cross-enterprise perspective and internal and external supply and demand data.
Attract and Hire Talent				
HR owns and manages I&O recruitment efforts with limited involvement from I&O leaders.	I&O leaders provide HR with job descriptions and skills definitions as requested.	I&O leaders partner with HR to update job descriptions and recruitment strategies to target emerging skills needs and promising talent pools.	I&O leaders collaborate with IT leaders and HR partners to evolve recruitment and hiring practices.	I&O owns its recruitment and hiring strategy, which is aligned to support IT and enterprise strategies.
Develop Employee Skills and Competencies				
I&O closes acute skills gaps with ad hoc and informal trainings.	I&O builds staff competencies through formalized and specialized skills development certification programs.	I&O employee development practices encourage and support continuous development of both technical and soft skills (e.g., collaboration, leadership and communication).	I&O employee development practices include a focus on developing on-the-job coaching and learning experiences.	I&O employee development practices provide incentives for continuous, on-the-job learning while encouraging skill and career path versatility.

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Maturity Level Definitions: Plan and Manage I&O Talent (2 of 2)

Level 1	Level 2	Level 3	Level 4	Level 5
Manage Employee Performance				
I&O employee performance is managed at the discretion of individual managers.	I&O employee performance management involves annual calibration of employee performance against centrally mandated criteria.	I&O employee performance management involves regular, two-way discussions on employee performance metrics, defined by role.	I&O employee performance management is forward-looking and customized to the individual within a role.	I&O employee performance management is targeted to the individual and the development of individual growth paths to support evolving business objectives.
Build Effective Teams and Culture				
I&O team collaboration is informal or undefined.	I&O formally defines teams and provides tools and support for individuals to collaborate within and across teams.	I&O creates teams with a mix of technical and business skills, fostering an environment of recognition within and across teams and a process-centric mindset.	I&O instills a coaching commitment and a culture of knowledge sharing and team empowerment. Teams are not bound by geographical or organizational model constraints.	I&O leaders develop fusion teams by encouraging openness, learning agility and an agile mindset.
Manage Talent Retention and Career Growth				
Retention and career progression efforts are reactive or have limited structure.	I&O career progression planning is largely ladder-based progression. Retention efforts are limited to centrally managed activities.	I&O provides career progression information such as sample career paths and basic leadership skills training. Retention planning is formal and systematic.	I&O provides both horizontal and vertical opportunities, and managers align career progression to employees' interests and skills.	I&O career planning and retention efforts are consistently applied in the organization, and employees plan for multiple, unknown roles in the future.

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Maturity Level Definitions: Manage the Function of I&O (1 of 2)

Level 1	Level 2	Level 3	Level 4	Level 5
Develop I&O Strategy				
Set priorities informally in response to specific requests.	Set priorities based loosely on IT-level objectives.	Define strategies influenced by business strategy and include forward-looking plans for resources and technologies.	Update strategies to address evolving needs for technologies and resources as well as services and skills.	Build strategies in collaboration with business partners, and follow agile methodology to respond quickly and adapt iteratively to enable changes in business priorities and strategies.
Design Strategic Sourcing Approach				
Make sourcing decisions on an ad hoc basis in response to immediate needs.	Make sourcing decisions within silos based on specific project needs.	Base sourcing decisions on enterprise needs, cost optimization and categorized vendors. Determine solutions in collaboration with other IT teams.	Base sourcing decisions on fit-for-purpose analysis and identify solutions in collaboration with IT partners and input from business.	Guide business partner decision making on vendor selection and make vendor management decisions through continuous review of value, performance and risk.
Design and Evolve Organizational Models				
Follow a hierarchical organization chart that shows reporting relationships inside technical silos.	Promote some level of communication and collaboration across silos and initiate reorganizations based on executive turnover.	Pilot cross-functional teams for increased collaboration across silos.	Map out critical handoffs between teams and organize team members around service delivery.	Support cross-functional teams (such as DevOps teams or automation centers of excellence) and organize around IT products and/or business goals.

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Maturity Level Definitions: Manage the Function of I&O (2 of 2)

Level 1	Level 2	Level 3	Level 4	Level 5
Manage I&O Finance and Budgeting				
Follow the overall annual IT budget process.	Actively participate in the budget process at least annually, and capture the total cost of IT at the general ledger level.	Focus on IT objectives and manage the budget based on technology spend requirements.	Track I&O spend to specific business outcomes and obtain buy-in for key projects from stakeholders.	Explain to business leaders how financial decisions positively affect business objectives and ensure transparency by engaging stakeholders to drive informed IT consumption behavior.
Embed Security Into Solution Delivery				
Create controls that may be disconnected from information security policies and compliance regulations.	Become aware of and establish the goal of aligning with information security policies and compliance regulations.	Define controls to comply with security policies and procedures to manage the risk of security infringements. Monitor and manage all systems and services.	Proactively work with the information security team to embed security controls, create clear escalation paths for infringements and enforce accountability for security in operations.	Deploy state-of-the-art initiatives (e.g., AI, automation, DevSecOps) to proactively monitor and manage the estate, identify threats, prioritize business needs and integrate deliverables with policies and procedures.

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SECTION 4.4 – GSP – PLACEHOLDER

This section is not applicable for the GSP. It is included in the GSP structure to maintain alignment with the structures of the TSP and DSP.

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SECTION 4.5 – GSP – PLACEHOLDER

This section is not applicable for the GSP. It is included in the GSP structure to maintain alignment with the structures of the TSP and DSP.

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SECTION 4.6 – GSP – OTHER CAPITAL PLANNING FACTORS AND CONSIDERATIONS

4.6.1 INTRODUCTION

Whereas Sections 4.2 and 4.3 of the GSP outline the planning considerations related to asset lifecycle management and third-party benchmarking results, this section focuses on other key planning factors and considerations that informed the development of the GSP. The factors include:

- customer engagement;
- regulatory and policy requirements;
- industry trends;
- environmental stewardship;
- prepaid investments related to cloud computing implementation (applies to Digital & Technology Solutions (DTS) only); and
- work program enablement.

Each of these factors is further discussed below as applicable for each GSP portfolio.

4.6.2 CUSTOMER ENGAGEMENT

Hydro One's capital planning was informed by a structured, multiphase customer engagement process which is described in Section 1.6 of the System Plans Framework (SPF). For a detailed explanation of how customer input informed investment planning for the GSP, please refer to GSP Section 4.7.2.1.

4.6.3 REGULATORY REQUIREMENTS AND POLICY

Regulatory requirements and corporate and public policy commitments are important considerations in Hydro One's capital planning process. GSP investments address the need to maintain compliance with legislative and regulatory obligations, reliability and cybersecurity standards, accessibility requirements, and health and safety requirements, while supporting corporate and public policy objectives. These considerations help ensure

Hydro One maintains the facilities, systems, and capabilities required to meet its obligations and support the delivery of electricity services to customers.

4.6.3.1 FACILITIES & REAL ESTATE (FRE)

The average Operations Centre/Administration (OC Admin) building is approximately 36 years old, and the proposed Compliance and Governance investments reflect the realities of this aging portfolio. Many facilities were constructed decades ago, have undergone limited modernization, and no longer align with contemporary standards for accessibility, inclusivity, and climate sustainability objectives. The latter is discussed in more detail in section 1.4 below.

Accessibility for Ontarians with Disabilities Act, 2005 (AODA)

Compliance with AODA is a key input for FRE's investment plan and also supports Hydro One's corporate policy objectives with respect to Diversity, Equity and Inclusion (DEI). In addition, a significant portion of Hydro One's building portfolio requires targeted upgrades to remain fit-for-purpose as operating requirements, regulatory obligations, and workforce needs evolve. These considerations are important drivers of the investments included within the "Compliance and Governance" segments of GSP Section 4.11, G-GP-03 and G-GP-04, Subsections 3.3 Compliance and Governance.

Through its DEI Policy, Hydro One has committed to fostering a welcoming and accessible workplace, eliminating systemic and physical barriers, and ensuring all employees have a sense of belonging and equitable access to opportunities. Investments in the building portfolio support these objectives by improving the accessibility, functionality, and inclusiveness of Hydro One's workplaces.

Many of Hydro One's legacy facilities do not fully reflect current workforce demographics, accessibility standards, or employee needs, which can create barriers to workplace participation and inclusion. Hydro One has identified women as an important employee demographic through its Employee Resource Groups and broader workforce diversity initiatives and is committed to attracting, retaining, and advancing women across the organization, including in operations and skilled trades roles. Modernizing facilities helps

ensure that all employees are appropriately supported and able to work effectively within Hydro One's workplaces.

Investments supporting these objectives include the introduction of universal washrooms, additional women's washrooms and change rooms, shower facilities, quiet or prayer rooms, enhanced privacy features in washroom and locker-room facilities, inclusive signage and wayfinding, and hybrid collaboration spaces. Hydro One also invests in accessibility improvements such as barrier-free entrances, automatic door operators, elevator accessibility enhancements, accessible washrooms, accessible parking and pathways, and improved wayfinding and tactile signage. These investments are targeting improvements to employee experience, personnel safety, and compliance.

These investments support compliance with AODA and advance Hydro One's broader DEI objectives by:

- Creating a culture of inclusion and a psychologically healthy and safe work environment for all employees.
- Providing an accessible and barrier-free workplace for employees, candidates, customers, and visitors.
- Supporting inclusive talent strategies that attract, retain, and develop a diverse workforce while fostering an equitable and inclusive workplace.

4.6.3.2 DIGITAL & TECHNOLOGY SOLUTIONS (DTS)

DTS investment portfolio is informed by the need to maintain compliance with evolving regulatory, reliability, cybersecurity, and customer service obligations. Information Technology (IT) and Operational Technology (OT) systems directly enable critical functions including system operations, outage management, asset management, customer billing, customer service, grid monitoring, and enterprise reporting. As regulatory requirements continue to evolve, these systems must be maintained and modernized to ensure Hydro One fully meets its obligations under the Transmission System Code, Distribution System Code, and other applicable regulatory and operational requirements.

DTS investments are also required to support compliance with North American Electric Reliability Corporation (NERC) standards, including Critical Infrastructure Protection (CIP) requirements, Independent Electricity System Operator (IESO) operating obligations, and Hydro One's broader cybersecurity framework, which is aligned with the Ontario Cyber Security Framework (OCSF) and National Institute of Standards and Technology (NIST) Cybersecurity Framework, as discussed in GSP Section 4.11: G-GP-10, G-GP-11, G-GP-16, G-GP-18 and G-GP-30.

Certain DTS investments also address vendor end-of-support requirements, which create compliance and operational risks when technology platforms are no longer maintained or supported by their vendors. Failure to address these requirements can result in security vulnerabilities, system instability, and potential non-compliance with regulatory obligations. Examples include the SAP S/4HANA OneCore Transformation (GSP Section 4.11 G-GP-29), which replaces Hydro One’s legacy SAP ECC platform before vendor support ends, and investments in cybersecurity capabilities that maintain alignment with evolving NERC/CIP and OCSF requirements.

Hydro One uses the Cybersecurity and Infrastructure Security Agency's (CISA) Zero Trust Maturity Model as the framework to assess how forecast cybersecurity investments support the evolution of its cybersecurity architecture. Under this model, Hydro One is able to ensure continuous verification of users, devices, applications, networks, and data, with access decisions informed by identity, context, and risk.

Forecast investments across multiple Investment Summary Documents (GSP Section 4.11 G-GP-11, G-GP-12, G-GP-28, and G-GP-30) respond to Hydro One's CISA framework to demonstrate how they collectively advance capabilities across the Identity, Devices, Networks, Applications & Workloads, and Data pillars. These investments strengthen areas such as identity governance, device trust validation, network segmentation, application security, and data protection, while improving integration, visibility, automation, and policy-based security controls.

The CISA Zero Trust Maturity Model provides a common structure for assessing the contribution of individual investments to Hydro One's broader cybersecurity architecture and tracking progress toward higher levels of Zero Trust maturity over the 2028-2032 planning period.

In this context, DTS investments are foundational enablers that allow Hydro One to meet regulatory obligations prudently and efficiently, while ensuring that compliance is achieved in a manner that supports customer outcomes and long-term system sustainability.

4.6.3.3 SYSTEM OPERATIONS

The System Operations investment plan for ISOC and BU-OGCC has been developed to promote compliance with applicable regulatory requirements and public policy objectives by ensuring that Hydro One maintains the facilities, infrastructure, and capabilities necessary to safely and reliably operate the electricity system and to comply with mandatory obligations.

ISOC and BU-OGCC are essential to Hydro One’s ability to meet its obligations under the *Ontario Energy Board Act, 1998*, the Transmission System Code, the Distribution System Code, and reliability requirements applicable to system operations. The facilities support real-time system monitoring, contingency analysis, outage coordination, and emergency response, all of which are foundational to delivering reliable service to customers. System Operations facility investments also support compliance with mandatory reliability and cybersecurity standards, including NERC standards and CIP requirements. The BU-OGCC and ISOC house critical cybersecurity assets. Maintaining compliant control-centre environments requires secure facilities, reliable power and cooling, protected access controls, and resilient supporting infrastructure. For example, proposed investments in physical security systems, backup power, and building infrastructure such as roofs promote such compliance and system integrity.

Occupational health and safety requirements also inform the scope of System Operations investments. Control-room environments must meet applicable health, safety, and life-safety standards to ensure operators can perform critical functions safely and

effectively, particularly during prolonged emergency conditions. Upgrades to fire detection, suppression systems, ergonomic equipment and layouts, and building infrastructure support compliance while also reducing operational risk.

4.6.4 INDUSTRY TRENDS

Hydro One's capital planning process considers evolving industry trends to ensure investments remain aligned with operational requirements and customer expectations. The following sections describe how industry developments are reflected in Hydro One's Fleet, DTS, and System Operations investment plans.

4.6.4.1 FLEET

The industry trends underpinning fleet investments are set out in GSP Section 4.3 Attachment 2 (Utilimarc Reports) and are further detailed in GSP Section 4.7.3 (Investment Planning Process).

4.6.4.2 DIGITAL & TECHNOLOGY SOLUTIONS (DTS)

The DTS investment plan reflects evolving industry trends in the electricity sector, where utilities are increasingly investing in digital infrastructure to address growing grid complexity, electrification, climate-related risks, workforce pressures, and customer expectations. In response to these trends, utilities across the industry are investing in enterprise data platforms, cloud-enabled technologies, advanced analytics, artificial intelligence, and integrated operational and business systems. Hydro One has identified similar needs through its planning activities, including the requirement to manage rapidly growing data volumes, improve access to trusted information, strengthen analytics capabilities, modernize core enterprise systems, and establish scalable cloud-enabled platforms. These priorities are reflected in investments such as the Data, Analytics and AI Enablement program (GSP Section 4.11 G-GP-26) and SAP S/4HANA OneCore Transformation (GSP Section 4.11 G-GP-29). The Gartner IT maturity assessment further identified opportunities for Hydro One to strengthen its enterprise data management and analytics capabilities, providing additional support for the proposed investments.

An example of this prioritization is the SAP S/4HANA OneCore Transformation as a foundational component of Hydro One's digital landscape. The investment replaces Hydro One's legacy SAP ECC platform with a modern, integrated SAP S/4HANA Cloud Private Edition environment, addressing vendor end-of-support risks while standardizing core business processes across finance, supply chain, asset management, customer operations, and payroll. In addition to supporting day-to-day operations, the new platform improves data quality, strengthens integration across enterprise systems, enables advanced analytics and AI capabilities, and provides a scalable foundation for future innovation and continuous improvement.

Another example of this alignment is Hydro One’s investment in cloud-enabled Work and Asset Management capabilities (GSP Section 4.11 G-GP-08). This initiative aligns Hydro One with industry best practices by transitioning critical planning, field execution, and asset management functions from manual, siloed, or legacy environments to modern, cloud-aligned platforms. These solutions support advanced imaging, asset analytics, mobile work execution, integrated scheduling, and improved project controls across Transmission and Distribution, reflecting the broader industry shift toward digital, end-to-end work enablement.

From an industry perspective, the use of cloud-enabled solutions allows utilities to scale digital capabilities more efficiently, improve cybersecurity posture through standardized and continuously updated platforms, and reduce long-term lifecycle risks associated with aging, on-premise infrastructure. GSP Section 4.11 G-GP-08 investments support these outcomes by enabling Hydro One to deploy new functionality incrementally, integrate data across systems, and adapt tools more quickly as operational needs evolve, rather than relying on large, infrequent system replacements.

Industry trends also reflect an increasing emphasis on data quality, integration, and analytics as utilities manage larger and more complex capital programs. GSP Section 4.11 G-GP-08 cloud investments support this trend by strengthening enterprise data integrity, enabling real-time performance monitoring, and improving Hydro One’s ability to apply

risk-based and evidence-driven decision-making across asset planning, work execution, and project delivery functions.

These industry trends are reflected in Hydro One's DTS investments, which support:

- Improved visibility into asset condition, reduced reliance on manual inspections and paper-based processes, and more consistent, standardized field execution;
- Faster restoration activities, improved coordination during outage response, and clearer information flows between operations and customer-facing functions;
- Automated workflows, strengthened planning and scheduling accuracy, and improved capital project delivery predictability; and,
- Reduced legacy system complexity and long-term support requirements, improved capital productivity, and more efficient use of resources over time.

As electrification, distributed energy resources, and climate impacts continue to shape electricity system requirements, utilities must be able to adapt quickly without compromising reliability or affordability. By investing in scalable, cloud-aligned DTS solutions, such as those delivered under GSP Section 4.11 G-GP-08, Hydro One positions itself to respond to these changes in a manner consistent with industry best practice and its strategic objective to deliver a safe, reliable, customer-focused, and financially responsible electricity system.

Overall, the DTS investment plan reflects industry trends by emphasizing modern digital platforms, integration, and analytics that enhance operational resilience, improve customer outcomes, and support prudent, future-ready system management.

4.6.4.3 SYSTEM OPERATIONS

The System Operations investment plan for the ISOC and BU-OGCC reflects industry trends emphasizing control-centre resilience, redundancy, and operational preparedness in an increasingly complex operating environment.

Across the electricity sector, utilities are responding to climate change, extreme weather events, and growing cybersecurity threats by strengthening control-centre capabilities.

Failures at control-centre facilities can have system-wide impacts, prolong outages, and significantly increase restoration costs. The emphasis on control-centre resilience reflects broader industry recognition that reliable system operations depend on facilities capable of supporting evolving technology requirements and continuous operations during adverse conditions. For a discussion of the specific facility investments in electrical capacity, cooling, and building infrastructure that support these objectives, see GSP Section 4.6.5.2 below.

These investments ensure that ISOC and BU-OGCC remain fit-for-purpose as the electricity system evolves, while continuing to deliver the reliability, safety, and value that customers expect.

4.6.5 ENVIRONMENTAL STEWARDSHIP

Hydro One is enhancing the resilience of its electricity system and advancing its climate commitments in response to the increasing frequency and severity of weather-related events across Ontario. Since 2015, storm and force majeure days have increased by approximately 40%, with severe weather now accounting for roughly one-third of customer interruption frequency and driving significant restoration and capital costs as discussed in DSP Section 3.7.2.4. Consistent with its 2025 Sustainability Report, Hydro One is advancing emissions reductions through fleet electrification, facility energy efficiency initiatives, and SF_6 emissions reduction. These actions support Hydro One's goal of reducing operations-driven greenhouse gas emissions by 30% by 2030 and achieving net-zero emissions by 2050, while maintaining safe and reliable electricity service for customers in a changing climate.

4.6.5.1 FLEET

As part of its sustainability commitments, Hydro One plans to reduce operations-driven emissions by 30% by 2030 and achieve net-zero by 2050. To support this commitment, Fleet Services has created a Green Fleet Strategy that replaces end of life fossil fueled vehicles with green vehicles (including electric (EV), hybrid, smaller engine, Electric Power Take Off (PTO) and other alternative fuels), where market conditions and availability allow. For more details on this strategy, please see GSP Section 4.11 G-GP-01, Subsection 2.1.

Fleet Services has also collaborated with Corporate Real Estate to develop an Integrated Green Fleet Charging Strategy (IGFCS). This strategy addresses the cost and location of the EV charging infrastructure to support the growing number of electric vehicles. Additional information on the Integrated Green Fleet Charging Strategy is provided in the section below.

4.6.5.2 FACILITIES & REAL ESTATE

The proposed capital investment plan incorporates a range of sustainability and climate resilience objectives related to facilities. Facilities play a supporting role in achieving corporate greenhouse gas (GHG) reduction targets by 2030[1].

Sustainability includes capital expenditures for existing buildings and the integration of sustainable features in new construction to enhance lifecycle efficiency. These investments are addressed as part of the "Compliance and Governance" segments of GSP Section 4.11 G-GP-03 and G-GP-04, Subsections 3.3. Key energy reduction measures focus on decreasing reliance on natural gas for heating by replacing end of life gas HVAC systems with electrified HVAC systems, deploying smart building technologies to optimize operational performance, and undertaking retrofits such as building envelope improvements, water efficient fixtures and lighting upgrades. Additionally, the replacement of end of life base building systems — including HVAC, boilers, and lighting — with modern, energy-efficient alternatives will further reduce overall energy consumption.

The investment plan also supports the continued rollout of electric vehicle (EV) charging infrastructure across the facilities portfolio, aligning with the broader Integrated Green Fleet Charging Strategy (IGFCS). The IGFCS underscores Hydro One's commitment to sustainability and greening its fleet through an integrated solution, addressing vehicle adoption and the supporting infrastructure. Fleet and Corporate Real Estate have collaborated to develop an IGFCS that aims to achieve the following by 2030:

- Creation of a charging network at roughly 192 locations;

[1] Hydro One Limited. Hydro One 2025 Sustainability Report (May 7, 2026), P. 28, (https://www.hydroone.com/Sustainability/Documents/CSR_2025/2025-Sustainability-Report.pdf)

- Creation of an integrated solution for 467 charging ports (level 2 and 3) to support nomadic and local charging needs;
- Integration of network monitoring, simplifying operations and creating efficiency;
- Continued integration of EV Charging infrastructure as part of all new infrastructure construction to further expand the Hydro One charging network;
- Integration of EV Charging infrastructure deployment into facilities capital projects where need and opportunity are aligned (e.g., operations centre paving projects or service upgrades); and,
- Training updates for staff and vendors to support the evolution of the program for ongoing Fleet requirements.

Facility investments are designed with consideration for evolving environmental conditions and climate resilience. This includes the selection of durable building materials capable of performing under changing climate conditions, including increased wind, precipitation, snowfall, and temperature extremes. These materials are expected to reduce long-term maintenance requirements and extend asset life.

Site-specific design strategies are also incorporated where appropriate, including passive snow management measures (e.g., berms, swales, grading, and landscaping), the use of climate-resilient native vegetation to reduce water consumption and support biodiversity, and strategic building orientation and landscaping to help mitigate the impacts of severe weather and other climate-related risks.

4.6.5.3 SYSTEM OPERATIONS

Climate change, including the increased frequency and severity of extreme weather events, is a key consideration reflected in Hydro One's system operations planning. Extreme weather can prolong outages, create system-wide operational challenges, and significantly increase restoration costs. In response, Hydro One's investments in ISOC and BU-OGCC are designed to address these climate-related risks by eliminating single points of failure and improving the ability to operate continuously during major weather events. These investments enhance operational resilience by ensuring that control-centre

facilities can support reliable system operations under adverse conditions, enabling faster and more coordinated restoration when extreme weather impacts the grid.

4.6.6 PREPAID INVESTMENTS RELATED TO CLOUD (DTS)

Technology platforms are increasingly shifting from on-premise environments to cloud-based solutions as vendors concentrate product development, artificial intelligence (AI) capabilities, innovation roadmaps, and future enhancements on cloud-native platforms. In some cases, cloud deployment is no longer an alternative delivery model but the only viable option, as vendors discontinue on-premise offerings or limit new functionality and long-term support to cloud environments.

Cloud services can reduce the need for organizations to procure and maintain supporting infrastructure, replace hardware, and manage underlying technology environments, while providing access to continuously updated platform capabilities, cybersecurity features, and software enhancements that address evolving business, operational, and security requirements. As part of Hydro One's technology strategy, cloud solutions are adopted where they provide operational, technical, security, or economic advantages and align with business requirements and enterprise architecture objectives. At the same time, Hydro One recognizes that many applications and technology platforms will continue to be deployed through capital investments in on-premise or hybrid environments due to operational, regulatory, cybersecurity, or reliability requirements. When considering the 2028-2032 planning period, investments that do not otherwise meet these on-premise requirements are assumed to be cloud-based solutions and planned within the prepaid envelope. This is supported by the current increase in vendors providing cloud-based solutions as the only available solution, and the industry trend of this practice expanding and continuing.

This approach supports technology modernization, improved integration of business systems and data, reduced reliance on aging legacy platforms, and the flexibility to adapt to evolving operational, customer, and regulatory requirements. It also enables Hydro One to leverage cloud-based innovation and vendor-supported capabilities where appropriate, while maintaining direct control of critical systems and infrastructure where warranted.

Hydro One's use of cloud services reflects the increasing need to support data-intensive, highly interconnected utility operations. As business and operational requirements evolve, technology solutions are evaluated based on functional needs, operational requirements, cybersecurity considerations, risk profiles, regulatory obligations, and lifecycle costs. Cloud services may be adopted where they provide required capabilities, support system integration and scalability, accelerate the delivery of new functionality, or represent the only vendor-supported deployment model. In all cases, cloud adoption decisions are made in alignment with Hydro One's cybersecurity requirements, risk management practices, and long-term technology strategy.

Hydro One recognizes that increased adoption of cloud-native solutions also introduces corresponding operational, governance, and financial considerations that must be actively managed over the lifecycle of these investments. While cloud-based solutions can reduce certain upfront infrastructure and capital requirements, they generally rely on recurring subscription and licensing models, resulting in a greater proportion of technology expenditures being incurred through OM&A rather than capital investment. In addition, cloud vendors may periodically modify licensing structures, including transitions to user-based, device-based, transaction-based, data-volume-based, or consumption-based pricing models, which may increase ongoing costs as organizational usage, data volumes, integrations, or business requirements evolve.

Cloud-native environments also require organizations to maintain ongoing capabilities to assess, test, govern, and adapt to frequent vendor-delivered updates (including feature enhancements) and patches. While these updates can reduce technical debt and enable timely remediation of cybersecurity vulnerabilities, they necessitate sustained operational discipline and organizational maturity. Further, continued expansion of cloud services requires ongoing investment in cybersecurity monitoring, identity and access management, data governance, vendor oversight, integration management, and related operational capabilities (see GSP Section 4.11, G-GP-11 and GSP Section 4.11, G-GP-30). Hydro One has identified these implications and has incorporated the associated sustainment activities, operating requirements, and expected OM&A impacts into its planning assumptions and evidence, described in Exhibit E-04-04, Section 2.0.

The Ontario Energy Board's introduction of a sector-wide cloud computing deferral account[2], effective December 1, 2023, supports cloud adoption by allowing electricity distributors and transmitters to record incremental cloud implementation costs and associated savings for future disposition. The deferral account provides a transparent mechanism to track prudently incurred cloud costs and associated savings, and supports potential recovery through rates, subject to OEB review and approval. This framework allows utilities to advance cloud adoption while maintaining regulatory oversight, and cost accountability. See Exhibit G-01-01, Section 3.9 for more information on the Incremental Cloud Computing Implementation (Account 1511).

Exhibit E-08-01, Section 4.0 provides further information regarding the accounting treatment of cloud computing arrangements that are service contracts, including the recording of eligible implementation costs as prepaid assets under U.S. GAAP.

4.6.7 WORK PROGRAM ENABLEMENT

The successful execution of Hydro One's Transmission and Distribution investments and the delivery of service to customers, depends on the availability of suitable, well-supported, and appropriately configured general plant assets and systems. As outlined in Exhibits 2 and 3, and summarized in Figure 1 below, these work programs are growing to meet asset, system, customer, and policy requirements. This growth drives expanded field activities and increased demand for materials, facilities, vehicles, equipment, digital tools, data, and supporting infrastructure. The General Plant portfolio must therefore evolve accordingly to ensure crews and support teams can perform their work safely, efficiently, and reliably.

[2] Accounting Order (003-2023) for the Establishment of a Deferral Account to Record Incremental Cloud Computing Arrangement Implementation Costs (November 2, 2023).

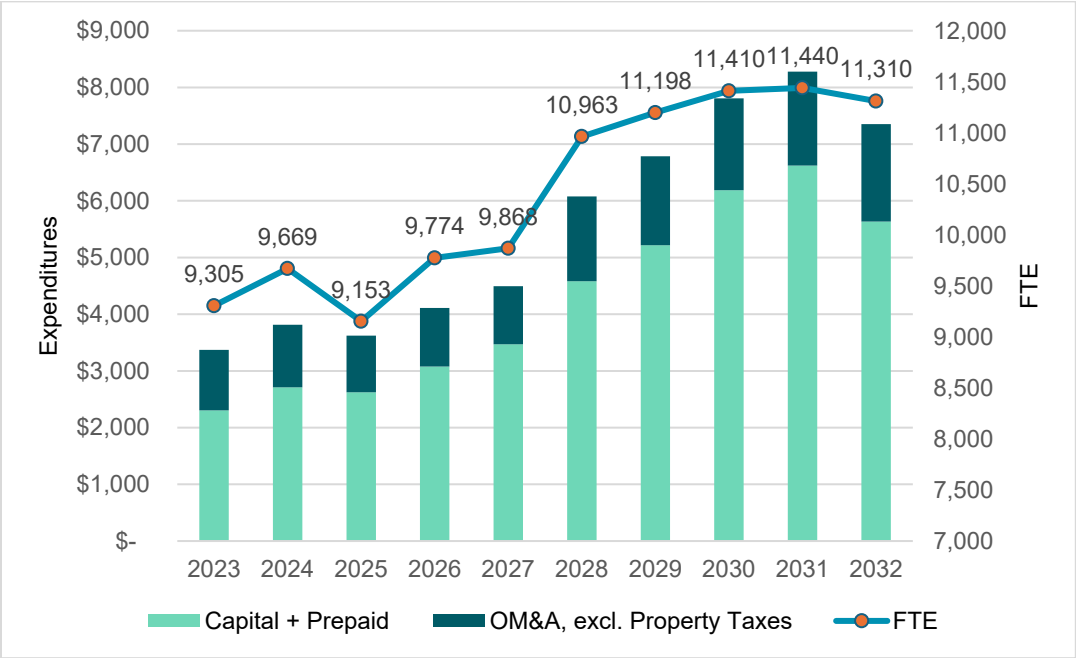

Figure 1: Transmission and Distribution System Access, System Renewal and System Service capital and prepaid expenditures, OM&A expenditures and FTE growth from 2023-2032[3]

4.6.7.1 FLEET & AVIATION

Fleet & Aviation investments support the safe, efficient, and effective execution of Transmission and Distribution work by optimizing fleet resources and enhancing the specialized aviation capabilities required to meet increasingly complex operational needs. Investment planning for this portfolio is undertaken collaboratively with Hydro One's Lines of Business to ensure fleet capacity, utilization, and capabilities remain aligned with current and anticipated operational requirements. This includes assessing equipment utilization, fleet sizing, employee-to-fleet ratios, and future work program needs to identify and prioritize fleet investments. Further details are provided in GSP Section 4.7.2.2 and 4.10.2.

[3] Referenced in E-06-02, Figure 6: Total full-time equivalents (FTEs) include both Distribution and Transmission-specific FTEs (E-06-02, Sections 4.1 and 4.2) and the Enterprise Support and Common Corporate FTEs (E-06-02, Section 4.3) allocated to Distribution and Transmission, consistent with the methodology used and described in Appendix 2-K.

Fleet supports delivering an expanded work program by ensuring there are sufficient vehicles and equipment for internal resources to complete their work. Investments in new equipment, coupled with the timely renewal of existing assets in accordance with lifecycle requirements detailed in Section 4.2.2.2, ensures that field crews have the resources required to connect and serve customers, respond to outages in a timely manner, including high-impact storm events, and complete planned capital and maintenance projects. Figure 2 below illustrates the growth of the Fleet portfolio relative to the increasing Transmission and Distribution capital work programs. For more details, please see GSP Section 4.11 G-GP-01, Subsection 2.2.

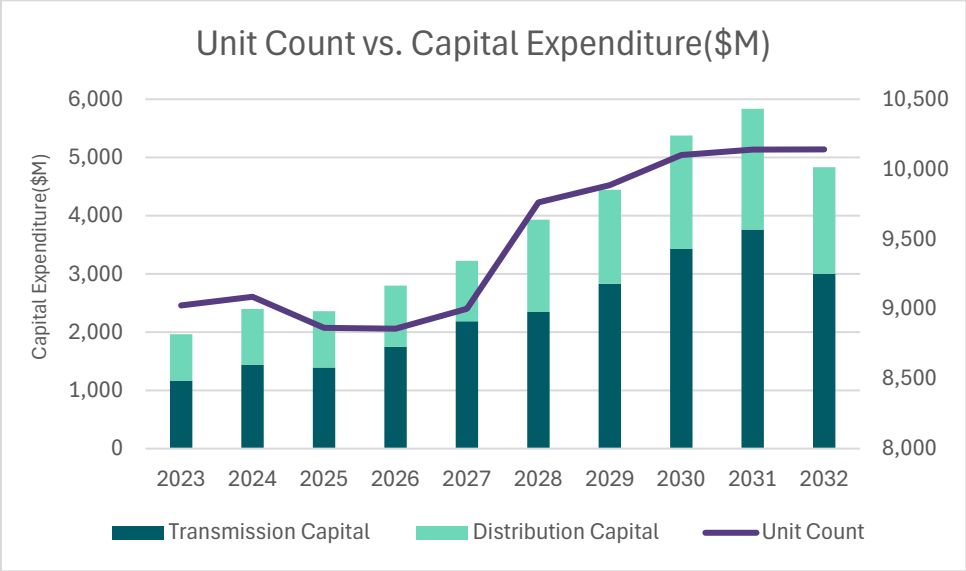

Figure 2: 2023-2032 Fleet Unit Count vs. Capital Expenditures ($M)[4]

To support various evolving Transmission and Distribution work programs, Aviation Services plans to replace two older single-engine aircraft with two twin-engine helicopters and implement related capability enhancements. The new aircraft will be equipped with hoists that improve worker access to transmission towers and enable mid-span repairs using the "Class D" or Human External Cargo ("HEC") work method. These enhancements will provide greater lifting capacity, improve operational flexibility, and enhance safety for pilots, onboard personnel, and line workers. The HEC work method is a proven industry

[4] Capital amounts exclude capital work related to General Plant.

practice currently used by utilities including BC Hydro, Manitoba Hydro, Nova Scotia Power, PG&E, and Duke Energy. Together, these fleet enhancements will improve Aviation Services' ability to safely and efficiently support Hydro One's Transmission and Distribution work programs. For additional details, please see GSP Section 4.11 G-GP-02, Subsection 3.0.

4.6.7.2 FACILITIES & REAL ESTATE

Facilities & Real Estate investments play an essential role in enabling Hydro One's growing Transmission and Distribution work programs. Many existing facilities are deteriorating, overcrowded, inefficiently designed, or otherwise unable to support current and future operational requirements. As work programs expand, workforce levels increase, and equipment, vehicle, and operational needs evolve, certain sites lack the capacity to effectively support workforce deployment, vehicle staging, material management, training, logistics, business continuity, accessibility, and field operations. In these circumstances, new construction, facility expansions, and major renovations are required to replace facilities in poor condition and ensure Hydro One's infrastructure remains aligned with operational needs and business objectives.

4.6.7.3 DIGITAL & TECHNOLOGY SOLUTIONS

DTS investments enable work program execution and drive operational effectiveness by providing the systems, data, devices, platforms, and workflows needed for Hydro One’s workforce to support growing work volumes and complexity across the organization. For example, Work and Asset Management Enablement (GSP Section 4.11 G-GP-08) supports outage coordination, field execution, and capital project delivery across Transmission and Distribution. SAP S/4HANA OneCore Transformation (GSP Section 4.11 G-GP-29) supports finance, procurement, supply chain, project delivery, and asset-related business processes. Data, Analytics and AI Enablement (GSP Section 4.11 G-GP-26) supports centralized platforms, analytics tools, data-driven decision-making, innovation, and operational efficiency. These investments allow Hydro One to execute a larger and more complex work program with better visibility, consistency, and control.

4.6.7.4 SYSTEM OPERATIONS

ISOC and BU-OGCC investments support system resilience during major events, timely power restoration, and the delivery of Hydro One's growing work programs. As operational demands increase, these facilities require additional capacity and infrastructure to support workforce growth, expanding technology requirements, and evolving control room operations. Planned investments include additional operator workstations in the ISOC control room to accommodate increased staffing requirements associated with expanding work programs and outage response activities. Investments in electrical, cooling, and building infrastructure, including additional cooling capacity for the ISOC data hall, will support increasing server loads and the continued evolution of control room technologies. Together, these investments ensure Hydro One can adopt more advanced operational tools over time while maintaining reliable and efficient system operations without requiring disruptive facility overhauls.

SECTION 4.7 – GSP – INVESTMENT PLANNING PROCESS

4.7.1 INTRODUCTION

Section 1.7 of the System Plan Framework (SPF) describes Hydro One's integrated planning framework, known as the system planning process, which is comprised of strategy and context, asset management and investment planning processes that create a comprehensive approach for managing the utility's asset base and prudently identifying and prioritizing investments. The output is a detailed, multi-year investment plan (consisting of the Transmission, Distribution and General Plant System Plans) that prudently addresses system and asset needs in alignment with Hydro One's strategic priorities and service obligations.

This planning framework achieves outcomes that are consistent with the OEB's RRF and reflects customer priorities (including priorities communicated through customer engagement), as described in detail in SPF Sections 1.6 and 1.7, respectively.

This section highlights and supplements SPF Section 1.7. It discusses the processes used to identify, select, prioritize (including reprioritizing investments over the 2028-2032 planning period), optimize and pace the execution of Hydro One's general plant assets (i.e., Fleet & Aviation (Fleet), Facilities & Real Estate (FRE), Digital & Technology Solutions (DTS), and System Operations) over the term of the System Plan. Because customer engagement informed the planning across all four investment categories, Section 4.7.2.1 addresses customer needs collectively before discussing the specific asset management approaches applicable to each category.

- Section 4.7.1 provides an overview of the components that make up the system planning process.
- Section 4.7.2 discusses elements of the asset management process (as detailed in SPF Section 1.7) as applied to General Plant assets, beginning with a discussion of how customer needs informed planning across all investment categories.
- Section 4.7.3 discusses the investment planning process (as detailed in SPF, Section 1.7) that underpinned this GSP.

4.7.2 ASSET MANAGEMENT PROCESS

Through a systematic approach to asset management, Hydro One can effectively monitor its asset population (including General Plant assets), identify asset needs, and determine the optimal intervention (whether capital investments or maintenance) in relation to asset lifecycles.

Hydro One's asset management process draws on multiple inputs to identify asset needs and determine optimal interventions. These inputs include condition assessment data, lifecycle analysis, risk evaluation, operational requirements, and customer needs. The first section, Customer Needs, addresses how customer needs informed planning across all four General Plant areas: Fleet, FRE, DTS, and System Operations. The sections that follow then describe the specific asset management approaches used in each of these areas.

4.7.2.1 CUSTOMER NEEDS

Hydro One engages customers proactively through connection requests, ongoing engagement activities, meetings, and formal surveys. Understanding these diverse customer needs is critical to business effectiveness and directly informed the development of the 2028-2032 investment plans.

Hydro One developed its 2028-2032 investment plans for general plant assets through a comprehensive, two-phase customer engagement exercise. This exercise, which engaged over 100,000 customers across all rate classes, is described in detail in SPF Section 1.6. Hydro One used the results of this exercise as a direct input into investment decision making: Phase I findings informed the development of draft investment plans, and Phase II results validated those plans before finalization. The sections below summarize how Hydro One applied customer engagement feedback to shape general plant investment plans.

PHASE I: CUSTOMER PRIORITIES AS PLANNING INPUTS

In Phase I of the customer engagement exercise, customers consistently identified reliable electricity service, rapid outage restoration, and effective system response during emergencies as their highest priorities. Hydro One used these findings to guide investment decisions across multiple general plant categories. For example, Hydro One prioritized maintaining transport and work equipment in a state of good repair within the Fleet portfolio, recognizing that fleet availability directly affects its ability to respond to outages and restore service following storm events (GSP Section 4.11 G-GP-01, Subsection 2.1)

Hydro One similarly drew on Phase I feedback to shape investments in control centre infrastructure within the System Operations portfolio. The Integrated System Operations Centre (ISOC) and Backup Ontario Grid Control Centre (BU-OGCC) house critical control room functions, and Hydro One designed investments to eliminate single points of failure, increase redundancy in power supply and cooling systems, and strengthen physical security — all aimed at reducing the risk that control centre operations could be impaired during extreme weather or emergency events (GSP Section 4.11 G-GP-13, Subsection 1.0).

Hydro One drew on the same customer feedback to shape its DTS investment plan. Customers expressed support for investments that improve outage response, strengthen system resilience, enhance communications during outage events, and improve customer service and operational efficiency, provided the benefits of those investments are clear and understood.[1] Hydro One incorporated this feedback into the development of its DTS plan by prioritizing investments that support these customer outcomes. For example, Customer Service Enablement (GSP Section 4.11 G-GP-07) supports improved customer experience for service and access to information through enhancements to customer facing systems and digital capabilities. As technology platforms increasingly evolve toward cloud based solutions, DTS investments also ensure Hydro One can continue to provide modern, reliable, and scalable technology services that support customer and operational needs. Intelligent Grid (DSP Section 3.11, D-SS-09) responds to customer priorities for

[1] SPF Section 1.6, Attachment 1, IRG Overview Report, p. 10-12 and 17-18

reliability and resilience by improving system visibility, outage response, and operational decision making.

Phase I results also showed strong customer support for investments that address at risk building components and make sites more resilient to severe weather. Hydro One used this feedback to direct FRE capital spending toward the highest risk facility deficiencies identified through rigorous condition assessment data. Further, Hydro One identified critical sites at increased risk of flooding or wildfire damage and proposed targeted investments to reduce these risks. Notably, Hydro One has experienced flooding incidents at Transmission Station Facilities, which led to service disruptions for customers partially attributable to facilities; these events reinforce the importance of resilience focused investments and informed FRE planning priorities (GSP Section 4.11 G-GP-04, Subsection 2.3).

PHASE II: TESTING DRAFT PLANS AGAINST CUSTOMER EXPECTATIONS

After developing draft investment plans informed by Phase I results, Hydro One used Phase II of the customer engagement exercise to test whether the level and composition of proposed investments aligned with customer expectations. In Phase II, customers were presented with draft investment plans alongside alternative scenarios with corresponding service outcomes and rate impacts. Hydro One reviewed the results to identify any areas where draft plans might require adjustment before finalization, and to confirm that the plans appropriately balanced customer priorities with operational and asset management requirements. The results of this exercise are discussed in SPF Section 1.6.

For example, customers were presented with Hydro One's proposed technology investment plan alongside an alternative scenario that would defer or limit investments in customer service and operational efficiency capabilities. A clear majority supported the draft level of information technology (IT) spending, including investments to maintain technology systems, enhance customer service, improve operational efficiency, and protect the grid from physical and cyber threats.[2] This feedback confirmed that the

[2] SPF Section 1.6, Attachment 1, IRG Overview Report, p. 18

proposed DTS plan appropriately balances customer priorities and expected investment outcomes by prioritizing investments that:

- address physical and cyber security risks (GSP Section 4.11 G-GP-10, G-GP-11, and G-GP-30)
- improve reliability, resilience, and outage response through initiatives such as Intelligent Grid (DSP Section 3.11, D-SS-09);
- enhance customer service and communications through Customer Service Enablement (GSP Section 4.11, G-GP-07);
- support operational efficiency and effective resource allocation; and
- enable long-term improvements in service quality and operational effectiveness.

Customers were also presented with Hydro One's proposed plan for maintaining buildings and facilities along with an alternative scenario that would reduce investments in repairing or retrofitting facilities that no longer meet modern standards. Customers supported the draft plan level of spending, including investments focused on addressing at risk building components, making at risk sites more resilient to severe weather, and repairing or retrofitting field offices.[3] Consistent with these customer preferences, the FRE plan prioritizes investments that:

- allow Hydro One to address at least 50% of high-to-medium-risk building components, prioritizing those that are most critical to safety and reliability;
- reduce the risk of flooding at its highest risk sites, making them more resilient to severe weather;
- repair or retrofit at least 15 field offices/ Operating Centres (OC) sites to bring them up to modern standards (GSP Section 4.11 G-GP-03, Subsection 3.3)

Through this two-phase process, Hydro One drew on customer engagement evidence as one input into investment decision making. Phase I results informed the development of draft investment plans across the Fleet, FRE, DTS, and System Operations portfolios. Phase II results allowed Hydro One to test those plans against customer expectations and consider customer feedback as appropriate through investment decision making.

[3] SPF Section 1.6, Attachment 1, IRG Overview Report, p. 17

The sections that follow describe the specific asset management methodologies, investment candidate development processes, and prioritization frameworks applied within each investment category.

4.7.2.2 FLEET & AVIATION

Fleet manages asset portfolios that support Hydro One's work programs and workforce. The portfolio is managed with the dual objectives of optimizing total lifecycle costs and minimizing disruptions due to asset unavailability. These objectives are achieved through planned replacement of end of life assets in poor condition and acquisition of incremental assets to support the planned work program and headcount growth over the 2028-2032 period.

The sections that follow describe the asset management process underlying these investments. Although the lifecycle inputs differ by asset type, the process described in this section applies to all Transport and Work Equipment (TWE) assets. Hydro One identifies candidate investments using lifecycle analysis, condition or inspection information, operational requirements, and cost considerations; prioritizes investments based on work program need, safety, availability, utilization, and financial considerations; and optimizes the plan through maintenance, refurbishment, rentals, sharing, and pacing where appropriate.

For aviation assets, Hydro One targets aircraft replacement at the optimal age of 20 years, after completion of their 12-year inspection/refurbishment, but before the 24-year inspection/refurbishment is required. For more details, please see GSP Section 4.3 Attachment 3, p. 5.

This strategy allows Hydro One to benefit from improvements in industry technology and design. These include enhancements in performance and fuel management, a longer cycle between engine overhauls, and a redesigned tail-rotor for increased control and stability at low speeds or high hovers, to support safety and productivity.

4.7.2.2.1 INVESTMENT CANDIDATE DEVELOPMENT

Fleet undertakes a multifaceted approach to assess asset needs and determine units for replacement that includes Estimated Service Life (ESL) driven lifecycle analysis, condition verification, and the regular assessment of operational requirements. Fleet's replacement strategy uses ESL based on age and mileage (or engine hours, where applicable) to identify potential candidates for replacement. For more details, please see GSP Section 4.2.2.3.

To support the setting of ESLs for its asset types, Fleet engaged Utilimarc, a third party industry expert. The Utilimarc Fleet Lifecycle Study (see GSP Section 4.3, Attachment 2) and the Helicopter Lifecycle Analysis Report (see GSP Section 4.3, Attachment 3) analyzed the optimal age for asset replacement to achieve the lowest annualized lifecycle cost based on historical data.

Once an asset is past its recommended lifecycle age, it will become more prudent to replace the asset than to continue to repair it.[4] For TWE assets, to ensure that an identified candidate that has exceeded its ESL is indeed at end of life, Hydro One assesses the asset's mechanical condition based on detailed mechanical inspections and/or the unit's inspection and maintenance history.

As part of end of life replacement, Fleet will consider implementation of technologies that provide operational and/or environmental benefits. Hydro One's Green Fleet strategy is to replace internal combustion engine vehicles with low or zero emission technology where market conditions and availability allow.[5] Under this strategy, Fleet will initially focus on replacing light class vehicles (primarily, SUVs and sedans). In the future, as options for EV or plug-in hybrid electric pickup trucks and work trucks mature, they may be incorporated into the replacement program, where suitable for Hydro One's work programs and geography. Hydro One's service territory is vast and includes remote and

[4] Utilimarc, Hydro One Fleet Lifecycle Study– GSP Section 4.3 Attachment 2, p. 11-12
[5] Due to disruption in the EV market, some Original Equipment Manufacturer ("OEMs") are slowing the production of electric vehicles (EV) and plug-in hybrid (PHEV) vehicles which may affect future Green Fleet targets.

rural areas. Consequently, Fleet focuses on deploying EV technology in urban areas where charging infrastructure is available and where sufficient density allows for charging infrastructure to be efficiently scaled up or supplemented by Hydro One charging stations. In addition, Fleet optimizes utilization and fleet size relative to work program demands (thus minimizing or deferring new acquisitions where feasible). Fleet works with other lines of business (including Distribution Lines, Forestry Operations, Transmission Lines, Stations Construction and Stations Services) to maximize equipment utilization. This can involve moving underutilized equipment or specialized equipment of limited availability around the province through scheduling and line of business sharing. This is an important step that occurs prior to investment, and in some circumstances, may offset the need for new assets. As illustrated in the Utilimarc Fleet Operations Benchmarking report (see GSP Section 4.3 Attachment 1, p. 24), Hydro One leads its comparators by having one of the smallest proportions of low mileage vehicles as a percentage of the overall fleet.[6]

4.7.2.2.2 INVESTMENT PRIORITIZATION

Hydro One applies the same prioritization discipline to TWE and aviation assets, adapted to the relevant asset class. For TWE, Fleet considers a unit's cost-per-kilometre, availability, including downtime and repair time, potential safety risk to personnel, and the company's current and anticipated work requirements, among other factors. For helicopters, Aviation Services considers comparable lifecycle, availability, safety, and operational requirements.

The assessment of work requirements is a key contributor to the prioritization of asset replacements. As part of the assessment process, Fleet collaborates with other Lines of Business to ensure it has an up to date understanding of the types and numbers of assets needed. This assessment considers:

- Functionality of Equipment – Work programs have diverse needs that frequently require different equipment functionality, such as varying boom sizes. This functional assessment is also informed by the geographical location and seasonality of the work. Relevant considerations include the need for specialized

[6] Utilimarc, 2019 Fleet Operations Benchmarking Report (2020) – GSP Section 4.3 Attachment 1, p. 24

winterized equipment, access to boats, and access to areas that are remote or hard to reach necessitating aviation support or off-road equipment.

- Equipment standards – As work methods evolve, it is critical that the lines of business have access to TWE and aircraft that enable them to safely conduct their work.
- Future requirements – Priority is given to investments that support sustained, long term work programs; one-off or short term initiatives can typically be addressed more economically through rentals.
- Staff and equipment complement – Investments in vehicles for full-time employees are prioritized over vehicles for temporary staff. Short-term surges in equipment needs due to temporary staff can often be addressed through rentals.

Other important factors that drive Fleet investment decisions include:

- Technological improvements in the industry and the potential for adoption of electric vehicles (EV) or other technologies to enhance operational performance and work practices.
- The financial implications of replacement versus maintenance – Assets beyond their ESL have higher operating and maintenance costs. Those with higher incremental maintenance costs are typically prioritized over assets with lower incremental maintenance costs.
- Procurement lead-time and availability – Specialized equipment can take much longer to procure and may not be available to lease or rent from third-party vendors.
- Equipment utilization – By using telematics technology, under-utilized equipment is identified and considered for other work or moved to another work area, as discussed above.

4.7.2.2.3 CHALLENGES AND TRADE OFF CONSIDERATIONS

One of the biggest challenges for Fleet is the increase in unit costs since 2020. As outlined in SPF Section 1.8.3, the purchase price of pick-up trucks has increased by approximately 25% since 2020. The Utilimarc purchase price used for a bucket truck in its 2025 Fleet

Lifecyle study for Hydro One is $515,148,[7] compared to $350,000 in the 2020 Fleet Lifecyle study,[8] representing a 47% increase. As a result, Fleet requires a larger investment to acquire the same quantity of TWE units necessary to maintain a safe, reliable, and functional fleet.

To deliver value for Hydro One's business and its customers, Fleet performs further optimization by grouping investments into equipment categories and ranking each investment based on "financial opportunity", prioritizing investment candidates that have higher than expected operating cost. Additionally, Fleet conducts cost-benefit analysis of rent versus own options for repeated short-term equipment needs.

In addition to planned replacements, Hydro One performs preventive maintenance on all TWE assets as per manufacturer guidelines (as indicated in GSP Section 4.2.2.2). In the event of an unscheduled repair, decisions on whether to replace major components (e.g., engine) are made on a case-by-case basis, based on the economic value of repair versus replacement over the potential life of the asset.

The TWE Replacement Program balances capital and operating expense exposure to maintain a safe, reliable and cost-effective fleet. In this regard, it is imperative to evaluate and forecast capital spending requirements to minimize large fluctuations in spending levels and to stabilize long term capital investment, as discussed in GSP Section 4.11 G-GP-01, Subsection 3.1. In a given year, a reduction in capital spending will result in increased operating costs, which could ultimately result in increased equipment rates directly impacting the costs of work programs; those rates are discussed in Exhibit C-09-03 Section 3.1.

4.7.2.3 FACILITIES & REAL ESTATE

Hydro One manages a complex and diverse portfolio of facilities within its FRE portfolio. Investments under this portfolio are underpinned by (i) rigorous condition assessment data

[7] Utilimarc Hydro One Fleet Lifecycle Study is provided as an attachment under GSP Section 4.3 Attachment 2, p. 11
[8] EB-2021-0110, Exhibit B-4-1, Section 4.3 Attachment 2, p. 11

that covers approximately 90% of sites, and (ii) an enhanced risk-based prioritization framework which targets the building components that present the highest risks to operations in the event of failure. This represents a move away from Hydro One's historical "break and fix" approach in the FRE portfolio, towards a more targeted and data driven investment approach to ensure greater cost effectiveness and better customer outcomes.

4.7.2.3.1 INVESTMENT CANDIDATE DEVELOPMENT

FRE leverages multiple data driven processes to establish asset needs, corresponding investments and prioritization, including ongoing maintenance and inspections and Building Condition Assessments (BCAs), as well as coordinated reviews with lines of business.

Maintenance and inspection programs feed into the FRE data driven decision making and investment planning framework. As further discussed in GSP Section 4.2.4.2, BCAs and specialized inspections provide Hydro One with comprehensive insight into a facility's condition and form the backbone for data driven decision making, asset inventorying, and work prioritization. Hydro One has expanded the coverage of its BCAs to 90% of the portfolio (from ~50% as presented in EB-2021-0110). This effort improved the comprehensiveness and accuracy of FRE's asset intelligence, which is required to support its enhanced risk-based approach to planning.

To this end, Hydro One engaged Jones Lang Lasalle (JLL) to perform an independent assessment of the rigour of Hydro One's BCAs (see Section 4.3 Attachment 7). JLL concluded that the BCA program is professionally executed, is carried out in a manner consistent with industry standards, and provides Hydro One with consistent building condition data across the majority of the portfolio. JLL expressed a high degree of confidence in the quality and reliability of the assessment process employed by Hydro One's consultants, and concluded that the reports provide a sound technical foundation for understanding Hydro One's building conditions and capital needs.

The condition data gathered through BCAs directly informs investment decisions. In parallel, Hydro One conducts frequent reviews with lines of business to identify facility

related requirements and priorities. Specifically, a building component becomes a candidate for replacement when its condition-adjusted life remaining reaches zero or falls below. Throughout its lifecycle, the useful life of each component is adjusted based on condition assessment data from BCAs and other supplemental inspections, allowing Hydro One to prioritize investments based on current asset conditions (see in Section 4.7.2.3.2, Condition-Adjusted Life of Component). For example, a flat building roof membrane is typically rated for a useful life of 20 years. Therefore, when the condition-adjusted remaining life of a roof membrane reaches 0 or less, Hydro One will consider replacing it in accordance with prioritization methodology described in Section 4.7.2.3.2.

4.7.2.3.2 INVESTMENT PRIORITIZATION

To determine investment priorities for the FRE portfolio, Hydro One applies a risk-based prioritization methodology to rank proposed investments within the portfolio. To manage capital investments effectively, Hydro One developed the FRE criticality matrix framework in 2024 and 2025. This framework provides a consistent, defensible, and scalable approach to evaluating facility asset risk across hundreds of buildings and tens of thousands of components.

The methodology identifies, categorizes, and prioritizes primarily sustainment requirements for existing facility components by evaluating condition, condition-adjusted useful life, building criticality, and component criticality at the asset level. This approach distinguishes between capital deficiencies requiring near term investment due to elevated operational, reliability, safety, or security risk, and those that can be monitored, remediated, or deferred.

The risk-based framework also informs, but does not solely determine, New Build and Major Renovation investments. These larger scale investments are selected based on broader considerations such as operational capacity, work growth, changing operational needs, site factors, business continuity considerations, consolidation and efficiency opportunities, and long term functionality. However, an accumulation of significant high risk deficiencies at a site may signal the need for a more comprehensive solution, helping to identify candidates for these types of investments.

The methodology evaluates risk using two primary dimensions: Probability of Failure and Impact of Failure. Each dimension is scored on a scale of 1 to 5, and the two scores are multiplied to produce an overall risk score out of 25. This score is then classified as high, medium, or low risk, enabling data-driven capital planning decisions. These considerations that form part of the risk methodology are depicted in Figure 1 below.

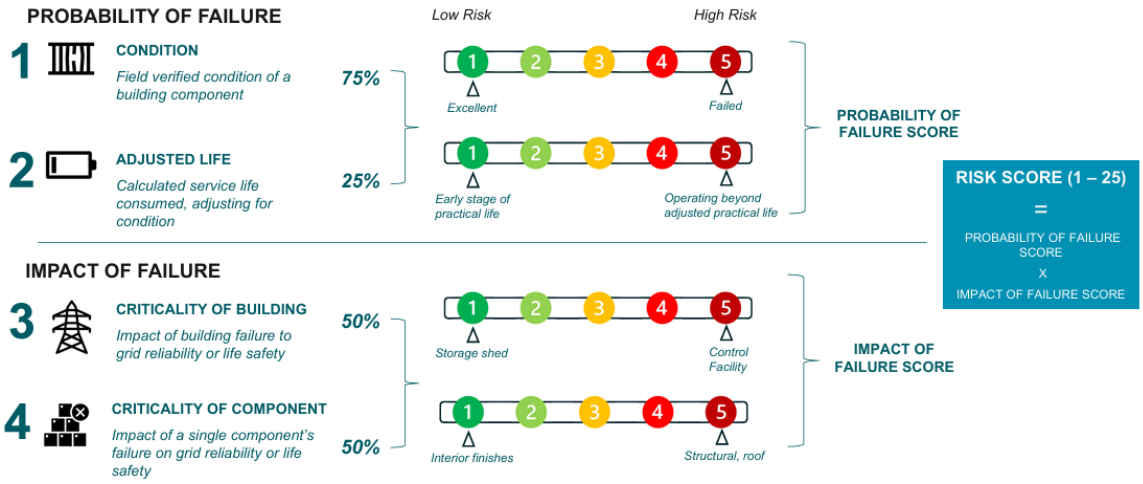

Figure 1: Facility Risk-Based Investment Methodology

The probability of failure and impact of failure are multiplied together to produce an overall risk score out of 25. This score is classified into “high”, “medium” and “low risk” in accordance with the following scoring rubric, as described in Figure 2.

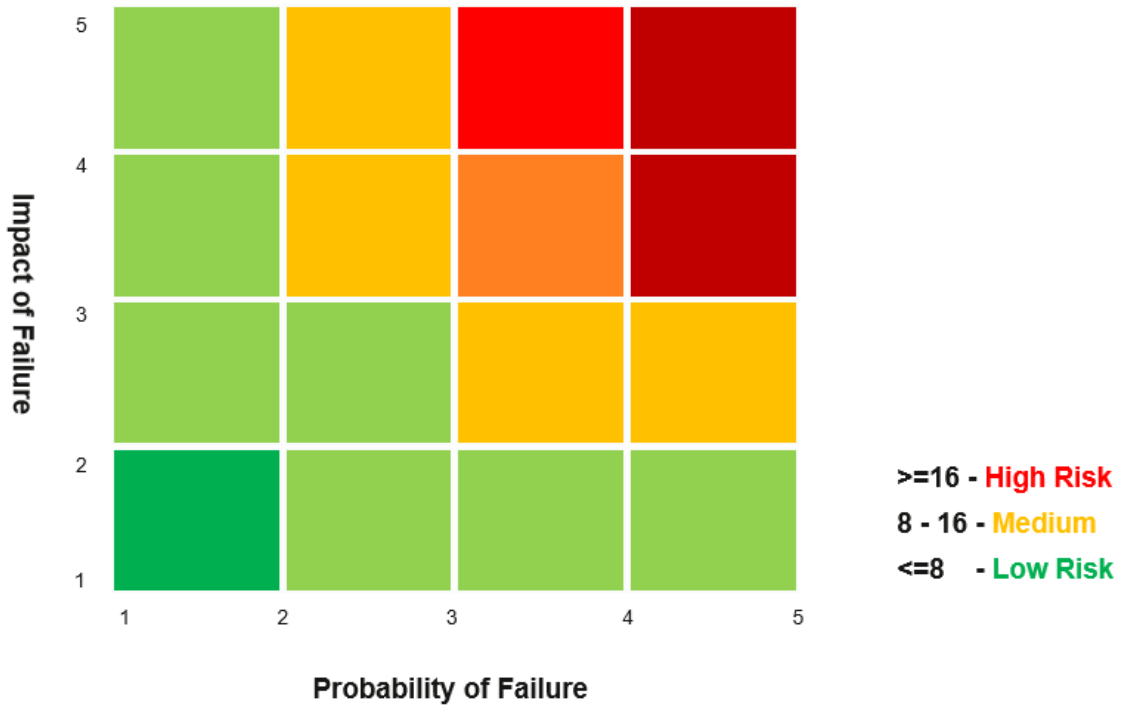

Figure 2: Facility Risk-Based Scoring Outcome Matrix

Assets with scores of 16 or higher are classified as high risk. The following sections describe how each dimension is assessed.

Probability of Failure

The probability of failure measures the likelihood that a specific component will fail, based on physical condition and lifecycle maturity. This dimension of the methodology is informed by two main factors:

1. Condition of Component (weighted as 75% of probability of failure)
2. Adjusted Life of Component (weighted as 25% of probability of failure)

Condition of Component: This factor reflects observable and measurable deterioration and performance degradation of building components. Condition scoring is primarily derived from BCA and also includes results from supplementary assessments including specialized surveys (e.g., roof inspections) and routine inspections. These field-verified assessments rank components from excellent to completely failed on a five-point scale.

For example, brand new assets are rated as a 1/5, and those that are completely failed are rated as a 5/5.

Condition-Adjusted Life of Component: This factor reflects the lifecycle position of building components relative to expected useful life, as adjusted based on condition data. The useful life of an asset is derived from industry lifecycle data, including manufacturer warranties and databases from third-party service providers.[9] For example, a flat building roof membrane is rated for a useful life of 20 years. Throughout its lifecycle, the useful life of components is adjusted based on condition assessment data from BCAs and other supplemental inspections. Assets that have exceeded 100% of their condition-adjusted remaining life are rated 5/5.

Condition-adjusted remaining life is the adjusted age based on the outcome of assessments and inspections described above. For example, an exterior window that has been in service 10 out of 15 years of its expected useful life, but assessed to be in excellent condition, can be adjusted to have its useful life extended by three years.

Age is a reliable indicator of failure for certain FRE assets. Large capital components such as roof systems have predictable degradation patterns, meaning their performance can be estimated with reasonable confidence based on their position in the lifecycle. For example, a membrane-system flat roof with an expected useful life of approximately 20 years would generally be expected to have a low probability of failure at year 10, while a roof operating many years beyond its 20-year expected useful life would generally have a much higher probability of failure.

Given the size of the portfolio and the operating expenses associated with condition assessments, using age as a supplementary factor in risk scoring is an appropriate approach that aligns with the industry best practice for large facility portfolios.

[9] One such third-party service provider is RSMeans.

Impact of Failure

Impact of failure measures the consequences to operational continuity, safety, and the broader grid reliability in the event of component failure. This dimension of the methodology is informed by 2 main factors:

1. Criticality of Building
2. Criticality of Component (i.e., to the operational integrity of the building)

Each of these criticality metrics is awarded a score out of 5, and weighed equally to determine the impact of failure of a given building component.

Criticality of Building: This factor reflects the operational importance of a building, by assessing the impact that would ensue if the building were to fail. This considers factors that include a building failure's impact to the provision of distribution and transmission service, Hydro One's distribution and transmission systems, the site that houses the building, Hydro One personnel, and to customers. The criticality of buildings is established through a comprehensive and collaborative exercise that considers historical failure information, as well as input from various perspectives within the organization.

All buildings within the OC Admin and TS Facilities sub-portfolios were assessed and ranked as high, normal, or low criticality. For example, in the TS Facilities portfolio, high criticality buildings mostly include those buildings that shelter high-energy relay, control, battery or power system equipment – that if compromised, are most likely to result in service disruptions to customers. Medium criticality buildings include "main buildings", "office buildings", and "shops". Low criticality buildings primarily consist of storage buildings. These building level criticality rankings were then converted to a five-point scale and used alongside component criticality to determine overall impact of failure.

Criticality of Component: This factor considers the importance of a component to the operational integrity of the building it supports, including the impact that would ensue if the component were to fail. Considerations include impact to building functionality, grid reliability, and health and safety. The criticality of components is established through a comprehensive and collaborative exercise that considers industry expertise, historical

failure information, and input from across the organization. The classification of building component criticality is organized using the Uniformat standard, which classifies building and site elements by function and performance. Components such as roofs, HVAC systems, and Fire/Life Safety systems score 5/5 due to their potential to directly affect reliability and safety. In contrast, components with limited operational impact, such as carpets, interior finishes, and furniture, score at 1/5.

Risk Scoring Outcomes

For both probability and impact of failure, the two dimensions are finally multiplied together to arrive at an overall “risk score” out of 25. The resulting risk classification informs the prioritization of facility component investments.

Assets with scores of 16 or higher are classified as high risk, and are generally prioritized for sustainment investment over medium or low risk assets. Because individual risk categories can contain hundreds of millions of dollars in assets, the FRE risk-based framework includes a quantitative prioritization process that identifies the building components with the greatest need for investment. This enables Hydro One to direct capital toward the highest priority deficiencies.

The examples illustrate the application of the risk matrix in different scenarios.

Example 1 - Failed Roof: This example of a proposed investment pertains to a roof that has completely failed (condition score of 5) and has no remaining useful life (adjusted useful life score of 5). As a critical component, the roof scores 5 for component criticality. At a high-criticality transmission station (building criticality score of 5), the overall risk score is 25/25— placing this deficiency in the high-risk category. However, if the same roof were located at a low-criticality storage building (building criticality score of 1), the overall risk score would be 15/25, placing it in the medium-risk category. This demonstrates how the building criticality of the component in question can impact the risk score for the deficiency in question.

Example 2 - Poor Condition HVAC Unit: This example of a proposed investment pertains to an HVAC unit (component criticality score of 5) at a medium-criticality building (building criticality score of 3). If the unit is in poor condition (condition score of 4) and 80% through its condition-adjusted useful life (adjusted useful life score of 4), the overall risk score is 16/25 — the threshold for high-risk. However, if the same HVAC unit were only 70% through its condition-adjusted useful life (adjusted useful life score of 3), the overall risk score would be 15/25. This would result in the deficiency being considered medium-risk despite being poor condition. This illustrates how a component's lifecycle position and condition can impact the risk score for the deficiency in question.

Example 3 - Failed Exterior Window: This example of a proposed investment pertains to an exterior window (component criticality score of 3) that has completely failed (condition score of 5) and is 200% past its condition adjusted useful life (adjusted useful life score of 5), located in a normal-criticality building (building criticality score of 3). Despite the window's failed condition, the overall risk score is only 15/25 — below the high-risk threshold. This is because the window's moderate component criticality limits the impact of failure. This illustrates how component criticality can impact the risk score for the deficiency in question. Assets with moderate impact of failure will generally only reach the high-risk category when located at high-criticality buildings.

For a breakdown of the high-risk, medium-risk, and low-risk deficiencies within the OC Admin and TS Facilities portfolios refer to Figures 3 and 4 of GSP Section 4.11 G-GP-03 and Figures 4 and 5 of GSP Section 4.11 G-GP-04.

The course of action for component investments, such as full or partial replacement, repair, renovation, or other types of remediation, depends on the type of component. For example, roof membranes or coatings are often fully replaced in accordance with the results of a condition assessment. However, a high-risk capital deficiency within a critical building foundation or structural component may not be feasible to replace. In this case, targeted repair or remediation may be conducted instead, depending on project-specific factors, the nature of the deficiency, and deliverability of the work.

4.7.2.3.3 ASSET MANAGEMENT CONSIDERATIONS FOR NEW BUILDS AND MAJOR RENOVATIONS

New Build and Major Renovation investments (see GSP Section 4.11 G-GP-03 and G-GP-04, Subsections 3.2) are assessed through a more holistic evaluation that considers the risk-based methodology described above in combination with additional factors. Hydro One advances facilities for New Build or Major Renovation consideration when multiple factors collectively indicate that continued sustainment investment would not adequately address the underlying facility need. This may occur where significant building deficiencies coincide with operational growth, facility functionality challenges, site constraints, ownership tenure risks, or opportunities to consolidate facilities and improve operational efficiency. Candidate projects are then prioritized based on the severity of these factors, ensuring capital is directed to facilities where long-term operational requirements cannot be cost-effectively managed through continued repair and sustainment investments.

Ownership tenure forms an important part of this evaluation. When assessing investment candidates, Hydro One considers whether leasing or ownership best supports the operational requirements of the asset class. Leasing may be appropriate for office-type facilities where flexibility and market availability provide value. In contrast, ownership is generally preferred for Operations Centres and other core operational facilities where continuity of service, operational control, resilience, and long-term investment value are more important than occupancy flexibility. Recent experiences with landlord termination rights and non-renewals at critical facilities have reinforced the importance of tenure certainty in supporting reliable operations, particularly in remote and rural areas where alternative facility options may be limited.

4.7.2.4 DIGITAL & TECHNOLOGY SOLUTIONS

Hydro One's DTS portfolio includes IT, operating technology (OT), and security investments to enable the safe, reliable, and efficient operation of its transmission and distribution systems and the delivery of customer services. IT investments support enterprise and customer-facing business processes; OT investments support real-time monitoring, control, and operation of the Bulk Electricity System; and security investments protect physical and cyber assets from evolving threats.

DTS is accountable for planning and managing IT and security assets. In addition, DTS includes the planning and delivery of OT solutions in close coordination with System Operations, given the specialized and safety-critical nature of OT systems. Investment decisions for all assets under the DTS portfolio are developed and prioritized using a structured, risk-based, and value-driven process that aligns system needs, regulatory obligations, customer priorities, and long-term asset sustainability.

4.7.2.4.1 INVESTMENT CANDIDATE DEVELOPMENT

Investment candidates are identified through engagement with Hydro One's lines of business. DTS works collaboratively with these groups to identify technology and security needs required to achieve business objectives and capabilities, including:

- Sustaining safe and reliable grid operations, including outage response and restoration;
- Maintaining and enhancing customer-facing services, such as billing, customer communications, and outage information;
- Improving operational practices through better data, analytics, and system integration;
- Supporting work planning and asset management; and
- Meeting evolving safety, legal, regulatory, and cybersecurity requirements.

Where feasible, candidate investments are designed to enable multiple business outcomes, such as improving operational performance while also strengthening cybersecurity or enhancing customer information during outages.

Candidate investments are developed with a strong focus on optimizing and rationalizing the technology environment. Emphasis is placed on business value, reuse of existing platforms, minimization of customization, avoidance of duplicative solutions, and appropriate use of commercial off-the-shelf and enterprise platforms. These principles also include taking a "cloud-smart" approach to technology, considering relevant industry trends towards cloud solutions and adopting them when doing so best meets business requirements.

Lifecycle management is a foundational element of investment candidate development. DTS regularly evaluates the health and supportability of IT, OT, and security assets using factors such as vendor support timelines, hardware age, system performance, cyber vulnerability exposure, and operational criticality (see GSP Section 4.2.5.3).

Where assets nearing end of life can be aligned with a broader business enabling initiative, lifecycle renewal is incorporated into that initiative to maximize value and minimize disruption. Where no such initiative exists, like-for-like replacements are planned to maintain continuity of service and mitigate operational and cybersecurity risks. This approach recognizes that continued reliance on unsupported or obsolete systems materially increases the risk of service interruptions, security incidents, and escalating support costs.

Ultimately, each investment candidate is assessed for alignment with Hydro One's corporate strategy and DTS strategic priorities, ensuring they support Hydro One's ability to safely, reliably, and efficiently operate Ontario's electricity system while meeting evolving customer, business, and regulatory requirements. Key areas of focus include enhancing grid reliability and resilience through the modernization of operational technology, network management systems, and communications infrastructure; protecting and securing critical infrastructure through integrated physical and cyber security capabilities; and maintaining customer-centric technologies that support digital customer interactions, core customer transactions, and service delivery.

Investments must also enable workforce and safety effectiveness by providing modern enterprise platforms, business systems, digital workplace tools, and asset management capabilities that support the effective execution of transmission, distribution, and corporate work programs. Investment emphasis is also placed on leveraging data and analytics as a strategic asset to strengthen information governance, decision-making, and operational insights across the enterprise.

Underpinning these priorities is a continued investment in core technology operations and foundational infrastructure to ensure that business systems remain secure, resilient,

vendor supported, and capable of supporting future growth. Collectively, investments are assessed based on their ability to deliver long-term value, reduce operational risk, improve reliability and security, enhance customer and employee experiences, and support Hydro One's evolving energy system needs.

Candidate investments are also sometimes identified as supporting best practices or as the result of a benchmarking study. The need for the planned technology investments included in Hydro One's application has been reinforced by Gartner's IT enterprise maturity assessment. The assessment indicated that Hydro One's IT capabilities generally sit at foundational to emerging levels, with data and analytics being identified as one of the lowest maturity domains, particularly in the areas of enterprise data integration, reuse of analytics content, and operationalization of AI. The study has confirmed the importance of DTS' investment in this area, with programs to develop centralized platforms, governance structures, and analytics tools included in Hydro One's application (see GSP Section 4.11 G-GP-26). Further information on Gartner's Enterprise IT Spending and Staffing Benchmark and IT Maturity Assessment can be found in GSP Section 4.3.

4.7.2.4.2 INVESTMENT PRIORITIZATION

After candidate investments are developed, Hydro One establishes a coordinated delivery plan that aligns investments with business priorities, resource availability, and implementation dependencies. Given the increasingly integrated nature of technology across the organization, the focus is on determining the appropriate timing and sequencing of investments to enable efficient execution of business plans while maintaining safe, reliable, and secure operations.

DTS' investments play an important role in enabling Hydro One's broader capital and operating portfolios. As a result, investment planning considers the extent to which initiatives:

- Reduce operational, cybersecurity, and compliance risks;
- Support safety, system reliability, and resiliency objectives;
- Enable business capabilities and outcomes across one or more lines of business;

- Deliver customer benefits, including improved outage information, restoration times, and service responsiveness; and
- Improve operational efficiency, productivity, and long-term cost effectiveness.

Rather than evaluating investments on a project-by-project basis, Hydro One has adopted an enterprise-wide view of technology planning. This approach recognizes that many investments are complementary and collectively required to support ongoing business operations, regulatory obligations, modernization initiatives, and grid transformation objectives. Accordingly, investment decisions are focused on determining the most effective pace and sequence of delivery while balancing organizational capacity, technology readiness, operational considerations, and business needs.

Hydro One actively manages dependencies across its technology portfolio and incorporates them into investment planning. Many initiatives rely on common platforms, shared data structures, cybersecurity capabilities, or foundational infrastructure that support multiple business functions. These enabling investments are coordinated with dependent business initiatives to ensure capabilities are available when required and to avoid delays to broader organizational objectives. Where appropriate, related technology needs are addressed through enterprise solutions that improve consistency, strengthen governance and security controls, reduce duplication, and optimize lifecycle costs.

A material portion of technology and security investments is also driven by mandatory safety, legal, and regulatory requirements. These include obligations related to:

- North American Electric Reliability Corporation Critical Infrastructure Protection (NERC CIP);
- Provincial cybersecurity and privacy requirements;
- Occupational health and safety regulations; and
- Legal and contractual commitments necessary to operate the electricity system.

These investments are incorporated into Hydro One's delivery plan to ensure ongoing compliance, system integrity, and operational continuity. The timing and sequencing of

discretionary investments are coordinated with these mandatory requirements and other business priorities to support efficient execution of the overall enterprise portfolio.

4.7.2.5 SYSTEM OPERATIONS

Planned investments in the ISOC and the BU-OGCC are required to ensure the safe, reliable, secure, and compliant operation of the electricity system. These facilities perform mission-critical, 24-hour real-time control and coordination of the Bulk Electricity System. They are essential to maintaining system reliability, managing outages, and responding to emergency conditions.

Given the critical nature of control centre operations and the severity of potential consequences of system failure, Hydro One applies a structured and disciplined investment planning process that is risk-based, value-driven, and aligned with regulatory obligations and long-term asset sustainability.

Investment decisions are reviewed through established forums to ensure proposed expenditures are prudent, necessary, and in the best interest of customers.

4.7.2.5.1 INVESTMENT CANDIDATE DEVELOPMENT

Investment candidates are identified by System Operations through a continuous planning process that incorporates system needs assessments, risk evaluations, compliance monitoring, and operational feedback. This process is informed by input from DTS, cybersecurity, facilities, and enterprise risk management functions.

Candidate investments are developed to address the following core objectives:

- Sustaining safe and reliable operation of the distribution and transmission systems under normal and contingency conditions;
- Maintaining rapid detection, coordination, and restoration capabilities during outages and system disturbances;
- Enhancing situational awareness, data accuracy, staff /operator needs, and decision support;

- Supporting workforce effectiveness through training systems, simulation tools, and human-factor improvements;
- Protecting critical infrastructure against evolving cyber and physical security threats; and
- Complying with mandatory reliability, safety, cybersecurity, and legal requirements.

Where practicable, investments are designed to deliver multiple benefits, such as improving operational performance while also reducing risk or addressing lifecycle renewal needs. This approach ensures that expenditures maximize customer value.

Lifecycle management is a fundamental consideration in the development of BU-OGCC and ISOC investment candidates. System Operations assesses the condition and potential lifecycle of control-centre assets using factors such as vendor support status, failure risk, asset condition, maintenance history, security exposure, and operational criticality.

Where assets are approaching end of life or end-of-support, System Operations evaluates whether lifecycle renewal can be integrated into broader upgrade initiatives. This approach minimizes operational disruption, reduces the frequency of system changes, and improves overall investment efficiency.

This lifecycle-based planning approach recognizes that continued reliance on obsolete or unsupported systems increases the likelihood of service interruptions, security incidents, regulatory non-compliance, and escalating maintenance costs. Accordingly, lifecycle investments are necessary to maintain baseline system performance and reliability.

4.7.2.5.2 INVESTMENT PRIORITIZATION AND TRADE-OFF CONSIDERATIONS

The ISOC and the BU-OGCC are facilities that support core system control and outage response functions. As a result, investments affecting their operational capability, operational redundancy, and continuity are consistently among the highest priorities within the portfolio.

Priority is given to investments that:

- Address operational, reliability, safety, security, or compliance risks;
- Eliminate single points of failure;
- Strengthen redundancy and recovery capabilities;
- Support compliance with NERC Reliability and Critical Infrastructure Protection requirements; and
- Sustain operator performance and control centre functionality.

When evaluating competing investment needs, System Operations considers the consequences of asset failure, compliance requirements, asset condition, operational requirements, program interdependencies, and the timing of investments. Where funding needs exceed available resources, trade-off decisions are made by assessing the relative operational and compliance impacts of delaying, deferring, or advancing individual investments. Greater priority is generally assigned to investments that address compliance obligations, reduce the risk of service disruption, mitigate single points of failure, or maintain the capability of the ISOC and BU-OGCC to perform their system control and outage response functions. These factors help direct funding to investments that address the most significant operational and compliance needs.

Given the role of the ISOC and BU-OGCC in monitoring and controlling the electricity system, investments that maintain control centre capability, support continuity of operations, and address vulnerabilities in supporting systems are prioritized within the portfolio.

4.7.2.5.3 COMPLIANCE DRIVEN INVESTMENTS

A significant portion of the BU-OGCC and ISOC investments are driven by mandatory requirements necessary to continue operating the electricity system in compliance with applicable standards and regulations. These include:

- NERC Reliability Standards, including Critical Infrastructure Protection (CIP);
- Provincial and federal cybersecurity and privacy obligations;
- Occupational health and safety requirements applicable to control-room environments; and,

- Physical security requirements for critical system operations facilities.

These investments are non-discretionary in nature. They are required to maintain Hydro One's licence to operate and fulfill its obligations as a transmitter and distribution system operator.

4.7.3 INVESTMENT PLANNING PROCESS

Based on the general plant investment candidates, Hydro One establishes a prioritized and optimized GSP through its investment planning process. Investment candidates are assessed based on their benefits and contribution to desired outcomes and are calibrated to ensure a consistent view across the organization, as highlighted below and detailed in SPF Section 1.7.

GSP investment candidates are assessed based on their contribution to Transmission and Distribution business outcomes and efficiency (including opportunities to support productive work delivery and the realization of associated cost efficiencies).

Customer and regulatory outcomes are "flagged" in the assessment process to ensure that the proposed investments are in alignment with RRF outcomes and corporate priorities. Flags are clearly defined to reflect either mandatory obligations (e.g., obligations to regulators, stakeholders or contractual counterparties) or non-mandatory priorities (e.g., customer preferences, productivity commitments). Once candidate investments have been assessed, enterprise-wide calibration sessions occur to ensure comparable and consistent evaluation (including approach, assumptions and quality of data) across investments and lines of business.

As another layer of planning rigor and validation, challenge sessions take place among a broad set of stakeholders to debate the feasibility and merits of potential investments. Following the challenge sessions, the investment portfolio is subject to engagement with portfolio owners and the executing lines of business. This creates a realistic and up-to-date plan (i.e. reflecting the latest cost estimates, schedules and investment scope) and accounts for operational and execution considerations (e.g., resourcing, material

availability and outage feasibility). The draft plan that results from this enterprise review then undergoes a final internal review and is used as the basis for Phase II of customer engagement discussed above in section 4.7.2.1.

Based on relevant planning inputs, including customer needs, independent expert studies, and latest project maturity/status information, Hydro One is able to establish the final investment plan that is presented to the executive leadership team and the Board of Directors for approval.

4.7.3.1 INVESTMENT PLAN APPROVAL & DELIVERY

The final investment plan was reviewed and approved by Hydro One's Board of Directors (see Exhibit A-03-01 Attachment 1).

As the plan is released to work execution teams for delivery, Hydro One closely monitors the ongoing implementation of the investment plan. As unforeseen asset, system and customer needs emerge, Hydro One adapts and re-evaluates its investment plan as part of a rigorous re-prioritization process described in SPF Section 1.7.

SECTION 4.8 – GSP – CAPITAL EXPENDITURES AND TRENDS

4.8.1 INTRODUCTION

This section provides an overview of Hydro One's proposed General Plant capital and prepaid expenditures.[1] It summarizes the expenditures by functional area for the 2028-2032 test years and provides an overview of the scale and composition of the proposed General Plant capital and prepaid expenditures relative to the historical and bridge-period spending levels from 2023-2027.

For the purposes of this Application, the GSP presents total expenditures for General Plant investments and the allocation of those expenditures to Hydro One Transmission and Distribution. [2] This section provides a comprehensive view of Hydro One's General Plant portfolio, including a preliminary discussion of the material investments, which are presented under GSP Section 4.11. The OEB's Distribution Chapter 2 Filing Requirements - Appendix 2-AA for General Plant investments is attached to this exhibit. The proposed accounting treatment for investments with project life cycles greater than one year, including the treatment of construction work in progress financing costs, is outlined in Exhibit C-08-01.

The GSP capital expenditure plan for the 2028-2032 planning period is provided below in Table 1.

[1] Prepaid expenditures relate to cloud computing implementation costs for technology hosting arrangements. These expenditures are included in the System Plans to provide a comprehensive view of the technologies for which DTS is accountable, including both traditionally owned, capital technology assets (e.g., physical hardware and on-premises applications) and subscription-based cloud solutions. For information regarding accounting treatment of prepaid expenditures related to cloud, refer to GSP Section 4.6.6 and Exhibit E-08-01, Section 4.0.

[2] General Plant investments include expenditures that are either (i) shared between Transmission and Distribution; or (ii) are fully attributable to Transmission or Distribution and fall under the General Plant OEB investment category. For shared investments, the allocation between Transmission and Distribution is based on Black and Veatch's Shared Asset Allocation Study presented in Exhibit E-04-08 Attachment 1.

Table 1 - Planned Net Capital Expenditures for General Plant from 2028-2032[3]

General Plant Function	ISD	Forecast Period (Planned $M)					
		2028	2029	2030	2031	2032	Total
Fleet & Aviation	[G-GP-01 & G-GP-02]	285.9	158.0	190.7	136.3	132.9	904.0
Facilities & Real Estate	[G-GP-03 & G-GP-04]	131.1	230.1	231.6	225.8	154.3	972.9
Digital & Technology Solutions	[G-GP-05-08, 10-12, 16, 25, 26, 28-30, 31]	152.6	150.9	155.4	144.7	137.4	741.1
System Operations	[G-GP-13 & 15]	18.4	5.5	7.3	10.4	13.5	55.1
Capital Contributions to Transmission	[G-GP-22]	23.1	5.3	19.5	302.6	217.8	568.3
Capital Contributions to Third Party	[G-GP-27]	3.2	4.8	0.0	0.0	0.0	8.0
Other[4]	[G-GP-19-20, 23, Other]	15.6	15.6	13.0	10.7	10.6	65.5
General Plant Total – Net Capital Expenditures		**630.0**	**570.2**	**617.5**	**830.5**	**666.6**	**3,314.9**
General Plant – Transmission Allocation		287.9	259.0	275.3	247.2	217.6	1,287.0
General Plant – Distribution Allocation		342.1	311.2	342.2	583.3	449.0	2,027.9

Hydro One is also planning prepaid expenditures for cloud computing solution implementation. Prepaid expenditures are cloud computing implementation costs for a technology hosting arrangement under a service contract. Prepaid expenditures are generally amortized over the term of the hosting arrangement. Details about prepaid expenditure amortization are provided in Exhibit E-08-01, Section 4.0. The GSP prepaid expenditures for the 2028-2032 planning period are provided below in Table 2.

Table 2 - Planned Prepaid Expenditures for General Plant from 2028-2032[5]

General Plant Function	Forecast Period (Planned $M)					
	2028	2029	2030	2031	2032	Total
Digital & Technology Solutions	168.8	190.0	189.3	157.9	138.9	845.0
General Plant Total – Prepaid related to Cloud	**168.8**	**190.0**	**189.3**	**157.9**	**138.9**	**845.0**
General Plant – Transmission Allocation	70.9	65.4	70.4	58.4	44.0	309.1
General Plant – Distribution Allocation	98.0	124.7	118.9	99.5	94.9	536.0

[3] Figures presented in the tables may not sum to the totals shown due to rounding.
[4] Includes investment in operating infrastructure and other immaterial investments.
[5] Figures presented in the tables may not sum to the totals shown due to rounding.

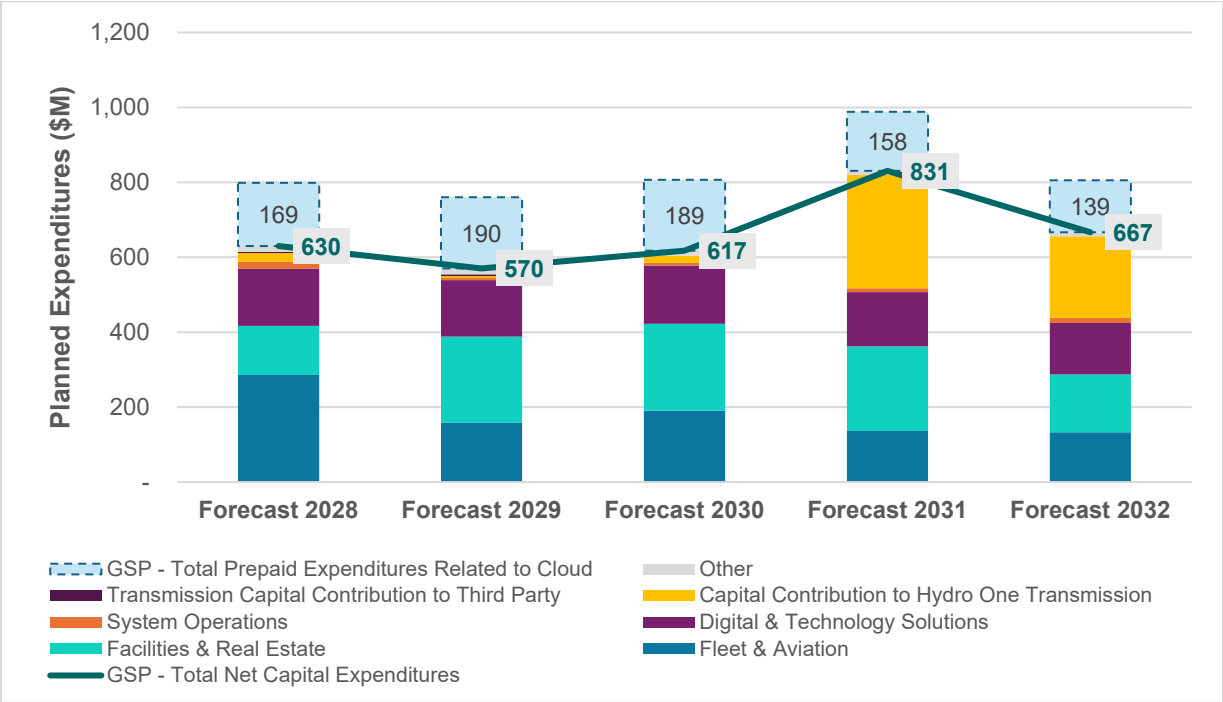

Figure 1: Planned expenditures for General Plant by function from 2028-2032[6]

Over the 2028-2032 period, the GSP includes $3,314.9M in General Plant capital expenditures, of which 39% is allocated to Hydro One Transmission and 61% is allocated to Hydro One Distribution. Planned annual GSP capital expenditures range from $570.2M to $830.5M during the forecast period, as shown in Figure 1. Year-to-year variations in total capital expenditure are mainly driven by the timing of investments in Facilities & Real Estate (FRE) and Capital Contributions to Transmission. The GSP also includes $845.0M in prepaid expenditures, of which 37% is allocated to Hydro One Transmission and 63% is allocated to Hydro One Distribution.

4.8.2 CURRENT SYSTEM CONTEXT

Hydro One's General Plant portfolio consists of expenditures related to Fleet & Aviation, FRE, Digital & Technology Solutions (DTS), and System Operations. Investment needs within this portfolio reflect asset lifecycle demands, macroeconomic pressures, and evolving operational requirements across the Transmission and Distribution businesses.

[6] Figures presented in the tables may not sum to the totals shown due to rounding.

General Plant assets provide essential infrastructure that enables field crews to execute core work programs safely and efficiently. An increasing number of General Plant assets are reaching end of life, increasing the operational, customer service and reliability risks associated with reliance on reactive “break/fix” approaches. In addition to these physical asset conditions, cost pressures across the specialized vehicle and construction sectors have necessitated a more sophisticated, condition-based prioritization framework. Over the planning horizon, the GSP portfolio must adapt to support the growth in the field workforce, which introduces a corresponding and immediate need for new field mobility equipment, specialized tools, and modernized real estate configurations.

Simultaneously, Hydro One’s operating environment is undergoing significant technological evolution, requiring enhancements of both corporate and operational technology platforms. Hydro One’s legacy digital infrastructure faces increasing technical debt, including core enterprise resource tools and grid control databases that are approaching their final dates of vendor support. Operating in a bidirectional grid while managing severe weather risks requires modern, data-driven system architecture with real-time situational awareness and robust data analytics. This digital shift must be executed alongside a reinforced physical and cybersecurity posture. As external threats grow more sophisticated, Hydro One must proactively upgrade its defense networks, threat detection capabilities, and station access controls to maintain compliance with mandatory North American Electric Reliability Corporation (NERC), Critical Infrastructure Protection (CIP), and OCSF standards.

Finally, the current system context is guided by public policy responsiveness and customer preferences. Hydro One’s facility infrastructure requires targeted capital modifications to satisfy statutory obligations under the Accessibility for Ontarians with Disabilities Act (AODA) and to execute the mandatory phase-out of legacy components under federal PCB regulations. Furthermore, while greenhouse gas mitigation is not the primary driver of the capital plan, the proposed portfolio supports a paced transition toward low-and zero-emission commercial fleet and high-efficiency facility assets, consistent with broader provincial sustainability targets. The GSP is paced to address these multi-layered asset, technology, and policy needs in a financially prudent manner, ensuring that safe, reliable,

and functional General Plant assets remain available to protect customer service levels and support overall grid operations.

4.8.3 HYDRO ONE INVESTMENT PRIORITIES

This section provides the details of the proposed capital investment plan at the investment level. Additional details for each of the proposed capital investments presented below can be found in GSP Section 4.11.

The GSP is structured around four investment areas: Fleet & Aviation, FRE, DTS, and System Operations. Each of these investment areas aligns with Hydro One's General Plant investment priorities as follows:

- **Workforce Enablement and Safety**: Investments that enable the Transmission business, Distribution business, and corporate support portfolios to achieve their operational and investment priorities as described in the SPF Section 1.7, TSP Section 2.8, DSP Section 3.8, and the OM&A work programs as described in Exhibit E.
- **Protect and Secure Critical Infrastructure**: Investments to strengthen physical and digital security ensuring safe, reliable power and continued economic activity.
- **Reliability and Resiliency of the Grid**: Investments directed toward sustaining and improving distribution and transmission system performance, supporting the continued delivery of safe, reliable service while adapting to changing operating conditions and emerging risk.
- **Customer Centricity:** Investments that enhance customer experience and service delivery through modernization of customer service technologies, digital channels, and supporting platforms.

Together, the GSP investments provide the essential physical and digital infrastructure that enables the distribution and transmission work programs. Investments in Fleet & Aviation and FRE focus on physical infrastructure, ensuring that field crews have safe, reliable, and efficient vehicles while operational facilities are optimized to support seamless, climate-resilient field deployments and business continuity. Investments in DTS and System Operations that target digital infrastructure provide the advanced monitoring,

automation, and cybersecurity frameworks necessary to manage the grid. By replacing legacy assets with condition-based, intelligent solutions and scaling digital platforms, the GSP investments are designed to ensure that frontline transmission and distribution teams have the physical tools and real-time data visibility required to deliver on the capital and OM&A work programs.

Table 3 below outlines how GSP investments support Hydro One's investment priorities and enable Distribution and Transmission work programs.

Table 3 - Concordance of Investment Priorities and Programs

Primary Hydro One Investment Priority	GSP Investment Area	Capital Programs	Primary Need Addressed
Workforce Enablement and Safety	Fleet & Aviation	G-GP-01, G-GP-02	Condition of existing fleet, functional requirements on work equipment for growth in work program, improvement in cost optimization, operational efficiencies and safety for storm or trouble responses, environmental or sustainability requirements.
	Facilities & Real Estate	G-GP-03	Deterioration of building facility components, health and safety risks, reliability, adequacy of operational requirements, growth, severe weather exposure.
	Digital & Technology Solutions	G-GP-05, G-GP-06, G-GP-08, G-GP-26, G-GP-28, G-GP-29, G-GP-31	Address aging technologies to improve reliability, cybersecurity, regulatory compliance, data-driven decision-making, field execution, and long-term platform sustainability.
	System Operations	G-GP-15	Minimize risks of failures and downtime in electrical equipment in critical control facilities, support compliance with health and safety and building standards, and support expansion of operational capacity

Primary Hydro One Investment Priority	GSP Investment Area	Capital Programs	Primary Need Addressed
Protect and Secure Critical Infrastructure	Facilities & Real Estate	G-GP-04	New facilities and major renovations or upgrades to suit operational requirements, address reliability and safety risks, and ongoing sustainment at Transmission facilities
	Digital & Technology Solutions	G-GP-10, G-GP-11, G-GP-12, G-GP-30	Physical and Cybersecurity risks, NERC, CIP, and OCSF compliance,
	System Operations	G-GP-13	Strengthening and maintaining reliability in Control Centre Operations, compliance to health and safety standards, expansion in operational capacity.
Reliability and Resilience of the Grid	Digital & Technology Solutions	GP-08, G-GP-16, G-GP-25	Enhance core digital and operational platforms to improve grid reliability, storm and outage response, field execution, compliance, cybersecurity, and customer service
Customer Centricity	Digital & Technology Solutions	G-GP-07	Customer Service Technology Enablement and related digital customer service platforms

The following subsections describe each investment priority and the capital programs supporting it.

4.8.3.1 FLEET & AVIATION

Hydro One's 2028-2032 Fleet & Aviation investments include the principal programs intended to replace transport and work equipment and helicopters based on estimated service life (ESL) and overall condition, optimize and enable efficient work program support, and address growth in Hydro One's work programs.

Hydro One proposes to invest $904.0M over the 2028-2032 period in programs supporting this priority, including Transport and Work Equipment (TWE) and Helicopter Renewal. This is further described in Table 4 below.

Table 4 - Fleet & Aviation Expenditures Summary ($M) [7]

Program ID	Program Name	2028-2032 Planned Total ($M)	Primary Hydro One Investment Priority	Program objectives
G-GP-01	Transport and Work Equipment (TWE)	850.1	Workforce Enablement and Safety	Replaces fleet and work equipment due to Estimated Service Life (ESL) and overall condition. Optimizes and mitigates unplanned system and customer incidents. Additions to work equipment to address growth in work program.
G-GP-02	Helicopter Renewal	53.8	Workforce Enablement and Safety	Enables work program including timely storm or trouble responses across vast service territory. Replacement of three older helicopters in order to modernize and improve work methods.
Total		**904.0**		

Hydro One is investing $850.1M in its TWE program. The TWE program comprises the Replacement Program, which manages the lifecycle of approximately 8,000 vehicles and 1,000 small off-road units, spanning light vehicles, heavy-duty trucks, large off-road equipment, and service equipment and tools such as generators. In addition, the Growth Program supports workforce expansion and overall headcount growth. Hydro One's investment strategy for the Replacement Program focuses on replacing assets at their optimal lifespan based on condition, rather than a reactive break/fix approach. This proactive lifecycle management is essential to managing escalating maintenance costs while mitigating delays in responding to unplanned customer outages and storm events. By optimizing the replacement cycle, Hydro One protects public and employee safety, secures manufacturer warranties to offset operational costs, and ensures frontline crews have the reliable physical infrastructure necessary to execute core work programs.

Hydro One is also investing $53.8M in its Helicopter Renewal program to replace and optimize its ten-aircraft fleet, which serves as a critical operational tool for both the transmission and distribution businesses. Helicopters are required for executing

[7] Figures presented in the tables may not sum to the totals shown due to rounding.

specialized line patrols, vegetation management, pole deliveries, and equipment transport in remote or inaccessible terrain. They also serve as a primary response mechanism during elevated operational postures such as emergency storm restoration. Three of Hydro One's current aircraft are over 20 years old and facing mandatory, high-cost full refurbishments during the rate period.

4.8.3.2 FACILITIES & REAL ESTATE (FRE)

Facilities & Real Estate is a core priority of Hydro One's 2028-2032 General Plant capital plan. This priority includes the principal programs intended to address deteriorated building facility conditions, support reliability and outage response, mitigate health and safety risks, accommodate the growth in operations, and align with sustainability and accessibility standards.

Hydro One proposes to invest approximately $972.9M over the 2028-2032 period in the principal programs supporting this priority, including Facilities and Accommodations (G-GP-03) and Transmission Facilities (G-GP-04). This is further described in Table 5 below.

Table 5 - Facilities & Real Estate Expenditures Summary ($M)

Program ID	Program Name	2028-2032 Planned Total ($M)	Primary Hydro One Investment Priority	Program Objectives
G-GP-03	Facilities and Accommodations	723.2	Workforce Enablement and Safety	Replaces or restores building components in poor condition. New builds and major renovations address health and safety risks, growth requirements, and strategic objectives.
G-GP-04	Transmission Facilities	249.7	Protect and Secure Critical Infrastructure	Replaces poor condition building components at existing Transmission facilities. Renovates or upgrades facilities to meet operational requirements, and address reliability and safety risks.
Total		**972.9**		

Hydro One is proposing $723.2M in Facilities and Accommodations investments to replace, restore, and modernize deteriorated buildings and facility components across its Operations Centre (OC) and Administrative buildings portfolio. These investments include asset renewal, major renovations, and new facility construction required to address health and safety risks, accommodate workforce and operations growth, support strategic business objectives, and improve the resilience of facilities to increasingly severe weather events and climate-related impacts.

In addition, Hydro One is investing $249.7M in Transmission Facilities through sustainment of poor condition building components at existing transmission station sites, and major renovations or upgrades. These investments are required to meet evolving operational requirements, address facility and reliability safety risks, sustain critical transmission operations, and ensure that facilities continue to effectively support the delivery of safe and reliable electricity service.

4.8.3.3 DIGITAL & TECHNOLOGY SOLUTIONS (DTS)

Digital & Technology Solutions is a core priority of Hydro One's 2028-2032 General Plant capital and prepaid for cloud plan. For purposes of the portfolio narrative in this section, this priority includes the principal programs intended to strengthen physical and cybersecurity perimeters, replace aging and unsupported technology, improve customer service and grid reliability, support compliance with NERC and CIP requirements, improve storm preparedness and response, enable the business, and standardize platforms (including data analytics and AI).

Hydro One proposes to invest approximately $741M of capital and $845M of prepaid over the 2028-2032 period in the principal programs supporting this priority, including the Information Technology Services Enablement, Corporate Services Enablement, Customer Service Technology Enablement, Work Asset Management Enablement, Physical Security Upgrades, Cybersecurity and Digital Protection, Common Operations Technology Infrastructure, Energy Management System Investments, Operations Projects, Data, Analytics and AI Enablement, Enterprise Platform Modernization and Sustainment, SAP S/4HANA One Core Transformation – Phase 2, Enterprise Security Platforms and Controls, and Control Room Equipment. This is further described in Table 6 below.

Table 6 - Digital & Technology Solutions Expenditures Summary ($M)

Program ID	Program Name	2028-2032 Capital Forecast Total ($M)	2028-2032 Prepaid Forecast Total ($M)	Primary Hydro One Investment Priority	Program Objectives
G-GP-05	Information Technology Services Enablement	201.2	51.9	Workforce Enablement and Safety	Replaces aging and unsupported technology (servers, network equipment, end-user computing and voice devices) to reduce unplanned outages, cybersecurity vulnerabilities, and productivity losses

Program ID	Program Name	2028-2032 Capital Forecast Total ($M)	2028-2032 Prepaid Forecast Total ($M)	Primary Hydro One Investment Priority	Program Objectives
G-GP-06	Corporate Services Enablement	15.0	82.5	Workforce Enablement and Safety	Strengthens data quality and governance, and supports platform consolidation to improve reliability, transparency, and scalability of corporate services technology in support of ongoing operations and regulatory requirements
G-GP-07	Customer Service Technology Enablement	19.7	178.0	Customer Centricity	Modernizes customer service systems to meet rising customer expectations, protect sensitive information, and operate within vendor-supported and regulatory-compliant environments
G-GP-08	Work and Asset Management Enablement	29.0	184.3	Workforce Enablement and Safety	Enables cloud-aligned digital capabilities that strengthen risk-based planning, storm preparedness and response, outage coordination, field execution, and capital project delivery across Transmission and Distribution
G-GP-10	Physical Security Upgrades	173.3	0.0	Protect and Secure Critical Infrastructure	Strengthens physical security at Hydro One facilities that are essential to the reliable operation of the transmission system. Supports compliance with

Program ID	Program Name	2028-2032 Capital Forecast Total ($M)	2028-2032 Prepaid Forecast Total ($M)	Primary Hydro One Investment Priority	Program Objectives
					NERC and CIP standards
G-GP-11	Cybersecurity and Digital Protection	45.1	0.0	Protect and Secure Critical Infrastructure	Reduces operational risk, strengthens protection of customer and corporate data, and improves maturity across core cybersecurity functions. Supports compliance with NERC, CIP, and OCSF standards
G-GP-12	Common Operations Technology Infrastructure	120.3	0.0	Protect and Secure Critical Infrastructure	Renews and modernizes COTI platforms to sustain critical BES monitoring and control systems, maintain vendor support, address end of life infrastructure, and preserve cybersecurity and reliability for mission-critical OT operations.
G-GP-16	Energy Management System Investments	65.7	6.0	Reliability and Resilience of the Grid	Modernizes the Energy Management System to sustain 24/7 control-room operations, meet compliance obligations, and prepare the control platform for the next decade of operational complexity
G-GP-25	Operations Projects	36.5	7.6	Reliability and Resiliency of the Grid	Retires the legacy power system database and migrates more than 70

Program ID	Program Name	2028-2032 Capital Forecast Total ($M)	2028-2032 Prepaid Forecast Total ($M)	Primary Hydro One Investment Priority	Program Objectives
					dependent applications to modern enterprise platforms to address aging technology, reduce operational and cybersecurity risks, maintain compliance, and improve service delivery.
G-GP-26	Data, Analytics and AI Enablement	26.0	17.5	Workforce Enablement and Safety	Develops centralized platforms and marketplaces for data analytics and AI, together with supporting analytics tools to enable data-driven decision-making innovation and operational efficiency through the development and implementation of advanced analytics solutions
G-GP-28	Enterprise Platform Modernization and Sustainment	0.0	30.8	Workforce Enablement and Safety	Modernizes and standardizes Microsoft 365 to strengthen enterprise adoption, enhance security and compliance, and improve the digital workplace experience.
G-GP-29	SAP S/4HANA One Core Transformation	0.0	242.0	Workforce Enablement and Safety	Completes the enterprise resource planning transformation through Phase 2 of the One Core program to reduce technical debt,

Program ID	Program Name	2028-2032 Capital Forecast Total ($M)	2028-2032 Prepaid Forecast Total ($M)	Primary Hydro One Investment Priority	Program Objectives
					align with the vendor's product roadmap, and sustain the long-term viability of enterprise business systems.
G-GP-30	Enterprise Security Platforms and Controls	0.0	44.4	Protect and Secure Critical Infrastructure	Enhances cybersecurity and governance capabilities to support expanding cloud adoption, strengthen protection of business and operational systems, and align with cybersecurity and regulatory requirements.
G-GP-31	Control Room Equipment	9.3	0.0	Workforce Enablement and Safety	Integrates provincial radio and satellite communication systems at the primary and backup grid control centres to improve the reliability and availability of critical voice communications with system operators, utilities, emergency services, and field staff.
Total		**741.1**	**845.0**		

Over the 2028-2032 period Hydro One plans to invest $1,586M in its DTS portfolio (inclusive of both capital and prepaid investments). This level of expenditure reflects both the need to renew aging technology assets and the growing role that digital systems play in supporting utility operations, customer service, and the safe and reliable delivery of electricity.

Witness: Julie Ricketts Daniel; Lorraine Gray; Chris Iveson; Kevin Marcotte

A significant portion of the planned investments is driven by the replacement of end of life, obsolete, or unsupported technology platforms, applications, and infrastructure. These assets present increasing operational, reliability, cybersecurity, and support risks if not renewed in a timely manner. At the same time, Hydro One's reliance on digital capabilities continues to grow, requiring investments that support evolving business processes, increasing customer expectations, regulatory and compliance obligations, and the operation of an increasingly complex electric system. These investments will ensure that critical technology systems remain secure, reliable, and capable of supporting the utility's operations and strategic objectives.

4.8.3.4 SYSTEM OPERATIONS

System Operations is a core priority of Hydro One's 2028-2032 General Plant capital plan. For purposes of the portfolio narrative in this section, this priority includes the principal programs intended to replace failing building components and electrical components, mitigate the risk of failures and downtime, support compliance with health, safety and building standards, and support growth in operational capacity.

Hydro One proposes to invest approximately $55M over the 2028-2032 period in the principal programs supporting this priority, including Operational Technology Facility Sustainment, and BU-OGCC & ISOC Office Remediation. This is further described in Table 7 below.

Table 7 - System Operations Expenditure Summary ($M)

Program ID	Program Name	2028-2032 Forecast Total ($M)	Primary Hydro One Investment Priority	Program objectives
G-GP-13	Operational Technology Facility Sustainment	49.0	Protect and Secure Critical Infrastructure	Replacement of failing common operating facility components to prevent operational disruptions. Mitigating risks to backup systems at the Back-up Ontario Grid Control Centre and Integrated System Operations Centre.
G-GP-15	BU-OGCC & ISOC Office Remediation	6.1	Workforce Enablement and Safety	Minimize risks of failures and downtime in electrical equipment in critical control facilities. Compliance to health and safety, and building standards. Expansion in operational capacity
Total		**55.1**		

Over the 2028-2032 period Hydro One plans to invest in the System Operations portfolio to sustain the facilities and infrastructure that support the real-time operation of Ontario's electricity system. These investments are focused on maintaining the reliability, availability, and resilience of critical system operations facilities that enable continuous monitoring and control of the transmission and distribution networks.

The planned expenditures include the replacement and renewal of aging or failing common operating facility components, including building systems and infrastructure that are essential to maintaining uninterrupted operations. The portfolio also includes investments to mitigate operational risks at the BU-OGCC and ISOC ensuring that these facilities remain capable of supporting critical grid operations during both normal and contingency conditions.

4.8.4 FORECAST CAPITAL AND PREPAID EXPENDITURES AND TREND ANALYSIS

This section explains how Hydro One's proposed 2028-2032 GSP capital and prepaid expenditures compare to the 2023-2027 historical and bridge-period spending levels. The purpose of this section is to explain the change in the scale and composition of the proposed GSP capital and prepaid expenditures forecast. GSP Section 4.9 separately addresses historical capital expenditure performance, including actual and bridge-period expenditures relative to previously approved or planned capital expenditure levels.

Over the forecast period, Hydro One plans to spend approximately $4,159.9M on General Plant investments (including $3,314.9M in capital expenditure and $845.0M in prepaid expenditure), compared to $1,532.5M (including $1,283.8M in capital expenditure and $248.7M in prepaid expenditure) in the historical actual and bridge period, representing a variance of $2,627.4M or 171%. On an average annual basis, this reflects combined capital and prepaid spending of approximately $832.0M per year in the forecast period, compared to $306.5M per year historically. As shown in Table 8 below, the increase reflects changes in the scale and composition of the GSP portfolio across Fleet & Aviation, FRE, DTS, System Operations, other General Plant investments, and cloud-related prepaid expenditures. Additional details are provided by General Plant function in the following subsections.

Table 8 - Ten-year Capital Plan Snapshot for General Plant Investments[8]

General Plant Function	Historical Actual/Forecast ($M)				Bridge Forecast ($M)	Total 2023-2027 ($M)	Forecast Period (Planned $M)					Total 2028-2032 ($M)
Net Capital Expenditure	**2023**	**2024**	**2025**	**2026**	**2027**		**2028**	**2029**	**2030**	**2031**	**2032**	
Fleet & Aviation	74.9	71.0	74.6	68.4	70.7	359.6	285.9	158.0	190.7	136.3	132.9	904.0
Facilities & Real Estate	65.4	111.0	53.3	39.8	35.6	305.1	131.1	230.1	231.6	225.8	154.3	972.9
Digital & Technology Solutions	177.8	114.2	66.1	76.0	51.7	485.8	152.6	150.9	155.4	144.7	137.4	741.1
System Operations	0.0	0.4	2.1	0.0	0.0	2.5	18.4	5.5	7.3	10.4	13.5	55.1
Other	22.3	6.8	33.5	24.1	44.2	130.9	41.9	25.7	32.5	313.3	228.4	641.8
Total General Plant	**340.4**	**303.3**	**229.7**	**208.3**	**202.1**	**1,283.8**	**630.0**	**570.2**	**617.5**	**830.5**	**666.6**	**3,314.9**
Transmission Allocation	146.3	134.3	111.0	86.8	82.9	561.3	287.9	259.0	275.3	247.2	217.6	1,287.0
Distribution Allocation	194.1	169.1	118.7	121.5	119.2	722.6	342.1	311.2	342.2	583.3	449.0	2,027.9
Prepaid related to Cloud	**0.0**	**10.0**	**40.7**	**118.3**	**79.7**	**248.7**	**168.8**	**190.0**	**189.3**	**157.9**	**138.9**	**845.0**

4.8.4.1 FLEET & AVIATION

For the 2028-2032 plan, the GSP includes $904.0M in Fleet & Aviation investments, of which $378.6M is allocated to Transmission and $525.4M is allocated to Distribution. These costs are presented below in Table 9 by material investment.

Table 9 - Fleet & Aviation Material Investments for 2028-2032[9]

ISD and Description	2023-2027 Historical and Bridge Total ($M)	2028-2032 Planned Total ($M)	Variance ($M)	Primary Variance Driver
G-GP-01 Transport and Work Equipment (TWE)	331.1	850.1	519.1	Asset Renewal, Growth in Work Program
G-GP-02 Helicopter Renewal	28.5	53.8	25.3	Asset Renewal, Operational Efficiencies
Total	**359.6**	**904.0**	**544.4**	

[8] Figures presented in the tables may not sum to the totals shown due to rounding.
[9] Figures presented in the tables may not sum to the totals shown due to rounding.

Fleet investments are broken out into two material investments – G-GP-01 Transport and Work Equipment (TWE) and G-GP-02 Helicopter Renewal, as described below.

TRANSPORT AND WORK EQUIPMENT

G-GP-01 includes the 2028-2032 capital TWE replacement programs for light and heavy non-power take off (PTO) vehicles, heavy PTO vehicles, off-road vehicles, miscellaneous equipment for specific tasks, trailers, small off-road equipment, and service equipment. Over the 2028-2032 period, Hydro One plans to invest $611.5M to replace its existing fleet, and $238.6M to support the increase in the Distribution and Transmission work program.

Hydro One integrates sustainability as a consideration in its fleet investments. Hydro One has begun the transition to clean energy, including fleet electrification and other low emissions alternatives. The success and breadth of the transition are driven by various factors including maturing battery technology, increased driving range for electric vehicles (EVs), new hybrid alternatives and model availability. Hydro One plans to continue the gradual EV adoption of light duty vehicles to minimize risks associated with rapid changes in EV technologies and infrastructure. For more details, please see GSP Section 4.7.2.2.

Maintaining the Current Fleet

Between 2028 and 2032, Hydro One will focus on replacing end of life equipment, while maximizing utilization of the existing fleet to ensure the ongoing availability of a functional fleet of transport and work equipment. This fleet is crucial to maintaining the company's operational continuity and avoiding adverse impacts to work program delivery and customer reliability. Hydro One plans to invest $611.5M in new equipment to replace aging units, between 2028 and 2032 to keep its current fleet of approximately 8,000 fleet vehicles and 1,000 small off-road units operating safely and reliably.

Hydro One plans to increase investment in Fleet assets to contain overall lifecycle costs, including day-to-day maintenance, and operational costs associated with an aging fleet. By replacing assets at their optimal lifespan, these investments will also allow Hydro One to protect public and employee safety and meet compliance obligations (e.g., under the

Highway Traffic Act, R.S.O. 1990, C. H.8). The unit costs for vehicles and equipment have experienced cumulative price increases since 2020, including by 35% for pick-up trucks, as demonstrated in SPF Section 1.8, Table 1, and 47% for bucket trucks, as demonstrated in GSP Section 4.11, G-GP-01, Subsection 3.1. As detailed in GSP Section 4.11 G-GP-01, Subsection 2.1, Hydro One plans on purchasing a total of 2,845 units over the 2028-2032 period, which is 458 more units than the number forecast for the 2023-2027 period.

Fleet Growth

Hydro One is also proposing to increase the size of its fleet during the 2028-2032 period by investing an additional $238.6M to acquire 1,141 units to support the significant work program growth during the planning period, as seen in Exhibit E-06-02, Section 4.0. For more information on the Growth Program, see GSP Section 4.11, G-GP-01, Section 2.2.

HELICOPTER RENEWAL

G-GP-02 describes the 2028-2032 Helicopter Renewal program. Helicopters support many functions across Hydro One's lines of business, including transporting workers and materials to remote locations, facilitating sky wire and conductor replacement, supporting insulator change programs, pole delivery and pole-sets, and supporting construction and the forestry management program. These helicopters are a vital tool during elevated operational postures such as storm response and restoration and are key to both Distribution and Transmission line patrols and are used extensively by the vegetation management program.

For 2028-2032, Hydro One plans to invest $53.8M in the Helicopter Renewal program to replace three aircraft that have reached end of life and optimize Hydro One's helicopter fleet. This will allow Hydro One to meet the evolving needs of the Transmission and Distribution lines of business and to enhance the safety of flight operations.

Three of Hydro One's ten helicopters will be greater than 20 years old. Absent replacement, these three aircraft would require full refurbishment (costing about $400,000 per unit to complete) during the 2028-2032 period. For more details please see G-GP-02, Section 2.1.

One of the helicopters planned for replacement will be replaced with a new generation single engine helicopter that will provide a number of improvements over the existing aircraft, including a more powerful engine, flight data recorders, improved hydraulic flight control systems and crash resistant fuel tanks. These improvements will offer enhanced safety margins for the pilots and other employees.

Two of the three aircraft will be replaced with new, next-generation, multi-engine helicopters that will further enhance safety during low level and low speed flight operations. The twin-engine aircraft will be equipped with hoists, so Aviation Services can provide worker access to towers and conduct mid-span repairs using a work access method known as “Class D” or “Human External Cargo” (HEC). Hydro One plans to replace a helicopter each year in the first three years of the rate period.

IMPACT OF CAPITAL INVESTMENTS ON OPERATIONS, MAINTENANCE AND ADMINISTRATION SPENDING

Planned capital investment to replace end of life TWE will minimize the observed escalation in maintenance costs (labour and parts) and lead to increased equipment availability due to reduced breakdowns and maintenance requirements. Planned capital investment for growth will support the evolving increase to the capital work program and will mitigate the exposure to available rental equipment. If Hydro One’s TWE replacement investment levels for on-road vehicles were sustained at current levels through the planning period, maintenance costs would increase by 18% from 2028 to 2032[10]. The planned level of capital investment will mitigate potential delays in response time to unplanned customer incidents, such as trouble calls and storm response. The combined investment will also provide for optimal levels of availability of fleet vehicles and other specialized equipment, which will reduce manual labour and minimize risk of personal injury in the field.

The proposed capital investment in the helicopter fleet directly mitigates OM&A costs by

[10] Utilimarc, Hydro One Fleet Lifecycle Study (August 27, 2026) – GSP Section 4.3 Attachment 2, p. 14, *Sustained Funding - Annual Maintenance.*

avoiding imminent and expensive refurbishment costs. Three of Hydro One's ten aircraft are over 20 years old and will require comprehensive, high-cost structural and mechanical overhauls within the 2028-2032 rate period. By executing a planned replacement of these end of life assets prior to these major service overhauls, Hydro One is able to avoid these prohibitive repair expenses. Furthermore, replacing these legacy platforms with next-generation aircraft drives long-term OM&A cost efficiencies through extended engine overhaul cycles and reduced day-to-day maintenance requirements. These operational savings are further secured in the short-term as the first two years of each new aircraft are fully covered under manufacturer warranty.

4.8.4.2 FACILITIES & REAL ESTATE (FRE)

Over the 2028-2032 period, the GSP includes FRE investments of $972.9M, of which $402.2M is allocated to Transmission and $570.7M is allocated to Distribution. These costs are presented below by material investment.

The planned investments will target critical facilities and predominantly high-risk capital deficiencies that have deteriorated to poor condition. Further strategic investments are planned to meet growing work program demands, consolidation opportunities, and facility modernization requirements for Hydro One's Transmission and Distribution businesses. These costs are presented below in Table 10 by material investment.

Table 10 - FRE Material Investments for 2028-2032[11]

ISD and Description	2023-2027 Historical and Bridge Total ($M)[12]	2028-2032 Planned Total ($M)	Variance ($M)	Primary Variance Driver
G-GP-03 Facilities and Accommodations	244.2	723.2	479.0	Asset Renewal, Growth in Work Program, Regulatory Compliance
G-GP-04 Transmission Facilities	60.8	249.7	188.9	Asset Renewal, Growth in Work Program, Regulatory Compliance
Total	**305.1**	**972.9**	**667.9**	

FRE investments are divided into two material investments: G-GP-03 'Facilities and Accommodations' and G-GP-04 'Transmission Facilities'. Both programs are structured to deliver on three main objectives:

- **Sustainment:** Ongoing sustainment investments at existing facilities, to promote grid reliability and an efficient response to outages and customers;
- **Growth:** The construction of new facilities to support customer growth, strategic opportunities, and the consolidation of facilities not meeting work program requirements;
- **Compliance & Governance:** Major renovations or investments, as appropriate, to deliver on compliance requirements for accessibility, commitments to Greenhouse Gas (GHG) emissions reductions, and investments in facilities to promote inclusive facilities to meet the needs of a diverse workforce.

The FRE investment plan represents an increase from historical spending levels that is reflective of the cumulative effect of continued deterioration of critical facility assets, increasing operational demands across Transmission and Distribution businesses, and

[11] Figures presented in the tables may not sum to the totals shown due to rounding.
[12] To present expenditures consistently across the current and forecast rate periods, Hydro One has mapped certain investments from the prior rate application to new ISDs in this application. Where material, these mappings are discussed in the relevant ISDs. The mapping does not change the overall expenditures established under the OEB-approved Settlement Proposal in EB-2021-0110.

the need to address facility requirements that have historically been deferred. Hydro One's condition assessments identify a substantial inventory of high-risk and medium-risk building components that are in poor or failed condition, while many facilities no longer adequately support current operational needs, employee safety, and compliance requirements. The proposed investment plan is intended to address these needs through a targeted program of sustainment, new builds, major renovations, and compliance investments to support the safe and reliable operation of Hydro One's electricity system.

Table 11 below outlines the funding allocations by type of investment, within the Transmission Facilities (TS) and Operating Centre and Administrative (OC Admin) portfolios.

Table 11 - Capital Investments by Priorities ($M)

Priorities	G-GP-03	G-GP-04	Total
Sustainment (Building Upgrades and Component Replacements)	272.4	161.9	434.3
New Builds and Major Renovations	321.0	18.7	339.7
Compliance & Governance (Decarbonization, DEI, Accessibility, EV Charging and Climate Adaptation)	129.8	69.1	198.9
Total	**723.2**	**249.7**	**972.9**

The planned capital investments allow Hydro One to:

- reduce the risk for broad asset-write offs, unplanned outages, and support an efficient response to customers during restoration activities;
- accommodate growth in the portfolio to maintain levels of service; and,
- modernize legacy facilities to support changing worker demographics, accessibility and decarbonization goals.

Investments are determined through the risk-based investment prioritization process discussed in GSP Section 4.7.2.3. In general, condition information from inspection/assessments is heavily weighted alongside the criticality of the building and building components requiring replacement. Given the emerging risks that can affect the need for specific FRE investments, Hydro One assesses and, as necessary, reprioritizes

FRE investments annually. For example, storms and other external events can cause or accelerate critical issues with facilities, requiring the company to re-prioritize its investments.

SUSTAINMENT

Hydro One invests in sustainment projects to replace and renew deteriorated building components that are necessary to maintain safe, reliable, and functional facilities. These investments address facility components that condition assessments have identified as being in poor or failed condition, including roofing systems, HVAC equipment, building envelope elements, and site infrastructure. By renewing these assets, Hydro One maintains facilities that support utility operations, protects business continuity, reduces health and safety risks, and enables facilities to continue meeting operational and regulatory requirements.

As described in GSP Section 4.11 G-GP-03 and G-GP-04, condition assessments indicate that 41% of high-criticality OC Admin buildings and 33% of high-criticality TS facilities are currently in poor condition. Without additional investment, continued asset deterioration is forecast to increase these proportions to 63% and 38%, respectively, by 2032. The proposed sustainment program prioritizes renewal of deteriorated components within critical operational facilities and is expected to reduce the proportion of high-criticality buildings in poor condition to 2% of OC Admin and 20% of TS facilities by the end of the 2028-2032 period.

Hydro One prioritizes sustainment investments using the risk-based asset management methodology described in GSP Section 4.7.2.3. Component condition is the primary driver of investment need - assets requiring replacement have exceeded their condition-adjusted useful lives. This is particularly evident for major building systems such as roofs, HVAC equipment, and building envelope components, where continued deferral materially increases the likelihood of asset failure, service disruption, escalating repair costs, and health and safety risks.

The proposed investment pacing reflects the need to stabilize facility condition by addressing deteriorated assets that present the greatest risk to utility operations. Table 12 provides representative examples of component categories requiring renewal during the 2028-2032 period, including their replacement value, expected useful life, and current average age in the Hydro One portfolio. While replacement decisions are driven primarily by condition assessments, the majority of components included in the sustainment investment plan have significantly exceeded their expected useful lives, demonstrating that further deferral would increase operational and asset performance risks.

Table 12 - Pacing: Sustainment Capital Investments by Component (2025)

Component	Component Criticality	Replacement Value	Average Useful Life (years)	Average Component Age (years)
Roofing, Roof Coverings	High	$188.5M	28	32
HVAC, All	High	$73.7M	15	22
Electrical, Electrical Service and Distribution (i.e., panels)	High	$53.5M	37	43
Site Civil/Mechanical Utilities, Water Supply	High	$22.1M	20	34
Site Improvements, Roadways	Medium	$158.4M	18	25
Exterior Enclosure, Exterior Doors	Medium	$73.5M	23	31
Exterior Enclosure, Exterior Windows	Medium	$63.0M	20	29

The FRE investments are further categorized and described by High-risk and medium-risk components below.

Investments to Address High Risk Components:

Hydro One has identified approximately $405M of high-risk component replacement needs within the FRE portfolio. These needs are associated with components in poor or failed condition that are located within facilities supporting critical utility operations. Consistent with the risk-based investment planning methodology described in GSP Section 4.7.2.3, the proposed sustainment program will address approximately 75% of identified high-risk replacement needs during the 2028-2032 period.

Hydro One will manage the remaining high-risk needs through alternative investment strategies where standalone component replacement would be inefficient or duplicative. These strategies include incorporating renewals into planned facility consolidations, replacement facilities, major renovations, and compliance and governance initiatives. This approach allows Hydro One to mitigate identified risks while avoiding investments in assets that will subsequently be replaced or substantially renewed through other capital programs.

Investments to Address Medium-Risk Components:

Hydro One has identified approximately $860M of medium-risk component renewal needs across the portfolio. During the 2028-2032 period, the proposed investment plan will address approximately 18% of the highest-priority medium-risk needs. These investments target components that are forecast to become major deficiencies during the planning period, support operationally important facilities, and can be renewed proactively before further deterioration results in increased risk, service disruption, or more extensive future replacement requirements.

The proposed investment plan balances the need to address immediate high-risk deficiencies while continuing to advance renewal of medium-risk assets. Without sustained capital investment, facility condition would continue to deteriorate, increasing risks to operational continuity, employee health and safety, facility security, and Hydro One's ability to maintain facilities that support long-term business requirements.

NEW BUILDS AND MAJOR RENOVATIONS

New Builds and Major Renovations are investments required to respond to increasing work-program demands and changing operational requirements across the FRE portfolio. The process used to identify and prioritize New Builds and Major Renovations investment candidates is described in detail in GSP Section 4.7.2.3.3, with project-specific investment need analysis documented in the GSP Sections G-GP-03 and G-GP-04, Subsections 2.0. To qualify for a new build or major renovation in the proposed investment plan, candidate projects must satisfy a confluence of factors - that when taken into consideration together,

a new build or major renovation reflects the most cost-effective and satisfactory business decision to support Hydro One operations. The investment drivers include:

- **Poor Condition:** Facility deterioration confirmed through regular Building Condition Assessments (BCAs) and supplemental evaluations or inspections. Sites with condition ratings well beyond the poor threshold (indicating significant capital deficiencies) are rebuilt to address escalating operational disruptions and safety risks. The alternative, applying costly patchwork repairs in sustainment, can exceed the replacement value of the asset.
- **Operational Growth and/or Changing Business Needs:** Expansion of work programs and distribution and transmission systems, workforce increases, changing equipment and vehicle needs and new operational requirements where existing sites are constrained and cannot support Hydro One's business objectives without additional and expanded facilities.
- **Consolidation:** Investments are pursued where the consolidation of multiple buildings and/or sites delivers efficiencies and enhances operational effectiveness
- **Risk to Long-Term Viability:** Unique site-specific considerations threaten the business continuity at certain facilities, including risk associated with leases and challenges associated with existing facility location.

For the 2028-2032 rate period, 10 new build facilities, two major renovations and one land purchase are proposed to replace or remediate existing facilities that are in deteriorated condition and/or cannot accommodate Hydro One's work program requirements. Each of these facilities meets a confluence of candidacy criteria as described in detail in GSP Section 4.11 G-GP-03, Subsection 3.2, although most proposed investments are responsive to poor overall building condition at the existing facilities. In several cases, buildings have reached a point where structural, building envelope, or poor condition mechanical systems make further sustainment imprudent, necessitating full replacement when considered alongside operational growth pressures. Further summaries regarding the rationale for these investments are provided in Table 13 below.

Table 13 - New Builds & Major Renovations - Net Investments for 2028-2032

Facility	Poor Condition Existing Facilities	Operational Growth and/or Changing Business Needs	Opportunities for Consolidation & Efficiency	Mitigating Risks to Long-Term Facility Viability	Total ($M)
Dryden OC and Fleet Garage	✓	✓	✓		$42.0M
Brockville OC	✓	✓			$29.6M
Rockford OC	✓		✓		$16.6M
Peterborough OC		✓	✓	✓	$29.0M
Kingston OC	✓	✓		✓	$62.0M
Dryden Heliport	✓			✓	$9.2M
Hanmer Fleet Garage	✓	✓	✓		$41.4M
Timmins OC	✓	✓	✓	✓	$32.0M
Huntsville Fleet Garage		✓		✓	$25.4M
Winchester Fleet Garage		✓		✓	$26.3M
Muskoka OC Land Only	✓	✓	✓	✓	$7.5M
Hanmer Tx Work Centre		✓		✓	$4.7M
Timmins Tx Work Centre	✓	✓	✓		$14.0M
Total					**$339.7M**

Each proposed new build or major renovation has been subject to an investment need analysis, including consideration of ongoing repair, partial refurbishment, consolidation, and market-based solutions. In many cases, go-to-market options are not viable due to the specialized, purpose-built nature of Hydro One's OC Admin facilities, which must meet particular operational, safety, security, and municipal zoning requirements. In other cases, particularly within remote or rural operating territories, suitable facilities simply do not exist on the open market. Where feasible, market options were evaluated and documented in

the G-GP-03 and G-GP-04 investment support materials. Where market options were not feasible, purpose-built solutions were determined to be the most appropriate means of meeting Hydro One's FRE objectives.

COMPLIANCE & GOVERNANCE

Compliance & Governance investments address gaps between the existing FRE portfolio and the organizational and workforce requirements. These investments address incremental requirements arising from compliance obligations, corporate commitments, workforce evolution, and climate-related risks - rather than asset condition or operational capacity alone. Compliance & Governance investments are proposed where deferral would compromise regulatory compliance, customer expectations, or Hydro One's long-term operating efficiency.

The average Hydro One building is approximately 42 years old. Many facilities were designed several decades ago and do not meet current standards for accessibility, inclusivity, energy efficiency, or climate resilience. These investments are necessary to ensure Hydro One's facilities remain fit-for-purpose as operating contexts, regulatory requirements, and workforce needs evolve. The FRE Compliance & Governance investments are further categorized by: (a) Accessibility and Compliance, (b) Greenhouse Gas Reductions and Sustainability, (c) EV Charging and Fleet Electrification, (d) Climate Adaptation and Resilience, (e) Work Program Enablement, and (f) Furniture and Accommodations as outlined in Table 14 below.

Table 14 - Compliance & Governance Investments - 2028-2032 Net Expenditures

Program	Total ($M)
Accessibility & Compliance	77.3
GHG Reductions and Sustainability	22.1
EV Charging and Fleet Electrification	24.6
Climate Adaptation and Resilience	22.5
Work Program Enablement	27.7
Furniture and Accommodations	25.0
Total Compliance & Governance	**198.9**

Accessibility and Facility Compliance

Compliance & Governance investments across the facility portfolio represent non-discretionary capital allocations required to rectify accessibility barriers and systemic demographic inequities embedded within legacy facility designs. These targeted upgrades support compliance with the *Accessibility for Ontarians with Disabilities Act, 2005, S.O. 2005, c. 11* (AODA) while establishing inclusive washroom, changing, and support spaces necessary to accommodate the needs of Hydro One's workforce within high-occupancy Operations Centres and Administrative Facilities. These investments are necessary to meet modern labour standards, support a diverse workforce, and enable Hydro One to effectively recruit and retain skilled personnel across all technical and operational trades.

Greenhouse Gas Reduction and Energy Efficiency

The FRE portfolio contributes to Hydro One's Scope 2 Greenhouse Gas (GHG) emissions through the operations of its facilities. As such, these investments form an important part of Hydro One's broader decarbonization strategy and support the achievement of its corporate environmental objectives, including a target *to reduce our operations-driven emissions by 30% by 2030 and achieve net-zero by 2050*[13] **.** Proposed investments focus on the replacement of end of life high energy consuming building systems, particularly HVAC equipment, with more efficient technologies. In addition, the program includes enhancements to building automation, controls, and monitoring systems that enable

[13] Hydro One Limited, Hydro One 2025 Sustainability Report (May 7, 2026), p.12, (https://www.hydroone.com/Sustainability/Documents/CSR_2025/2025-Sustainability-Report.pdf)

improved energy management, reduce energy consumption, and lower operating costs over the lifecycle of assets.

During the 2028-2032 rate period, FRE proposes targeted investments to address the incremental costs associated with incorporating energy-efficient and lower-emission technologies into facility renewal projects. These investments will address building systems within more than 200 buildings identified as being among the highest emitting in Hydro One's portfolio. Investments will be directed toward HVAC, building envelope, and building control systems where renewal needs have been identified through asset management and facility planning processes. By integrating decarbonization objectives with planned asset renewal activities, these investments seek to improve facility energy performance, reduce GHG emissions, and achieve these outcomes in a cost-effective and prudent manner while avoiding the need for more costly standalone retrofit initiatives in the future.

EV Charging Infrastructure and Fleet Electrification

Compliance and Governance investments support Hydro One's Integrated Green Fleet Charging Strategy (IGFCS) GSP Section 4.6.5.2, enabling on-site electric vehicle (EV) charging infrastructure across the FRE portfolio. As Hydro One transitions its light duty and passenger vehicle fleet to electric and plug-in hybrid vehicles, the IGFCS assumes that facilities will accommodate charging capacity at facilities and sites where the majority of vehicles will be deployed to ensure operational effectiveness.

The provision of on-site charging infrastructure is necessary to support daily fleet operations, including vehicle deployment, charging availability during peak operating periods, and the reliable maintenance and management of charging assets. Reliance on public charging infrastructure is not a viable alternative for many Hydro One locations, particularly in remote, northern, and rural service areas where public charging may be limited or insufficient to meet operational needs. Consequently, implementation of the IGFCS requires investments in electrical service upgrades, site modifications and EV charging infrastructure.

During the 2028-2032 rate period, FRE proposes to deploy approximately 75 additional EV charging installations across Transmission Stations, Northern Operations Centres, and high density operating locations within the Southern and Greater Toronto Area regions. In addition, electrical service upgrades are required at 13 high-utilization charging locations where projected charging demand exceeds the capacity of existing electrical infrastructure. These investments are intended to ensure that facilities can safely and reliably support fleet electrification objectives while maintaining operational effectiveness and supporting Hydro One's broader emissions reduction strategy.

Climate Adaptation and Resilience

Compliance and Governance investments are required to respond to climate-related risks that were not contemplated when many facilities were originally designed. Select FRE facilities are exposed to more frequent and severe storm events, including flooding, extreme precipitation, snow-load stresses - and in certain regions, wildfire risk. Climate adaptation investments strengthen facility resilience through targeted drainage improvements, envelope reinforcements, structural upgrades, and other protective measures.

These proposed investments reduce the likelihood and magnitude of reliability incidents, emergency repairs, and asset damage, and therefore support long-term reliability and cost prudency. During the 2028-2032 rate period, FRE proposes resilience upgrades at select flood-exposed Transmission Station sites in the GTA, and hardening measures across OC Admin facilities, addressing recurring storm-related risks that have direct implications for system reliability.

Work Program Enablement

Compliance and Governance investments support facility innovation and modernization initiatives that enhance operational effectiveness and enable Hydro One's evolving business requirements at existing sites. These investments incorporate communications and connected digital facility control infrastructure and specialized facility equipment that improve facility functionality, monitoring capabilities, automation, and workforce enablement. Key initiatives include deployment of advanced building management

systems, sensor-based monitoring technologies, communication infrastructure upgrades, and operational support infrastructure tailored to specific work programs and field operations.

During the 2028-2032 rate period, FRE proposes to implement these investments on a prioritized basis across selected facilities within the portfolio. Initial pilot deployments will be used to evaluate the effectiveness of emerging technologies and inform broader implementation where operational benefits are demonstrated. These investments are intended to improve facility performance, support evolving operational requirements, and ensure facilities remain capable of supporting future business needs.

Furniture and Accommodations

Compliance and Governance investments support workplace modernization and employee accommodation initiatives necessary to ensure Hydro One's facilities provide safe, functional, and productive working environments. Certain furniture, workspace configurations, and employee amenities have reached the end of their useful life or no longer effectively support current work practices, accessibility requirements, or employee needs. These investments address workplace deficiencies through furniture replacement, interior fit-out upgrades, accessibility improvements, ergonomic accommodations, and enhancements to employee support spaces.

During the 2028-2032 rate period, FRE proposes to refresh and standardize furniture and workplace environments at its seven core office facilities and at office spaces throughout field sites within the OC Admin portfolio. Investments will focus on modernizing administrative and operational workspaces, improving accessibility and accommodation provisions, and ensuring facilities support contemporary work requirements. These upgrades are intended to enhance employee productivity, support workforce well-being, and maintain workplace environments that effectively support Hydro One's operations.

IMPACT OF CAPITAL INVESTMENTS ON OPERATIONS, MAINTENANCE AND ADMINISTRATION SPENDING

Summary

The impact of FRE capital investments on OM&A spending varies by investment program and expenditure category. Overall, FRE is not forecasting a notable net change in OM&A spending as a direct result of capital investments during the 2028-2032 rate period.

The 2028–2032 period represents a critical inflection point for FRE's building portfolio. A growing number of building components are operating in poor condition or beyond their expected useful lives, increasing FRE's reliance on corrective maintenance, temporary repairs and emergency response. The proposed capital investments are intended to begin reversing this trajectory by replacing high-risk components, modernizing legacy facilities and restoring appropriate preventative maintenance practices.

This inflection point represents the beginning of FRE's transition toward a more sustainable operating state, rather than the completion of that transition. Capital investments will be implemented progressively throughout the rate period. Their OM&A benefits will therefore accumulate over time as deteriorated assets are replaced, preventative maintenance practices are re-established, and new or compliant facilities operate for a sustained period.

The absence of notable net OM&A reductions during 2028-2032 should not be interpreted as an absence of capital-related benefit. Rather, the proposed investments represent the initial intervention required to stabilize the portfolio and begin bending its long-term cost and risk trajectory downward. During this transition, the principal OM&A impact is expected to be a gradual shift from urgent, temporary and reactive work toward more effective preventative maintenance, together with targeted reductions in lease, utility and other operating costs.

FRE OM&A Spending Profile

FRE categorizes OM&A spending into four broad categories. The percentages in Table 15 below are approximate, reflect the general composition of actual spending during the 2023–2027 rate period, and are not intended to represent an exact allocation of every expenditure.

Table 15 - Definition & Context on FRE OM&A Spending Categories

OM&A Category	Approx. Share of 2023 - 2027 OM&A Spending	Definition and 2023 - 2027 Context
Preventative Maintenance	5%	Planned maintenance performed at established intervals to achieve or extend useful life and reduce break-fix costs. Programs for assets such as HVAC equipment, generators, fire-safety systems, water-treatment systems and elevators were nearly eliminated in response to corrective maintenance requirements and inflationary pressures.
Corrective Maintenance	15%	On-demand, urgent and emergency repairs, including temporary HVAC or generator units and temporary roof or building-envelope patches. Most low-risk and some medium-risk work was deferred to maintain cost control, contributing to continued degradation within affected building systems.
Scheduled Maintenance	35%	Recurring operational activities such as janitorial services, grass cutting, snow clearing, inspections and asset assessments. Service levels were reduced to the minimum viable level required to support business continuity, with adverse effects on field effectiveness and readiness, particularly during winter seasons.
Administrative and Operational Expenses	45%	Lease costs, utilities and management fees. Lease costs represented approximately 25% of total OM&A spending, while utilities, management fees and other administrative and operational expenses represented approximately 20%.

Expected Capital Investment Impacts

Capital investments are expected to reduce certain corrective maintenance, lease, utility and operating costs. However, the extent to which these benefits will be reflected in total OM&A spending during 2028-2032 will be moderated by four factors:

1. Sustainment investments will address only a portion of the deficiencies expected to exist or materialize during the rate period;
2. A portion of avoided corrective maintenance costs will be redirected toward preventative maintenance for newly installed components;

3. Most New Builds will enter service late in the rate period, with their full OM&A benefits expected after 2032; and
4. Certain Compliance and Governance investments will introduce incremental maintenance requirements or increased electricity usage.

Sustainment investments are expected to address approximately 75% of the high-risk capital deficiencies forecast to exist or materialize during 2028-2032. However, they will only address approximately 35% of total forecast deficiencies when high-, medium- and lower-risk deficiencies are considered together. Corrective maintenance will therefore continue to be required for unaddressed and newly emerging deficiencies.

Corrective maintenance requirements for newly replaced components are expected to decline to nearly zero in the years immediately following replacement. However, a substantial portion of the resulting savings will be redirected toward preventative maintenance to support achievement of the components' expected useful lives. Sustainment investment is therefore expected to improve the composition and effectiveness of OM&A spending during 2028-2032, rather than materially reduce its overall level.

New Builds and Major Renovations are expected to generate modest reductions in lease and operating costs, particularly where projects consolidate multiple locations or replace leased and legacy facilities. Based on the current investment plan, aggregate lease costs are forecasted to decrease by approximately 8%, while aggregate operational costs are forecasted to decrease by approximately 13%. These are aggregate forecast impacts and should not be interpreted as the expected benefit of each individual project.

Most New Builds are scheduled to enter service in the latter years of the rate period. Consequently, only a small portion of the associated benefits will be realized by 2032. Growth-driven builds are forecast to increase the portfolio footprint by approximately 2%, however, the resulting scheduled maintenance requirements are expected to be offset by the lower operating requirements of more energy-efficient, purpose-built facilities.

Compliance and Governance investments are expected to have offsetting impacts, resulting in a negligible net OM&A change during 2028-2032. Accessibility and Code investments are forecast to increase scheduled maintenance costs by approximately 5% overall, primarily because of additional janitorial and inspection requirements. Greenhouse Gas Emissions Reduction and Sustainability investments are expected to lower energy consumption and utility expenses, although part of these savings will support preventative maintenance for new equipment. EV Charging will increase electricity consumption at affected locations. FRE generally observes approximately 20% higher electricity usage at facilities equipped with EV charging than at comparable facilities without charging infrastructure. This is a facility-level observation and should not be interpreted as a 20% increase in portfolio-wide electricity usage or OM&A spending. Climate Adaptation and Resilience investments may reduce emergency response and corrective maintenance at targeted sites, but their portfolio-wide impact is expected to be negligible because the investments apply to a limited number of facilities.

Overall Expected Impact of FRE Capital Investments on OM&A

FRE's proposed capital investments are expected to improve the effectiveness of OM&A spending by shifting expenditure from reactive, corrective repairs toward preventative maintenance and reducing select lease and operating costs. These benefits will be partially offset during 2028-2032 by continued maintenance of unaddressed and emerging deficiencies and incremental costs associated with certain investments.

Provided that capital investment is sustained and high-risk corrective maintenance declines, modest inflation-adjusted OM&A savings are expected to become more evident after 2032. Deferring investment would delay this transition and prolong FRE's reliance on urgent, temporary and reactive work.

4.8.4.3 DIGITAL & TECHNOLOGY SOLUTIONS

The 2028-2032 plan includes $1,586.1M of capital and prepaid investments in DTS, of which $717.1M is allocated to Transmission and $869.0M is allocated to Distribution. These expenditures are presented by material investment in Table 16 below.

For the 2023-2027 rate application, three of the ISDs included within the DTS portfolio were presented as part of the System Operations program (G-GP-12, G-GP-14, and G-GP-16). For improved operational alignment, these investments have been included in the Digital & Technology Solutions program for 2028-2032.

Table 16 - Digital & Technology Solutions Material Investments for 2028-2032 Capital and Prepaid Expenditures[14]

ISD and Description	Capital Expenditures			Prepaid Expenditures			Primary Variance Driver
	2023-2027 Historical and Bridge Total ($M)	2028-2032 Planned Total ($M)	Variance ($M)	2023-2027 Historical and Bridge Total ($M)	2028-2032 Planned Total ($M)	Variance ($M)	
G-GP-05 Information Technology Services Enablement	148.7	201.2	52.5	4.3	51.9	47.6	Asset Renewal, Operational Efficiencies
G-GP-06 Corporate Services Enablement	49.6	15.0	-34.6	6.8	82.5	75.7	Operational Efficiencies, Centralization of Platforms
G-GP-07 Customer Service Technology Enablement	38.8	19.7	-19.2	38.1	178.0	139.9	Improve Customer Experience, Operational Efficiencies
G-GP-08 Work Asset Management Enablement	41.1	29.0	-12.1	13.2	184.3	171.2	Operational Improvements
G-GP-10 Physical Security Upgrades	45.7	173.3	127.6	0.0	0.0	0.0	Strengthen Security, Regulatory Compliance, Asset Renewal

[14] To present expenditures consistently across the current and forecast rate periods, Hydro One has mapped certain investments from the prior rate application to new ISDs in this application. Where material, these mappings are discussed in the relevant ISDs. The mapping does not change the overall expenditures established to implement the OEB-approved Settlement Proposal in EB-2021-0110.

ISD and Description	Capital Expenditures			Prepaid Expenditures			Primary Variance Driver
	2023-2027 Historical and Bridge Total ($M)	2028-2032 Planned Total ($M)	Variance ($M)	2023-2027 Historical and Bridge Total ($M)	2028-2032 Planned Total ($M)	Variance ($M)	
G-GP-11 Cybersecurity and Digital Protection	35.9	45.1	9.2	1.1	0.0	-1.1	Strengthen Security, Improve Grid Reliability, Regulatory Compliance
G-GP-12 Common Operations Technology Infrastructure	51.4	120.3	68.9	0.0	0.0	0.0	Improve Grid Reliability, Regulatory Compliance, Asset Renewal
G-GP-16 Energy Management System Investments	21.7	65.7	44.0	0.0	6.0	6.0	Strengthen Security, Improve Grid Reliability, Operational Efficiencies
G-GP-25 Operations Projects	21.1	36.5	15.4	0.0	7.6	7.6	Strengthen Security, Operational Efficiencies, Data Enhancements
G-GP-26 Data, Analytics and AI Enablement	15.3	26.0	10.7	2.3	17.5	15.2	Operational Efficiencies, Centralization of Platforms, Data Enhancements
G-GP-28 Enterprise Platform Modernization and Sustainment	0.0	0.0	0.0	6.0	30.8	24.8	Operational Improvements, Centralization of Platforms
G-GP-29 SAP S/4HANA OneCore Transformation	16.5	0.0	-16.5	175.5	242.0	66.5	Operational Efficiencies, Centralization of Platforms,

ISD and Description	Capital Expenditures			Prepaid Expenditures			Primary Variance Driver
	2023-2027 Historical and Bridge Total ($M)	2028-2032 Planned Total ($M)	Variance ($M)	2023-2027 Historical and Bridge Total ($M)	2028-2032 Planned Total ($M)	Variance ($M)	
							Data Enhancements
G-GP-30 Enterprise Security Platforms and Controls	0.0	0.0	0.0	1.4	44.4	43.0	Strengthen Security, Regulatory Compliance
G-GP-31 Control Room Equipment	0.0	9.3	9.3	0.0	0.0	0.0	Operational Improvements
Total	**485.8**	**741.1**	**255.3**	**248.7**	**845.0**	**596.3**	

Over the 2028-2032 period, Hydro One plans to invest $1,586.1M in its DTS portfolio. This increased level of DTS expenditures relative to the 2023-2027 period reflects both the renewal of aging technology assets and the growing role that digital systems play in the delivery of utility operations and customer service. A significant portion of the planned expenditures in the DTS portfolio are driven by the replacement of end of life or unsupported technology platforms, applications, and infrastructure that represent increasing operational, reliability, and support risks if not renewed. At the same time, Hydro One's reliance on digital capabilities has increased, requiring investments that support evolving business processes, increased volume of data and transactions, customer expectations, regulatory obligations, and system operations.

Modern digital platforms have become an operational necessity for utilities. Hydro One is investing in technologies that strengthen customer information management, improve customer communications, expand digital self-service capabilities, and provide customers with better visibility into accounts, billing information, and service requests. Together, these investments will support more timely access to information, reduce reliance on manual interactions, and enable a more consistent customer experience across digital and assisted service channels. Internally, Hydro One is managing growing volumes of

operational and customer data that supports planning, asset management, work execution, and decision-making activities. Advances in data analytics and artificial intelligence are creating opportunities to improve operational efficiency and service delivery; however, realizing these benefits requires investments in foundational data systems and technology capabilities. In parallel the frequency and sophistication of cyber and physical security threats continue to increase, requiring ongoing investments to maintain secure and resilient technology environments and to protect critical utility operations and customer information.

The DTS portfolio consists of 14 material investments. These investments are aligned to four core outcomes: Grid Reliability and Resilience, Protecting and Securing Critical Infrastructure, Customer Centricity, and Workforce Enablement and Safety. In addition to these four outcomes, each of these investments is supported by the foundational enablers of Data and Analytics and Technology Operations, both of which are integrated across the DTS portfolio, as demonstrated in Table 17 below.

1

Table 17 - DTS Investment Outcomes and Foundational Enablers

Investment Outcomes	Grid Reliability and Resilience	Protect & Secure Critical Infrastructure	Customer Centricity	Workforce Enablement and Safety
Material Investments	**G-GP-08:** Work and Asset Management Enablement **G-GP-16:** Energy Management System Investments **G-GP-25:** Operations Projects **G-GP-31**: Control Room Equipment	**G-GP-10:** Physical Security Upgrades **G-GP-11:** Cybersecurity and Digital Protection **G-GP-12:** Common Operations Technology Infrastructure **G-GP-30:** Enterprise Security Platforms and Controls	**G-GP-07:** Customer Service Technology Enablement	**G-GP-05**: IT Services Enablement **G-GP-06:** Corporate Services Enablement **G-GP-08:** Work and Asset Management Enablement **G-GP-26:** Data & AI Enablement **G-GP-28:** Enterprise Platform Modernization and Sustainment **G-GP-29:** S/4HANA OneCore Transformation
Foundational Enablers	**Data and Analytics as a Strategic Asset** (**G-GP-26:** Data Analytics and AI Enablement)			
	Technology Operations (**G-GP-05**: IT Services Enablement)			

Note: Some DTS Investments may be listed in more than one area to best represent the alignment of the ISDs

GRID RELIABILITY AND RESILIENCE

Over the 2028-2032 period Hydro One is investing to support Reliability and Resiliency (G-GP-08, G-GP-16, G-GP-25, G-GP-31). Investments in energy management systems, operational technology projects, and control centre communications infrastructure are necessary to maintain and enhance the reliability and resilience of the electricity system. These investments provide the technology capabilities that support real-time monitoring, control coordination, and response across the transmission and distribution networks. As the electricity system becomes increasingly complex and interconnected, system operators require reliable, secure, and modern tools to maintain situational awareness, manage outages, and respond to abnormal operating conditions, and support the safe restoration of service. Many existing operational technology and communications components are approaching end of life or face increasing reliability, supportability, and cyber security risks. The proposed investments will modernize critical operational systems and communications infrastructure, improve the availability and quality of operational information, strengthen system redundancy and resilience, and reduce the risk of service disruptions associated with technology failures. Collectively, these investments support Hydro One's ability to safely and reliably operate the electricity system and respond effectively to both routine operational requirements and increasingly high-impact events.

PROTECT & SECURE CRITICAL INFRASTRUCTURE

Over the 2028-2032 period Hydro One is investing in physical and cyber security (G-GP-10, G-GP-11, G-GP-12, and G-GP-30). As cyber and physical threats increase in scale and sophistication, Hydro One is investing in its security model. Security improvements will allow a coordinated approach to unified visibility, identity centric security for access control, threat detection and response, governance, and continuous monitoring that aligns information technology (IT), operating technology (OT), and physical asset protections. Enhanced identity and access management, continuous monitoring, improved incident response capabilities, and targeted hardening of critical assets all contribute to a more resilient security posture. These investments mitigate operational risk, safeguard sensitive information, and strengthen the utility's ability to respond to emerging threats. During the 2023-2027 rate period, perimeter security investments focused on seven stations identified through Threat Risk Assessments and CIP-014 requirements. In 2025, Hydro

One introduced an enterprise-wide facility criticality methodology to better assess physical security risks across all grid-connected facilities. This expanded risk-based approach identified many Tier 1 and Tier 2 facilities (62% of the highest-criticality sites) that lack security controls aligned with their risk level, providing a stronger basis for prioritizing future security investments. Hydro One has proposed a new Cyber Security Variance Account[15] for the 2028-2032 rate term to address material, incremental cybersecurity compliance costs arising from new, amended, or unforeseen regulatory obligations that cannot be reasonably forecast at the time of filing.

CUSTOMER CENTRICITY

Hydro One is investing to maintain and enhance technologies that support digital customer interactions, agent-led service operations, and core customer transactions such as metering, billing, and collections (G-GP-07). Hydro One is progressing from targeted sustainment activities to larger, phased modernization programs across three interrelated categories: Digital Customer Experience Enablement, Meter-to-Bill Sustainment and Enhancements and Contact Centre Operations Enablement. These investments also address recurring lifecycle upgrades aligned with vendor-prescribed support cycles, the need to remain in supported and secure technology environments, and ongoing enhancements required to implement regulatory requirements and address evolving business needs. Together, these investments underpin Hydro One's ability to meet rising customer expectations, protect sensitive customer information, and maintain reliable, compliant customer service platforms.

WORKFORCE ENABLEMENT AND SAFETY

The DTS portfolio of investments plays a critical role in enabling the transmission, distribution, and corporate investment plans and work programs. As utility operations become increasingly data-driven and interconnected, modern technology platforms are required to support day-to-day business processes, maintain operational reliability, and address evolving workforce needs. The proposed investments are necessary to ensure that employees have access to the system, information, and tools necessary to execute

[15] Exhibit G-01-03, Section 5.1 and 9.1

their work effectively while reducing operational risk associated with aging and unsupported technologies. Within this subset of DTS portfolio investments Hydro One plans to:

- **Complete the implementation of SAP S/4HANA** (G-GP-29) which began in 2026. Investments in S/4HANA support the Company's core business processes, including finance, human resources, supply chain management, project delivery, meter to bill, payroll, and asset management activities. These investments provide employees with modern tools and standardized processes that improve the accessibility, quality, and timeliness of information to support operational and financial decision making. Investment is necessary to maintain vendor-supported platforms, address evolving business requirements, and improve the efficiency and effectiveness of administrative and operational functions.
- **Address ongoing maintenance and aging DTS infrastructure** to enable extensive capital and OM&A work programs within the distribution, transmission, and corporate lines of business. The increase in investment levels across Work and Asset Management Enablement (G-GP-08), and Corporate Services Enablement (G-GP-06) are necessary to address aging technology assets and ensure that Hydro One's digital capabilities can effectively support a growing capital portfolio across both the distribution and transmission business. Many of the underlying applications, platforms, and technology infrastructure that support planning, engineering, project delivery, asset management, and operational activities are approaching end of life, becoming increasingly costly to maintain, or no longer align with current business requirements. At the same time, the scale, complexity, and pace of capital investment activities continue to increase, placing greater demands on the systems used to manage assets, execute projects, coordinate resources, monitor operational performance, and support customer interactions. These investments will provide the foundational capabilities required to support the efficient delivery of capital programs, maintain reliable utility operations, and meet evolving business and customer needs over the planning period.
- **Modernize tools and leverage new Data, Analytics and Artificial Intelligence capabilities** (G-GP-28). These investments will enhance and standardize Hydro

One's primary digital workplace platform (Microsoft 365 (M365)) in order to strengthen enterprise-wide adoption and standardization, improve security and compliance posture within the digital workplace, reduce avoidable sustainment effort and cost in the integration environment, and reduce ongoing platform costs while improving long-term supportability.

DATA AND ANALYTICS AS A STRATEGIC ASSET

Data and Analytics as a Strategic Asset is a foundational, enterprise-wide capability that supports the effective delivery of the DTS portfolio. Investments in data governance, data management, and analytics platforms (G-GP-26) will enable Hydro One to improve the quality, accessibility, and use of information in decision-making processes. These capabilities support evidence-based investment planning, risk informed asset management, and operational decision-making, helping ensure that capital and operating resources are directed to areas of greatest customer and system benefit.

The need for these capabilities continues to grow as investments across the DTS portfolio introduce new digital technologies, monitoring equipment, and operational systems that generate increasing volumes of asset and operational data. Investments in Data and Analytics provide the framework to capture, govern, integrate, and leverage this information to support portfolio outcomes, including improved reliability and resilience, enhanced customer service, and workforce effectiveness. As a result, Data and Analytics is not associated with a single investment outcome; rather it serves as a foundational enabler that supports the realization of benefits across the broader DTS portfolio and maximizes the value derived from investment in other programs.

TECHNOLOGY OPERATIONS

Technology operations is the foundational enabler that supports reliable, secure, and effective delivery of the DTS portfolio (G-GP-05). Investments in core information technology infrastructure, end-user computing devices, networking systems, and enterprise enablement platforms ensure that the underlying technology environment remains resilient, vendor supported, and capable of meeting evolving business requirements. These investments address asset obsolescence, maintain cybersecurity

and supportability requirements, and reduce the operational risks associated with aging technology assets.

Investments in this area are necessary to provide the essential technology foundation that all DTS capabilities depend on. Maintaining reliable and secure technology operations enables the continued performance of critical business systems, supports the deployment of new digital capabilities, and ensures that investments across the broader DTS portfolio can be effectively implemented and sustained.

IMPACT OF CAPITAL AND PREPAID INVESTMENTS ON OPERATIONS, MAINTENANCE AND ADMINISTRATION SPENDING

Capital and cloud-based prepaid investments in Digital & Technology Solutions can help Hydro One minimize lifetime costs for technology systems. For example, although investments in technology upgrades and enhancements may be needed to maintain vendor supported versions of the hardware and software, these investments help to prevent Hydro One from having to rely on costly extended support to ensure required system reliability and service levels are met. Some capital and prepaid expenditures, such as the implementation of new technology to replace legacy systems, may also help to reduce costs in the long term where the overall run costs are reduced. One example of this relationship is the investments that Hydro One made in 2023 and 2024 to upgrade and consolidate the Company's data centre platform and locations, resulting in annual productivity savings of $1M.

Typically, when new capital technology or systems are deployed, there is often an associated increase in OM&A for any required licensing and maintenance support (i.e. third-party contracts), and sustainment support. Similarly, when a new cloud-based prepaid technology solution is deployed, there is often an associated increase in OM&A required for subscriptions. However, new technologies can enable cost savings for another line of business. Digital & Technology Solutions continues to seek opportunities to rationalize applications, replacing older costly systems with lower cost technologies, and continues to negotiate reduced third-party contract costs for licenses and maintenance.

4.8.4.4 SYSTEM OPERATIONS

Over the 2028-2032 period, Hydro One plans to invest $55.1M in System Operations, of which $24.6M is allocated to Transmission and $30.5M is allocated to Distribution. These costs are presented below in Table 18 by material investment.

Table 18 - System Operations Material Investments for 2028-2032

ISD and Description	2023-2027 Historical and Bridge Total ($M)	2028-2032 Planned Total ($M)	Variance ($M)	Primary Variance Driver
G-GP-13 Operational Technology Facility Sustainment	0.5	49.0	48.6	Strengthen Security, Asset Renewal, Regulatory Compliance
G-GP-15 BU-OGCC & ISOC Office Remediation	2.0	6.1	4.1	Asset Renewal, Growth in Work Program
Total	**2.5**	**55.1**	**52.6**	

Over the 2028-2032 period, Hydro One plans to invest $55.1M in its System Operations portfolio. These investments are necessary to maintain the safe, reliable, and resilient operations of Hydro One's System Operations functions. These facilities house essential operational technology, communications, and security systems that enable real-time monitoring and control of the electricity system, coordination of outage response activities, and protection of critical infrastructure. Much of the supporting facility infrastructure, including building systems, electrical and mechanical components, and technology-supporting environments, requires renewal to address aging assets, maintain reliability, and ensure continued compliance with operational, security, and workplace requirements. As these facilities are critical to Hydro One's day-to-day operations, investments are required to sustain their operational readiness, reduce the risk of facility related disruptions, and ensure that control room operators can effectively perform their responsibilities.

The System Operations investments align with the Security and Workforce Enablement and Safety priorities as follows:

SECURITY

The Operating Technology Facilities Sustainment (G-GP-13) investments will provide funding for the maintenance and lifecycle management of common Integrated System Operations Centre (ISOC) and Ontario Grid Control Centre (BU-OGCC) Operations facilities including: Roof replacement, HVAC (heating, ventilation and air conditioning) systems, electrical and backup power supplies, and security fencing. In 2028, these investments also include a Backup Generator Project. This project will allow for secondary backup in the event of a loss of power to the facility, which will allow continuation of 24/7 operations. Not proceeding with this investment will result in continued risk to the functionality of the control centre's facility, systems and tools. There is also the potential for a total loss of control of the distribution system in the event the ISOC, or its computer systems, are rendered unavailable due to loss of power. This would affect system reliability and Hydro One's customers as well as the safety of Hydro One and other LDC field staff.

WORKFORCE ENABLEMENT AND SAFETY

The BU-OGCC & ISOC Office Remediation (G-GP-15) investments remediate facility and office needs at the BU-OGCC & ISOC. As a critical facility, the BU-OGCC is integral to efficient and safe management of the electric grid in Ontario. The primary triggers for this investment are regulatory compliance for the Hydro One control function and the mitigation of health and safety risks (including elevator refurbishment / replacement and general repairs). The control room is the hub of operations, with many work programs requiring planned or unplanned outages that are authorized and executed by the control room operators. Increases in the volume and quantity of work programs directly correlate to an increased workload in the control room and support teams.

IMPACT OF CAPITAL INVESTMENTS ON OPERATIONS, MAINTENANCE AND ADMINISTRATION SPENDING

Capital investments in Grid Operations and Control Facilities will generally mitigate OM&A cost pressures. The deferral of capital investment can increase OM&A costs, since deteriorated facilities can break down, requiring emergency repairs and delaying restoration. These OM&A impacts can be significant depending on the breakdown event.

The planned capital investments will reduce the risk of these costly events, but are not expected to reduce OM&A costs overall.

4.8.4.5 OTHER GENERAL PLANT

Other material investments that fall under the General Plant OEB Category are provided below in Table 19.

Table 19 - Other General Plant Investments ($M)[16]

ISD and Description	2023-2027 Historical and Bridge Total	2028-2032 Planned Total	Variance	Primary Variance Driver
G-GP-19 Grid Control Network Sustainment	30.1	30.7	0.6	
G-GP-22 Capital Contribution to Hydro One Transmission	31.5	568.3	536.8	Increased load growth requiring transmission investments funded by Hydro One Distribution.
G-GP-23 PMU Synchrophasors Program	14.3	15.8	1.5	
G-GP-27 Transmission Capital Contribution to Third Party	8.0	8.0	0.0	
Other*	47.0	19.0	-28.0	
Total	**130.9**	**641.8**	**510.9**	

**Includes G-GP-20 is an ISD from Hydro One's previous rate application (EB-2021-0110) which has no investments with material expenditures in the 2028-2032 period*

These investments consist of three main groups: (1) operating infrastructure investments, (2) capital contributions from Hydro One Distribution to Hydro One Transmission, and (3) capital contributions from Hydro One Transmission to third parties.

[16] To present expenditures consistently across the current and forecast rate periods, Hydro One has mapped certain investments from the prior rate application to new ISDs in this application. Where material, these mappings are discussed in the relevant ISDs. The mapping does not change the overall expenditures established under the OEB-approved Settlement Proposal in EB-2021-0110.

- **Operating Infrastructure (fully allocated to Transmission – G-GP-19 and G-GP-23)** – These are investments in assets that oversee the Grid Control Network and other Transmission automation assets. Over the 2028-2032 period, Hydro One is planning to spend $46.5M at a relatively steady pace of approximately $9.3M per year. Additional information on these investments can be found under the following investment summary documents: G-GP-19 and G-GP-23.
- **Capital Contributions from Hydro One Distribution to Hydro One Transmission (fully allocated to Distribution)** – These investments are non-discretionary capital contributions to Hydro One Transmission for transmission system network upgrades to accommodate forecast distribution customer load growth and to improve reliability in the affected regions. For the 2028-2032 test years, Hydro One Distribution plans to contribute $568.3M to Hydro One Transmission, as discussed in G-GP-22.
- **Capital Contributions from Hydro One Transmission to Third Party (fully allocated to Transmission)** - This investment involves a capital contribution towards the Norfolk Area Battery Energy Storage System (BESS) and represents a Non-Wires Alternative (NWA) to meet Norfolk local area load growth transmission needs. The investment is expected to defer traditional transmission reinforcement investments for up to 20 years. For the 2028-2032 rate period, Hydro One Transmission plans to contribute $8.0M to the Norfolk BESS, as discussed in G-GP-27.

4.8.5 ATTACHMENTS

The following appendices are provided as part of this section:

- Attachment 1: OEB Distribution Chapter 2 Filing Requirements - Appendix 2-AA

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SECTION 4.8 – ATTACHMENT 1 – APPENDIX 2-AA CAPITAL PROJECTS TABLE FOR GENERAL PLANT ($M)

This attachment has been filed separately in MS Excel format.

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SECTION 4.9 – GSP – CAPITAL EXPENDITURE VARIANCES

4.9.1 INTRODUCTION

This Exhibit discusses the historical variances for General Plant expenditures between OEB-approved and actual/forecast investment levels for 2023-2027.

The variances described in this Exhibit are relative to Hydro One's December 2022 expenditures as the basis for the variance, which reflects the OEB-approved capital expenditures in accordance with the Settlement Proposal in Hydro One's application for Distribution Rates for 2023-2027 (EB-2021-0110).[1]

Hydro One has prepared detailed variance summaries for material investments within each Investment Summary Document (ISD) under GSP Section 4.11. Additional variance analysis can be found in the following attachments for General Plant investments: the OEB Distribution Chapter 2 Filing Requirements Appendix 2-AB, the Capital Performance Reports for General Plant investments for Transmission and Distribution in 2023, 2024 and 2025, and Capital Performance Summary for General Plant Investments for 2026 and 2027.

4.9.2 HISTORICAL EXPENDITURE VARIANCES

Hydro One managed the 2023-2027 GSP expenditures in a period marked by changing operational needs, market and input cost pressures, technology reprioritization, and emerging work requirements. This required Hydro One to make trade-offs across the General Plant portfolios to address critical asset and operational requirements while continuing to support the Transmission and Distribution work programs. As described in GSP Section 4.8, the 2028-2032 planning period addresses accumulated lifecycle, facility,

[1]In EB-2021-0110, the OEB approved Hydro One's 2023-2027 joint rate application based on the capital expenditure and in-service envelopes outlined in the Settlement Proposal (Decision and Order, November 29, 2022, Schedule A, p. 254-255 and p. 257-258). In December 2022, Hydro One allocated these OEB-approved envelopes to individual programs and projects for each of the five years. This represented the first time where the impacts of the Settlement Proposal were flowed through to the program and project level.

fleet, technology, security, and control-centre requirements that cannot be deferred without increasing risk to customers and operations.

This section provides a summary of Hydro One's 2023-2027 capital and prepaid expenditures[2] and bridge year forecasts relative to the capital expenditures approved in Hydro One's Application for Transmission Revenue Requirement and Distribution Rates for 2023-2027 (EB-2021-0110).

Hydro One has reallocated certain expenditures across ISDs within the Digital & Technology Solutions (DTS) and System Operations portfolios to support like-for-like comparisons between the 2023-2027 and 2028-2032 periods. In this Application, investments that support System Operations but are managed and delivered by DTS are presented within the DTS portfolio. By contrast, some of these investments were previously presented within the System Operations portfolio for the 2023–2027 period. Hydro One has also reallocated certain investments within the DTS portfolio to group similar investments together for the 2028-2032 planning period, including presenting SAP S/4 HANA expenditures together in the newly introduced G-GP-29 ISD. These reallocations are identified in the affected ISDs and are reflected consistently throughout this section.

Detailed variance explanations for material investments provided below can be found in the Capital Performance Reports[3] in the attachments to this Exhibit, as well as the respective ISD in GSP Section 4.11.

[2] Prepaid expenditures relate to cloud computing implementation costs for technology hosting arrangements. These expenditures are included in the System Plans to provide a comprehensive view of the technologies for which DTS is accountable. The technologies reflected in the System Plans include both traditionally owned, capital technology assets (e.g., physical hardware and on-premises applications) and subscription-based cloud solutions. For information regarding accounting treatment of prepaid expenditures related to cloud, refer to GSP Section 4.6.6 and Exhibit E-08-01, Section 4.0.

[3] Following the publication of the 2023 and 2024 Capital Performance Reports (CPRs), Hydro One updated the OEB-category mapping of a limited number of investments. As a result, some OEB category-level actual expenditures and in-service additions reported in Table 1 of the 2023 and 2024 CPRs may differ from the updated amounts presented in this Application.

Hydro One's actuals and forecast capital spending relative to OEB-approved amounts are shown in Table 1 below. Hydro One's prepaid expenditures trend is shown in Table 2 below. A further breakdown by functional area is outlined in Table 3 below.

1

Table 1 - Historical and Bridge Years - Net Capital Expenditures Summary[4]

OEB Category	Historical (Previous Plan and Actual / Forecast)												Bridge			Total		
	2023			2024			2025			2026			2027					
	OEB Approved	Actual	Variance	OEB Approved	Actual	Variance	OEB Approved	Actual	Variance	OEB Approved	Forecast	Variance	OEB Approved	Forecast	Variance	OEB Approved	Forecast	Variance
	$M	$M	%	$M	$M	%	$M	$M	%	$M	$M	%	$M	$M	%	$M	$M	%
General Plant – Transmission	143.7	146.3	1.8%	121.4	134.3	10.6%	111.8	111.0	-0.7%	113.4	86.8	-23.4%	102.8	82.9	-19.3%	593.1	561.3	-5.4%
General Plant – Distribution	172.2	194.1	12.7%	182.2	169.1	-7.2%	149.5	118.7	-20.6%	154.2	121.5	-21.2%	143.2	119.2	-16.8%	801.3	722.6	-9.8%
Total General Plant	**315.9**	**340.4**	**7.8%**	**303.6**	**303.3**	**-0.1%**	**261.3**	**229.7**	**-12.1%**	**267.7**	**208.3**	**-22.2%**	**246.0**	**202.1**	**-17.8%**	**1,394.4**	**1,283.8**	**-7.9%**

2

Table 2 - Historical and Bridge Years - Prepaid Expenditures Summary[5]

OEB Category	Historical (Previous Plan and Actual / Forecast)												Bridge			Total		
	2023			2024			2025			2026			2027					
	OEB Approved	Actual	Variance	OEB Approved	Actual	Variance	OEB Approved	Actual	Variance	OEB Approved	Forecast	Variance	OEB Approved	Forecast	Variance	OEB Approved	Forecast	Variance
	$M	$M	%	$M	$M	%	$M	$M	%	$M	$M	%	$M	$M	%	$M	$M	%
General Plant – Transmission	0.0	0.0	-	0.0	0.0	-	0.0	10.3	-	0.0	48.3	-	0.0	31.2	-	0.0	89.7	-
General Plant – Distribution	0.0	0.0	-	0.0	10.0	-	0.0	30.5	-	0.0	70.0	-	0.0	48.6	-	0.0	159.0	-
Total General Plant	**0.0**	**0.0**	**-**	**0.0**	**10.0**	**-**	**0.0**	**40.7**	**-**	**0.0**	**118.3**	**-**	**0.0**	**79.7**	**-**	**0.0**	**248.7**	**-**

[4] Figures presented in the tables may not sum to the totals shown due to rounding.
[5] Figures presented in the tables may not sum to the totals shown due to rounding.

Table 3 - Historical and Bridge Years - Net Capital and Prepaid Expenditures Summary by Functional Area[6]

General Plant Function	Historical												Bridge			Total		
	2023			2024			2025			2026			2027					
Net Capital Expenditures	OEB Approved	Actual	Variance	OEB Approved	Actual	Variance	OEB Approved	Actual	Variance	OEB Approved	Forecast	Variance	OEB Approved	Forecast	Variance	OEB Approved	Forecast	Variance
	$M	$M	%	$M	$M	%	$M	$M	%	$M	$M	%	$M	$M	%	$M	$M	%
Fleet & Aviation	N/A	74.9	N/A	N/A	71.0	N/A	N/A	74.6	N/A	N/A	68.4	N/A	N/A	70.7	N/A	N/A	359.6	N/A
Facilities & Real Estate	N/A	65.4	N/A	N/A	111.0	N/A	N/A	53.3	N/A	N/A	39.8	N/A	N/A	35.6	N/A	N/A	305.1	N/A
Digital & Technology Solutions	N/A	177.8	N/A	N/A	114.2	N/A	N/A	66.1	N/A	N/A	76.0	N/A	N/A	51.7	N/A	N/A	485.8	N/A
System Operations	N/A	0.0	N/A	N/A	0.4	N/A	N/A	2.1	N/A	N/A	0.0	N/A	N/A	0.0	N/A	N/A	2.5	N/A
Other[7]	N/A	22.3	N/A	N/A	6.8	N/A	N/A	33.5	N/A	N/A	24.1	N/A	N/A	44.2	N/A	N/A	130.9	N/A
Total Net Capital Expenditures	**315.9**	**340.4**	**7.8%**	**303.6**	**303.3**	**-0.1%**	**261.3**	**229.7**	**-12.1%**	**267.7**	**208.3**	**-22.2%**	**246.0**	**202.1**	**-17.8%**	**1,394.4**	**1,283.8**	**-7.9%**
Prepaid Expenditures related to Cloud	0.0	0.0	0.0	0.0	10.0	-	0.0	40.7	-	0.0	118.3	-	0.0	79.7	-	0.0	248.7	-

[6] Figures presented in the tables may not sum to the totals shown due to rounding.
[7] Includes General Plant investments contributing to Operating Infrastructure, System Capability Reinforcement, and high-level capital adjustments across General Plant (e.g., OPEB/Pension Bill, Cost/Billable Ration Variance)

Over the 2023-2027 period, Hydro One forecasts $1,283.8M in net capital expenditures, compared to the OEB-approved capital expenditure envelope of $1,394.4M, representing an underspend of $110.6M (7.9%). When $248.7M of prepaid expenditures related to cloud are included, total General Plant expenditures increase to $1,532.5M, resulting in an overall spend of $138.1M (9.9%) above the OEB-approved capital expenditure envelope.[8] This comparison illustrates the overall expenditure impact of the shift toward cloud-based delivery models. Further details on the variances are provided by functional area in the tables below.

Hydro One actively managed the GSP portfolio to respond to evolving operational requirements, emerging asset risks, changing business priorities, supply chain and market conditions, and the increasing adoption of cloud-based technologies. This required ongoing prioritization and reallocation of resources across Fleet & Aviation, Facilities & Real Estate (FRE), DTS, System Operations, and Other General Plant investments. As a result, numerous project-level expenditure increases, decreases, and timing shifts occurred throughout the period, with many variances offsetting one another within the overall portfolio.

While Hydro One made prudent trade-offs to remain focused on the highest-value and highest-risk work, several investments experienced variances from the approved plan due to changes in business requirements, technology delivery approaches, unforeseen operational needs, and project execution timing. In particular, the transition toward cloud-based technology solutions increased the prevalence of prepaid expenditures that were not a significant element of the 2023-2027 plan. The material variances discussed in the sections that follow represent the most significant deviations from plan and are the primary drivers of the overall GSP expenditure variance for the period.

Notwithstanding these project-level variances, the overall GSP portfolio reflects Hydro One's continued efforts to balance affordability, risk, and operational requirements while maintaining critical utility capabilities and supporting the Transmission and Distribution

[8] For information regarding accounting treatment of prepaid expenditures related to cloud, refer to Exhibit E-08-01, Section 4.0.

work programs. Many investments were deferred, re-phased, or reprioritized to accommodate emerging requirements, limiting overall spending growth while ensuring critical asset, technology, facility, fleet, security, and operational needs continued to be addressed.

The sections that follow provide the variance analysis for the General Plant functional areas: Fleet & Aviation, FRE, DTS, System Operations, and Other General Plant investments. As discussed above, in December 2022, Hydro One revised the capital expenditure and ISA forecast on a multi-year envelope and OEB-category basis to implement the OEB-approved Settlement Proposal. This was the first time Hydro One allocated the impact of the Settlement Proposal to the project and program level. As a result, the variance analysis that follows compares actual and bridge forecast capital expenditures to the revised forecast for the General Plant functional areas (the “Plan” herein).

4.9.2.1 FLEET & AVIATION HISTORICAL CAPITAL EXPENDITURES

The comparison of Fleet & Aviation actual and bridge forecast capital expenditures to the Plan is provided in Table 4.

Table 4 - Fleet & Aviation Historical and Bridge Years Capital Expenditures Summary[9]

General Plant Function	Historical												Bridge			Total		
	2023			2024			2025			2026			2027					
Net Capital Expenditures	Plan	Actual	Variance	Plan	Actual	Variance	Plan	Actual	Variance	Plan	Forecast	Variance	Plan	Forecast	Variance	Plan	Forecast	Variance
	$M	$M	%	$M	$M	%	$M	$M	%	$M	$M	%	$M	$M	%	$M	$M	%
Fleet & Aviation Allocated to Transmission	24.7	25.3	2.3%	23.5	24.0	2.1%	23.7	25.2	6.3%	24.1	23.1	-4.1%	22.9	23.9	4.0%	119.0	121.5	2.1%
Fleet & Aviation Allocated to Distribution	48.4	49.5	2.3%	46.1	47.0	2.0%	46.5	49.4	6.2%	47.2	45.3	-4.0%	45.1	46.8	3.9%	233.3	238.1	2.1%
Total Fleet & Aviation Capital Expenditures	**73.2**	**74.9**	**2.3%**	**69.6**	**71.0**	**2.0%**	**70.2**	**74.6**	**6.3%**	**71.3**	**68.4**	**-4.0%**	**68.0**	**70.7**	**4.0%**	**352.3**	**359.6**	**2.1%**

[9] Figures presented in the tables may not sum to the totals shown due to rounding.

Hydro One is forecasting to spend $359.6M capital expenditure on Fleet & Aviation investments over the 2023-2027 period, which is 2.1% ($7.3M) above the Fleet & Aviation capital expenditure Plan of $352.3M.

The most significant variances for the Fleet & Aviation investments are listed below:

- The 2025 increase of 6.3% ($4.4M) and the 2026 decrease of 4.0% ($2.9M) were driven by higher than planned helicopter unit costs between 2023-2025. The 2023-2027 investment plan contemplated the purchase of five helicopters, comprising two in 2023, and one in each of 2024, 2025, and 2026, with an average cost of $5.4M per aircraft. Actual costs averaged approximately $5.9M per aircraft, primarily due to foreign exchange rate impacts. To remain within the approved program funding envelope, Hydro purchased four helicopters, comprising two in 2023, one in 2024, and one in 2025, and deferred the fifth planned purchase, resulting in a timing difference relative to plan.
- The 2027 forecast increase of 4.0% ($2.7M) is primarily driven by higher planned expenditures on service equipment. The forecast reflects the purchase and replacement of specialized tools and field equipment required to support ongoing operations and work programs across Hydro One's lines of business. The increase is primarily attributable to rising equipment costs as well as increased replacement requirements for certain safety-related equipment. The increased expenditures are necessary to ensure that employees have access to the tools and equipment necessary to safely and efficiently execute Hydro One's work programs.

4.9.2.2 FACILITIES & REAL ESTATE HISTORICAL CAPITAL EXPENDITURES

The comparison of FRE actual and bridge forecast capital expenditures to the Plan is provided in Table 5.

Table 5 - Facilities & Real Estate[10] Historical and Bridge Years Capital Expenditures Summary[11]

General Plant Function Net Capital Expenditures	Historical												Bridge			Total		
	2023			2024			2025			2026			2027					
	Plan	Actual	Variance	Plan	Actual	Variance	Plan	Actual	Variance	Plan	Forecast	Variance	Plan	Forecast	Variance	Plan	Forecast	Variance
	$M	$M	%	$M	$M	%	$M	$M	%	$M	$M	%	$M	$M	%	$M	$M	%
Facilities & Real Estate Allocated to Transmission	21.0	22.8	8.5%	30.7	33.9	10.7%	22.2	23.7	6.9%	14.6	13.0	-10.9%	13.6	11.3	-16.5%	102.0	104.8	2.7%
Facilities & Real Estate Allocated to Distribution	41.6	42.6	2.5%	83.5	77.1	-7.7%	49.5	29.6	-40.2%	11.5	26.8	134.1%	11.9	24.2	103.2%	198.0	200.3	1.2%
Total Facilities & Real Estate Capital Expenditures	**62.6**	**65.4**	**4.5%**	**114.2**	**111.0**	**-2.8%**	**71.7**	**53.3**	**-25.7%**	**26.1**	**39.8**	**52.8%**	**25.5**	**35.6**	**39.5%**	**300.0**	**305.1**	**1.7%**

[10] To present expenditures consistently across the current and forecast rate periods, Hydro One has mapped certain investments from the prior rate application to new ISDs in this application. Where material, these mappings are discussed in the relevant ISDs. The mapping does not change the overall expenditures established under the OEB-approved Settlement Proposal in EB-2021-0110.
[11] Figures presented in the tables may not sum to the totals shown due to rounding.

Hydro One is forecasting to spend $305.1M in capital expenditures on FRE investments over the 2023-2027 period, which is 1.7% ($5.1M) above the capital expenditure Plan of $300.0M.

- **Transmission-allocated FRE expenditures:** Over the 2023-2027 period, Transmission allocated FRE expenditures are projected to be within 2.7% of plan. Intra-year variances are primarily attributable to higher than planned expenditures in 2023, 2024, and 2025 resulting from emergency roof repairs and HVAC failures. These increased expenditures are expected to be substantially offset by lower than planned expenditures in 2026 and 2027 due to the deferral of the Hanmer TS work centre project, and to accommodate emerging station expansion work at the Hanmer TS.
- **Distribution-allocated FRE expenditures:** Over the 2023-2027 period, Distribution allocated FRE expenditures are projected to be within 1.2% of plan. Intra-year variances are primarily attributable to timing differences related to the Orillia Operations Centre, Orillia Distribution Warehouse, Peterborough Operations Centre and Peterborough Fleet Garage. In 2024, the Orillia Operations Centre and Distribution Warehouse projects experienced delays in construction due to soil compaction issues. Expenditures associated with the Peterborough Operations Centre and Peterborough Fleet Garage projects were moved from 2025 to 2026 and 2027 due to delayed receipt of municipal site development agreements.

4.9.2.3 DIGITAL & TECHNOLOGY SOLUTIONS CAPITAL EXPENDITURES

The comparison of DTS actual and bridge forecast capital expenditures to the Plan is provided in Table 6.

Table 6 - Digital & Technology Solutions[12] Historical and Bridge Years Capital and Prepaid Expenditures Summary[13]

General Plant Function	Historical												Bridge			Total		
	2023			2024			2025			2026			2027					
Net Capital Expenditures	Plan	Actual	Variance	Plan	Actual	Variance	Plan	Actual	Variance	Plan	Forecast	Variance	Plan	Forecast	Variance	Plan	Forecast	Variance
	$M	$M	%	$M	$M	%	$M	$M	%	$M	$M	%	$M	$M	%	$M	$M	%
DTS Allocated to Transmission	79.6	75.5	-5.1%	41.4	55.7	34.5%	45.1	34.6	-23.3%	56.7	33.6	-40.8%	40.4	24.3	-39.7%	263.2	223.7	-15.0%
DTS Allocated to Distribution	78.9	102.3	29.8%	66.8	58.5	-12.4%	64.1	31.5	-50.8%	64.1	42.4	-33.9%	56.7	27.3	-51.8%	330.5	262.1	-20.7%
Total DTS Capital Expenditures	**158.4**	**177.8**	**12.2%**	**108.2**	**114.2**	**5.6%**	**109.2**	**66.1**	**-39.4%**	**120.8**	**76.0**	**-37.1%**	**97.0**	**51.7**	**-46.8%**	**593.7**	**485.8**	**-18.2%**
Prepaid Expenditures related to Cloud Allocated to Transmission	0.0	0.0	-	0.0	0.0	-	0.0	10.3	-	0.0	48.3	-	0.0	31.2	-	0.0	89.7	-
Prepaid Expenditures related to Cloud Allocated to Distribution	0.0	0.0	-	0.0	10.0	-	0.0	30.5	-	0.0	70.0	-	0.0	48.6	-	0.0	159.0	-
Total Prepaid Expenditures related to Cloud	**0.0**	**0.0**	**-**	**0.0**	**10.0**	**-**	**0.0**	**40.7**	**-**	**0.0**	**118.3**	**-**	**0.0**	**79.7**	**-**	**0.0**	**248.7**	**-**
Total DTS Capital and Prepaid Allocated to Transmission	79.6	75.5	-5.1%	41.4	55.7	34.5%	45.1	44.8	-0.6%	56.7	81.9	44.4%	40.4	55.5	37.4%	263.2	313.4	19.1%
Total DTS Capital and Prepaid Allocated to Distribution	78.9	102.3	29.8%	66.8	68.5	2.6%	64.1	62.0	-3.2%	64.1	112.4	75.3%	56.7	75.9	33.9%	330.5	421.1	27.4%
Total DTS Capital and Prepaid Expenditures	**158.4**	**177.8**	**12.2%**	**108.2**	**124.2**	**14.8%**	**109.2**	**106.8**	**-2.1%**	**120.8**	**194.2**	**60.8%**	**97.0**	**131.4**	**35.4%**	**593.7**	**734.5**	**23.7%**

[12] To present expenditures consistently across the current and forecast rate periods, Hydro One has mapped certain investments from the prior rate application to new ISDs in this application. Where material, these mappings are discussed in the relevant ISDs. The mapping does not change the overall expenditures established under the OEB-approved Settlement Proposal in EB-2021-0110.
[13] Figures presented in the tables may not sum to the totals shown due to rounding.

Hydro One is forecasting to spend $485.8M in capital expenditures and $248.7M in prepaid expenditures on DTS investments during the 2023-2027 period, for a combined total of $734.5M. The planned expenditure level for the period was $593.7M, consisting of capital expenditures. While prepaid expenditures were not included in the 2023-2027 plan, they have become increasingly significant due to the growing adoption of cloud-based technologies and subscription-based services across the DTS portfolio. Accordingly, the variance reflects both changes in the mix between capital and prepaid expenditures and changes in the cost and scope of the underlying initiatives, as described below.

Throughout the 2023-2027 period, Hydro One actively managed the DTS portfolio to respond to evolving business requirements, technology risks, and implementation considerations. As a result, numerous project-level expenditure increases and decreases occurred, with many variances offsetting one another through portfolio prioritization, scope adjustments, and timing changes. On a combined capital and prepaid basis, DTS expenditures are forecast to exceed plan by $140.8M (23.7%). The projects discussed below represent the most significant unplanned variances and are the primary contributors to the overall variance for the period.

The most significant variances for the DTS investments are listed below:

- **SAP S/4 HANA (G-GP-29):** Hydro One forecasts SAP S/4HANA-related expenditures to exceed planned prepaid expenditures by $175.5M and to be $76.7M below planned capital expenditures, resulting in a net increase of $98.8M relative to plan over the 2023-2027 period. The variance is primarily driven by a shift to deliver a broader scope than anticipated during 2023-2027 period. This need was identified through further analysis and business case development, including the complexity driven from Hydro One's use of a single SAP instance combined with data structure and customization complexity. The shift to a cloud delivery model changed the mix of costs between capital and prepaid expenditures, while the expanded scope increased overall program costs to support Hydro One's business transformation objectives. Further details on the SAP S/4HANA project are provided in G-GP-29.

- **Genesys Premise to Cloud Migration (G-GP-07)**: During the 2023-2027 period, Hydro One implemented the Genesys migration from on-premise to the latest cloud-based telephony and contact centre platform, resulting in $25.0M in unplanned prepaid expenditures. This unplanned project was necessitated based on an unexpected announcement of end of vendor support for the on-premise solution, creating operational and supportability risks for critical business functions and requiring Hydro One to upgrade. The Genesys platform supports Hydro One's customer contact centres and provides essential communication capabilities used by the Control Room to coordinate field operations and respond to customer outages. The Control Room scope is currently underway and, upon completion, is expected to address identified cybersecurity and technology risks associated with the current application while providing a secure, reliable, and supported communications platform for outage management and field crew coordination. In the absence of this investment, Hydro One would have faced increasing reliability and support risks, potentially impairing customer engagement and the risk of disruptions to outage response communications and field crew coordination.
- **Data, Analytics and AI (G-GP-26):** During the 2023-2027 period, Data, Analytics, and AI Enablement investments are forecast to be $15.3M above plan in capital expenditures and $2.3M above plan in prepaid expenditures. These investments began in 2026 and did not have a baseline, as no comparable investments were included in the EB-2021-0110 application. Investments support the implementation of Hydro One's enterprise data platform, the development of enterprise data management capabilities, the integration of enterprise data sources, and the advancement of analytics and AI capabilities. These capabilities were deemed a priority based on the increase in data volume, and evolution of AI capabilities within platforms and tools. Further details on the Data, Analytics and AI portfolio are provided in G-GP-26.

4.9.2.4 SYSTEM OPERATIONS CAPITAL EXPENDITURES

The comparison of System Operations actual and bridge forecast capital expenditures to the Plan is provided in Table 7.

Table 7 - System Operations[14] Historical and Bridge Years Capital Expenditures Summary[15]

General Plant Function	Historical												Bridge			Total		
	2023			2024			2025			2026			2027					
Net Capital Expenditures	Plan	Actual	Variance	Plan	Actual	Variance	Plan	Actual	Variance	Plan	Forecast	Variance	Plan	Forecast	Variance	Plan	Forecast	Variance
	$M	$M	%	$M	$M	%	$M	$M	%	$M	$M	%	$M	$M	%	$M	$M	%
System Ops Allocated to Transmission	0.0	0.0	-	0.9	0.2	-	0.9	0.9	-	0.0	0.0	-	0.0	0.0	-	1.8	1.1	-39.6%
System Ops Allocated to Distribution	0.0	0.0	-	1.2	0.2	-82.5%	1.2	1.2	-	0.0	0.0	-	0.0	0.0	-	2.4	1.4	-39.6%
Total System Ops Capital Expenditures	**0.0**	**0.0**	**-**	**2.1**	**0.4**	**-82.5%**	**2.0**	**2.1**	**-**	**0.0**	**0.0**	**-**	**0.0**	**0.0**	**-**	**4.2**	**2.5**	**-39.6%**

[14] To present expenditures consistently across the current and forecast rate periods, Hydro One has mapped certain investments from the prior rate application to new ISDs in this application. Where material, these mappings are discussed in the relevant ISDs. The mapping does not change the overall expenditures established under the OEB-approved Settlement Proposal in EB-2021-0110.
[15] Figures presented in the tables may not sum to the totals shown due to rounding.

Hydro One is forecasting to spend $2.5M capital in expenditures on System Operations investments from 2023-2027, which is $1.7M below the Plan capital expenditure envelope of $4.2M largely due to the cancellation of the control centre microgrid assessment as noted in G-GP-13.

4.9.2.5 OTHER GENERAL PLANT

The comparison of Other General Plant actual and bridge forecast capital expenditures to the Plan is provided in Table 8.

1

Table 8 - Other General Plant[16] Historical and Bridge Years Capital Expenditures Summary[17]

General Plant Function	Historical												Bridge			Total		
	2023			2024			2025			2026			2027					
Net Capital Expenditures	Plan	Actual	Variance	Plan	Actual	Variance	Plan	Actual	Variance	Plan	Forecast	Variance	Plan	Forecast	Variance	Plan	Forecast	Variance
	$M	$M	%	$M	$M	%	$M	$M	%	$M	$M	%	$M	$M	%	$M	$M	%
Other General Plant Allocated to Transmission	20.9	22.7	8.6%	19.0	20.5	7.5%	22.3	26.6	19.1%	23.6	17.1	-27.3%	21.3	23.4	9.8%	107.1	110.3	2.9%
Other General Plant Allocated to Distribution	7.5	-0.4	-	7.0	-13.7	-	1.0	7.0	607.5%	2.2	7.0	217.2%	19.1	20.8	8.7%	36.8	20.6	-44.0%
Total Other General Plant Capital Expenditures	**28.4**	**22.3**	**-21.5%**	**26.1**	**6.8**	**-74.0%**	**23.3**	**33.5**	**44.1%**	**25.8**	**24.1**	**-6.5%**	**40.4**	**44.2**	**9.3%**	**144.0**	**130.9**	**-9.1%**

[16] To present expenditures consistently across the current and forecast rate periods, Hydro One has mapped certain investments from the prior rate application to new ISDs in this application. Where material, these mappings are discussed in the relevant ISDs. The mapping does not change the overall expenditures established under the OEB-approved Settlement Proposal in EB-2021-0110.
[17] Figures presented in the tables may not sum to the totals shown due to rounding.

Hydro One is forecasting to spend $130.9M capital expenditure on Other General Plant investments 2023-2027, which is 9.1% ($13.1M) below capital expenditure Plan of $144.0M.

The variance is primarily attributable to the Other General Plant investments described below:

- **Distribution Capital Contribution to Hydro One Transmission (G-GP-22):** This investment is non-discretionary capital contributions to Hydro One Transmission for Transmission system upgrades to increase supply capacity. Expenditures have increased significantly due to the emergence of Transmission supply constraints at a faster pace than and higher average capital contribution requirements associated with the scope and cost of the underlying Transmission projects. This resulted in an unanticipated increase of $25.2M above plan.
- **Transmission Non-Operational Data Management System (G-GP-20):** In response to market pressures and competing capital requirements for non-discretionary work, Hydro One re-evaluated the pacing of this investment, resulting in implementation and deployment timelines being deferred beyond 2027 to support the prioritization of higher-priority investment needs. This ISD is forecasting $13.7M below plan.

This variance also includes the impact of an $18.4M Settlement Proposal adjustment that was not allocated to individual programs or projects. Following the OEB's approval of Hydro One's 2023-2027 custom distribution rates application in EB-2021-0110, Hydro One allocated the approved capital expenditure and in-service envelopes to individual programs and projects. However, $18.4M of the total settlement-related reduction was retained within General Plant - Other as a balancing adjustment to reconcile the program and project allocations to the total capital envelope approved in the Settlement Agreement. As a result, this amount remained centrally recorded rather than being distributed across specific programs and projects.

4.9.3 ATTACHMENTS

The following appendices will be provided as part of this section:

- Attachment 1: OEB Distribution Chapter 2 Filing Requirements – Appendix 2-AB
- Attachment 2: Capital Performance Report 2023
- Attachment 3: Capital Performance Report 2024
- Attachment 4: Capital Performance Report 2025
- Attachment 5: Capital Performance Summary – 2026 and 2027

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SECTION 4.9 – ATTACHMENT 1 – APPENDIX 2-AB: GENERAL PLANT CAPITAL EXPENDITURES SUMMARY FROM CHAPTER 5 CONSOLIDATED DISTRIBUTION SYSTEM PLAN FILING REQUIREMENTS

This attachment has been filed separately in MS Excel format.

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GENERAL PLANT CAPITAL PERFORMANCE REPORT – 2023

1.0 CAPITAL PERFORMANCE REPORT OVERVIEW

1.1 BACKGROUND

This Capital Program Performance Report provides an overview of Hydro One's performance in 2023 in relation to the overall General Plant capital envelope for the year and reviews the performance of individual projects and programs. It addresses both capital expenditures and in-service additions (ISA) delivered by Hydro One.

This Capital Performance Report is broken down into two main sections: Section 2 presenting Transmission-allocated General Plant capital expenditures and ISA and Section 3 presenting Distribution-allocated General Plant capital expenditures and ISA.

1.2 APPROVED CAPITAL INVESTMENT

In Hydro One's application for Transmission Revenue Requirement and Distribution Rates for 2023 to 2027 (EB-2021-0110), Hydro One reached settlement with all parties (the Settlement Proposal) which was approved by the OEB on November 29, 2022. Under the terms of the Settlement Agreement, the OEB approved Hydro One's 2023 to 2027 capital expenditures and ISA.[1]

In December 2022, Hydro One revised the capital expenditure and ISA forecast on a multi-year envelope and OEB-category basis to implement the OEB-approved Settlement Proposal (the "Settlement Implementation Forecast" or the "Forecast"). This was the first time Hydro One allocated the impact of the Settlement Proposal to the project and program level. The Forecast is the basis for the Program and Project level variances described in this Capital Performance Report.

1.3 PERFORMANCE DEFINITIONS

Projects and programs with planned or actual ISA in 2023 greater than or equal to $3M have been summarized in the tables below along with variance explanations. The

[1] EB-2021-0110, Decision and Order, November 29, 2022, Schedule A, p.254-55 and p.257-258.

thresholds used by Hydro One to identify "material variances" were determined using the following criteria[2]:

- **Cost Variances** – Material cost variances were identified where the in-year variance in cost for programs, or the total project end cost variance is greater than or equal to $1M and greater than or equal to 10% of planned values.
- **Scope Variances** – For programs, material scope variances arise if the functional scope changes by +/-20% or more.
- **Date Variances** – Material date variances were identified for projects where the actual or projected in-service year shifted from 2023 or earlier, to a later year.

The variance in these major projects and programs fall mainly into four categories: 1) Emergent Needs, 2) Execution Factors, 3) Work Definition, and 4) Reprioritization. These categories are used to identify the reasons for variances at the project and program level and are further defined below.

Emergent Needs

Emergent needs are investments that Hydro One made in response to a change of priority due to equipment condition or failure, as well as customer needs.

Execution Factors

Execution factors represent advances or delays encountered during the execution phase of work which can include timing changes that arise as a result of changing conditions, risks and priorities that need to be addressed during execution. As risks materialize, plans are adjusted to accommodate the change and mitigate the overall impact to cost, schedule and resources. This can change the year in which the project goes in-service without necessarily materially changing to the in-service amount or affecting the overall volume of work completed. Some of the main causes of delays are outage deferrals or cancellations, material delivery and logistics factors as well as customer needs.

[2] Hydro One updated this report's variance criteria to conform with its internal variance reporting criteria which focuses on projects and programs with positive variances greater than the thresholds described below.

Work Definition

Work definition variances arise from the process of refining a project's scope, estimated budget and schedule as the project moves from the high-level planning phase to design and estimate, and execution phases. As the project is refined, there may be increases or decreases to the project cost as a result of new or changing information that becomes known during the design and estimation phase or in the execution stage of work.

Reprioritization

Reprioritization includes investments that are accelerated or deferred. Hydro One adjusts its capital investments through annual planning and in-year redirection processes.

2.0 TRANSMISSION-ALLOCATED GENERAL PLANT INVESTMENTS

2.1 PERFORMANCE AT THE TRANSMISSION GENERAL PLANT CATEGORY

Table 1 below presents a breakdown of the actual 2023 capital expenditures and ISA for the Transmission General Plant category and compares them against the OEB-approved Settlement Proposal.

Table 1 - 2023 Transmission Capital Expenditures and ISA[3]

OEB Category	Capital Expenditures – 2023			In-Service Additions – 2023		
	OEB-Approved ($M)[4]	Actual ($M)	Variance ($M)	OEB-Approved ($M)	Actual ($M)	Variance ($M)
General Plant - Tx	$143.7	$146.3	$2.6	$160.1	$152.6	-$7.5

In 2023, Hydro One's Transmission-allocated General Plant capital expenditures were 2% above the OEB-approved amount and ISAs were 5% below the OEB-approved amount. As described below, these variances are mainly driven by work definition changes to Information Solutions projects.

[3] Does not include Hydro One affiliates.
[4] EB-2021-0110, Decision and Order, November 29, 2022, Schedule A, p.254-55 (Table 22 and 23)

2.2 PERFORMANCE AT THE TRANSMISSION PROJECT AND PROGRAM LEVEL

This section presents projects and programs with planned or actual ISA greater than or equal to $3M. A variance category is assigned to any project or program with material variances, as described in Section 1.3. Transmission-allocated General Plant programs are presented below in Table 2 and material projects are presented below in Table 3.

2.2.1 TRANSMISSION PROGRAM PERFORMANCE

Transmission-allocated General Plant Program variances are summarized in Table 2 and further discussed below:

1 **Table 1 - Transmission General Plant Program Summary**

			2023 Tx Capital Expenditures ($M)			2023 Tx In-Service Additions ($M)			2023 Units[5]				Performance
Category	**EB-2021-0110 ISD Number**	**Program Description**	**Forecast**	**Actual**	**Variance**	**Forecast**	**Actual**	**Variance**	**Unit Description**	**Forecast**	**Actual**	**Variance**	**Variance Category**
Fleet	G-GP-01	Transport and Work Equipment	21.0	21.4	0.4	21.0	21.4	0.4	# of vehicles	443	571	128	Execution Factors
	G-GP-02	Helicopters	3.7	3.9	0.2	3.7	3.9	0.2	# of helicopters	1	2	1	Work Definition
Facilities and Real Estate	G-GP-03	Facilities and Accommodation	9.9	9.9	0.0	3.1	3.6	0.5	N/A	N/A	N/A	N/A	No material variance
	G-GP-04	Transmission Facilities	11.1	12.7	1.6	11.2	11.3	0.1	N/A	N/A	N/A	N/A	No material variance
Information Solutions	G-GP-05	Hardware/Software Refresh and Maintenance	13.7	17	3.3	14.7	13.8	-0.9	N/A	N/A	N/A	N/A	No material variance
	G-GP-10	Physical Security Upgrade	11.7	10.3	-1.4	6.7	11.5	4.8	N/A	N/A	N/A	N/A	Work Definition
	G-GP-11	Security Monitoring	6.6	4.1	-2.5	10.6	2.6	-8.0	N/A	N/A	N/A	N/A	Reprioritization
System Operations	G-GP-12	Common Operating Technology Infrastructure	3.4	4.9	1.5	4.7	4.8	0.1	N/A	N/A	N/A	N/A	No material variance
Operating Infrastructure	G-GP-19	Grid Control Network Sustainment	6.0	6.2	0.2	3.7	7.7	3.9	N/A	N/A	N/A	N/A	Execution Factors

[5] Where the cost allocation of the program is shared between Transmission and Distribution, the unit numbers reflect the total units allocated to both Transmission and Distribution for the respective investment.

The **Transport and Work Equipment (G-GP-01)** program had expenditures that were in line with the Forecast. The program's unit variance was due to more light-duty vehicles (and less heavy-duty vehicles) being replaced than planned. More light-duty vehicles were replaced as heavy-duty vehicles experienced volume restrictions imposed by the chassis manufacturer.

The **Helicopters (G-GP-02)** program had expenditures that were in line with the Forecast. As a result of a vendor discount, Hydro One was able to purchase a second helicopter within the same forecast budget.

The **Physical Security Upgrade (G-GP-10)** program had capital expenditures that were below the Forecast and ISAs that were above Forecast. The ISA variance is due to physical security upgrades that were completed across 28 sites (versus 24 planned sites) to comply with the NERC Cybersecurity Standard CIP-014.

The **Security Monitor (G-GP-11)** program had capital expenditures that were below the Forecast due to planned investments being deferred as a result of work reprioritization.

The **Grid Control Network Sustainment (G-GP-19)** program had capital expenditures that were in line with the Forecast and ISAs that were above Forecast. The ISA variance is due to the delay in gateway devices being delivered in 2022 resulting in several station upgrades being carried over to 2023.

2.2.2 TRANSMISSION PROJECT PERFORMANCE

Transmission-allocated General Plant Project variances are summarized in Table 3 and further discussed below:

1 **Table 3 - Transmission General Plant Project Summary**

				2023 Tx Capital Expenditures ($M)		2023 Tx In-Service Additions ($M)		Project End Total Cost ($M)[6]			In-Service Year			Performance
Functional Area / Project Name	**Allocation**	**Project Phase[7]**	**EB-2021-0110 ISD Number**	**Forecast**	**Actual**	**Forecast**	**Actual**	**Forecast**	**Actual / Latest Forecast**	**Variance**	**Forecast**	**Actual / Latest Forecast**	**Variance (Years)**	**Variance Category**
Information Solutions														
HR Pay Transformation Project	Shared	Execution	G-GP-06	4.8	7.9	27.6	29.8	65.2	77.1	11.9	2023	2024	1	Work Definition
PSIT Cyber EOL - NGDC Upgrade	Transmission	Complete	G-GP-09	2.9	0.7	5.5	4.0	7.6	4.0	-3.6	2023	2023	0	Work Definition
PSIT Cyber EOL - IPS IDS Tipping Point	Transmission	Execution	G-GP-09	6.3	3.5	6.8	3.6	10.5	3.6	-6.9	2023	2023	0	Work Definition
System Operations														
NMS Upgrade Project	Transmission	Execution	G-GP-16	8.9	10.2	38.0	20.6	38.0	45.2	7.2	2023	2024	1	Execution Factors
NOMS Upgrade	Shared	Execution	G-GP-Other	3.8	1.2	6.0	0.0	14.1	14.2	0.1	2023	2024	1	Work Definition

[6] Where the cost allocation of the project is shared, the project total reflects the total value allocated to both Transmission and Distribution for the respective investment.
[7] Phases: Planning, Execution, Complete, Cancelled, or Deferred.

The **HR Pay Transformation Project (G-GP-06)** had expenditures that were above the Forecast. The project involves the digitization of Hydro One's HR systems, including the company's onboarding, training, time management, and payroll functions. During execution planning, Hydro One determined that certain critical functions initially intended to be outsourced must be performed on-premises, necessitating incremental IT capital expenditures. 2023 capital expenditures on the project included completing the integration of approximately 55 software interfaces across the company, as well as integration with Hydro One's SAP-based payroll solution. Given the scope and criticality of this project, material expenditures for testing and data-quality assurance were required, necessitating incremental expenditures in 2023 and deferred ISAs from 2022 into 2023.

The **PSIT Cyber EOL investments (including NGDC Upgrade and IPS IDS Tipping Point) (G-GP-09)** had expenditures that were below the Forecast. As the project's scope was refined work definition variances arose as budget and scheduling requirements reduced.

The **NMS Upgrade Project (G-GP-16)** had capital expenditures that were above the Forecast and ISAs that were below the Forecast. During project execution, incremental modeling improvements and testing resources were required to address data-related application issues affecting the state estimator. The additional effort resulted in deferred ISAs from 2023 into 2024.

The **NOMS Upgrade (G-GP-Other)** had expenditures that were below the Forecast. The project's planning phase was extended to allow better coordination and bundling of planned interruptions across the transmission and distribution system, and to ultimately improve customer satisfaction by reducing the numbers of interruptions on the Hydro One system. This change resulted in the in-service year being extended into 2024.

3.0 DISTRIBUTION-ALLOCATED GENERAL PLANT INVESTMENTS

3.1 PERFORMANCE AT THE DISTRIBUTION GENERAL PLANT CATEGORY

Table 4 below presents a breakdown of the actual 2023 capital expenditures and ISA for the Transmission General Plant category and compares them against the OEB-approved Settlement Proposal.

Table 4 - 2023 Distribution Capital Expenditures and ISA[8]

OEB Category	Capital Expenditures – 2023			In-Service Additions – 2023		
	OEB-Approved ($M)[9]	Actual ($M)	Variance ($M)	OEB-Approved ($M)	Actual ($M)	Variance ($M)
General Plant - Dx	$172.2	$194.5	$22.3	$136.9	$235.1	$98.2

In 2023, Hydro One's Distribution-allocated General Plant capital expenditures were 13% above the OEB-approved amount and ISAs were 72% above the OEB-approved amount. As described below, these variances are mainly driven by work definition changes to HR Pay Transformation and Design Optimization and Transformation projects.

3.2 PERFORMANCE AT THE DISTRIBUTION PROJECT AND PROGRAM LEVEL

This section presents projects and programs with planned or actual ISA greater than or equal to $3M. A variance category is assigned to any project or program with material variances, as described in Section 1.3. Distribution-allocated General Plant programs are presented below in Table 5 and material projects are presented below in Table 6.

3.2.1 DISTRIBUTION PROGRAM PERFORMANCE

Distribution-allocated General Plant Program variances are summarized in Table 5 and further discussed below:

[8] Does not include Hydro One affiliates.
[9] EB-2021-0110, Decision and Order, November 29, 2022, Schedule A, p.257-58 (Table 25 and 26)

1

2 **Table 5 - Distribution General Plant Program Summary**

			2023 Dx Capital Expenditures ($M)			2023 Dx In-Service Additions ($M)			2023 Units[10]				Performance
Category	**EB-2021-0110 ISD Number**	**Program Description**	**Forecast**	**Actual**	**Variance**	**Forecast**	**Actual**	**Variance**	**Unit Description**	**Forecast**	**Actual**	**Variance**	**Variance Category**
Fleet	G-GP-01	Transport and Work Equipment	41.3	41.9	0.7	41.2	41.9	0.8	# of vehicle	443	571	128	Execution Factor
	G-GP-02	Helicopters	7.2	7.6	0.4	7.2	7.6	0.4	# of helicopter	1	2	1	Reprioritization
Facilities and Real Estate	G-GP-03	Facilities and Accommodation	41.6	40.7	-0.9	16.9	16.4	-0.5	N/A	N/A	N/A	N/A	No material variance
Information Solutions	G-GP-05	Hardware/Software Refresh and Maintenance	21.6	27.2	5.6	23.0	22.8	-0.2	N/A	N/A	N/A	N/A	No material variance
	G-GP-11	Security Monitor	11.7	3.6	-8.2	11.3	1.3	-10.0	N/A	N/A	N/A	N/A	Reprioritization
System Operations	G-GP-12	Common Operating Technology Infrastructure	4.7	6.7	2.0	6.4	6.6	0.2	N/A	N/A	N/A	N/A	No material variance

[10] Where the cost allocation of the program is shared between Transmission and Distribution, the unit numbers reflect the total units allocated to both Transmission and Distribution for the respective investment.

The **Transport and Work Equipment (G-GP-01)** program had expenditures that were in line with the Forecast. Please see the explanation provided in section 2.2.1.

The **Helicopters (G-GP-02)** program had expenditures that were in line with the Forecast**:** Please see the explanation provided in section 2.2.1.

The **Security Monitoring (G-GP-11)** program had expenditures that were below the Forecast due to planned investments being deferred as a result of work reprioritization.

3.2.2 DISTRIBUTION PROJECT PERFORMANCE

Distribution-allocated General Plant Project variances are summarized in Table 6 and further discussed below:

1

Table 6 - Distribution General Plant Project Summary

				2023 Dx Capital Expenditures ($M)		2023 Dx In-Service Additions ($M)		Project End Total Cost ($M)[11]			In-Service Year			Performance
Functional Area / Project Name	**Allocation**	**Project Phase[12]**	**EB-2021-0110 ISD Number**	**Forecast**	**Actual**	**Forecast**	**Actual**	**Forecast**	**Actual / Latest Forecast**	**Project Total Variance**	**Forecast**	**Actual / Latest Forecast**	**Variance**	**Variance Category**
Information Solutions														
HR Pay Transformation Project	Shared	Execution	G-GP-06	6.6	10.8	37.6	40.7	65.2	77.1	11.9	2023	2024	1	Work Definition
Customer Digital Experience Journey	Distribution	Planning	G-GP-07 & G-GP-Other	3.5	0.2	3.9	0.0	27.8	20.8	-7.0	2023	2025	2	Reprioritization
Ultralow Overnight Price Option	Distribution	Complete	G-GP (New)	0.0	3.9	0.0	3.9	0.0	3.9	3.9	-	2023	-	Emergent Need
Design Optimization and Transformation (DOT) Project	Distribution	Complete	G-GP-08	6.0	19.1	64.7	72.8	64.7	72.7	8.0	2023	2023	0	Work Definition
System Operations														
NOMS Upgrade	Shared	Execution	GP-Other	5.1	1.7	8.1	0.0	14.1	14.2	0.1	2023	2024	1	Reprioritization

[11] Where the cost allocation of the project is shared, the project total reflects the total value allocated to both Transmission and Distribution for the respective investment.
[12] Phases: Planning, Executing, Complete, Cancelled, or Deferred.

The **HR Pay Transformation Project (G-GP-06):** Please see the explanation provided in section 2.2.2.

The **Customer Digital Experience Journey (G-GP-07 & G-GP-Other)** project had expenditures that were below the Forecast as it was deferred due to work reprioritization.

The **Ultralow Overnight Price Option (G-GP (New))** is a new project**.** This project was required to implement a new optional ultra-low overnight (ULO) price plan for electricity consumers on the Regulated Price Plan (RPP).

The **Design Optimization and Transformation (DOT) (G-GP-08)** project's cost increased due to scope changes primarily related to integration with the current SAP version necessitated by the deferred in-service date, additional hardware and licenses costs resulting from an increased number of end users, and incremental interest and overhead costs.

The **NOMS Upgrade (G-GP-Other)** had expenditures that were below the Forecast. Please see the explanation provided in section 2.2.2.

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GENERAL PLANT CAPITAL PERFORMANCE REPORT – 2024

1.0 CAPITAL PERFORMANCE REPORT OVERVIEW

1.1 BACKGROUND

This Capital Performance Report provides an overview of Hydro One's performance in 2024 in relation to the overall General Plant capital envelope for the year and reviews the performance of individual projects and programs. It addresses both capital expenditures and in-service additions (ISA) delivered by Hydro One, organized as follows:

This report consists of two sections:

- Section 2 presents Transmission-allocated General Plant investments
- Section 3 presents Distribution-allocated General Plant investments

1.2 APPROVED CAPITAL INVESTMENT

In Hydro One's application for Transmission Revenue Requirement and Distribution Rates for 2023 to 2027 (EB-2021-0110), Hydro One reached settlement with all parties (the Settlement Proposal) which was approved by the OEB on November 29, 2022. Under the terms of the Settlement Agreement, the OEB approved Hydro One's 2023 to 2027 capital expenditures and ISA.[1]

In December 2022, Hydro One revised the capital expenditure and ISA forecast on a multi-year envelope and OEB-category basis to implement the OEB-approved Settlement Proposal (the "Forecast"). This was the first time Hydro One allocated the impact of the Settlement Proposal to the project and program level. The Forecast is the basis for the Program and Project level variances described in this Capital Performance Report.

1.3 PERFORMANCE DEFINITIONS

Projects and programs with planned or actual ISA in 2024 greater than or equal to $3M have been summarized in the tables below along with variance explanations. The

[1] EB-2021-0110, Decision and Order, November 29, 2022, Schedule A, p.254-55 and p.257-258.

thresholds used by Hydro One to identify "material variances" were determined using the following criteria[2]:

- **Cost Variances** – Material cost variances were identified where the in-year variance in cost for programs, or the total project end cost variance is greater than or equal to $1M and greater than or equal to 10% of planned values.
- **Scope Variances** – For programs, material scope variances arise if the functional scope changes by +/-20% or more.
- **Date Variances** – Material date variances were identified for projects where the actual or projected in-service year shifted from 2024 or earlier to a later year.

The variance in these major projects and programs fall mainly into four categories: 1) Emergent Needs, 2) Execution Factors, 3) Work Definition, and 4) Reprioritization. These categories are used to identify the reasons for variances at the project and program level and are further defined below.

Emergent Needs

Emergent needs are investments that Hydro One made in response to a change of priority due to equipment condition or failure, as well as customer needs.

Execution Factors

Execution factors represent advances or delays encountered during the execution phase of work which can include timing changes that arise as a result of changing conditions, risks and priorities that need to be addressed during execution. As risks materialize, plans are adjusted to accommodate the change and mitigate the overall impact to cost, schedule and resources. This can change the year in which the project goes in-service without necessarily materially changing to the in-service amount or affecting the overall volume of work completed. Some of the main causes of delays are outage deferrals or cancellations, material delivery and logistics factors as well as customer needs.

[2] This report's variance criteria conform with Hydro One's internal variance reporting criteria which focuses on projects and programs with positive variances greater than the thresholds described below.

Work Definition

Work definition variances arise from the process of refining a project's scope, the estimated budget and schedule as the project moves from the high-level planning phase to design and estimate, and execution phases. As the project is refined, there may be increases or decreases to the project cost as a result of new or changing information that becomes known during the design and estimation phase or in the execution stage of work.

Reprioritization

Reprioritization includes investments that are accelerated or deferred. Hydro One adjusts its capital investments through annual planning and in-year redirection processes.

2.0 TRANSMISSION-ALLOCATED GENERAL PLANT INVESTMENTS

2.1 PERFORMANCE AT THE TRANSMISSION GENERAL PLANT CATEGORY

Table 1 below presents a breakdown of the actual 2024 capital expenditures and ISA for the Transmission General Plant category and compares them against OEB-approved values.

Table 1 - 2024 Transmission Capital Expenditures and ISA[3]

OEB Category	Capital Expenditures – 2024			In-Service Additions – 2024		
	OEB-Approved ($M)[4]	Actual ($M)	Variance ($M)	OEB-Approved ($M)	Actual ($M)	Variance ($M)
General Plant – Tx	$121.4	$126.7	$5.3	$149.6	$115.1	-$34.5

In 2024, Hydro One's Transmission-allocated General Plant capital expenditures were 4% above the OEB-approved amount and ISAs were 23% below the OEB-approved amount. As described below, these variances are mainly driven by Information Solutions program variances, including emergent cybersecurity needs, reprioritization of technology investments, and execution factors such as scope refinement and timeline shifts.

[3] Does not include Hydro One affiliates.
[4] EB-2021-0110, Decision and Order, November 29, 2022, Schedule A, p.254-55 (Table 22 and 23)

2.2 PERFORMANCE AT THE TRANSMISSION PROJECT AND PROGRAM LEVEL

This section presents projects and programs with planned or actual ISA greater than or equal to $3M. A variance category is assigned to any project or program with material variances, as described in Section 1.3. Transmission-allocated General Plant programs are presented below in Table 2 and material projects are presented below in Table 3.

2.2.1 TRANSMISSION PROGRAM PERFORMANCE

Transmission-allocated General Plant Program variances are summarized in Table 2 and further discussed below:

Table 2 - Transmission General Plant Program Summary

			2024 Tx Capital Expenditures ($M)			2024 Tx In-Service Additions ($M)			2024 Units[5]				Performance
Category	**EB-2021-0110 ISD Number**	**Program Description**	**Forecast**	**Actual**	**Variance**	**Forecast**	**Actual**	**Variance**	**Unit Description**	**Forecast**	**Actual**	**Variance**	**Variance Category**
Fleet	G-GP-01	Transport and Work Equipment	21.5	21.4	-0.1	21.5	21.4	-0.1	# of vehicles	311	587	276	Execution Factors
Facilities and Real Estate	G-GP-03	Facilities and Accommodation	17.2	21.6	4.3	3.2	1.7	-1.6	N/A	N/A	N/A	N/A	Execution Factors
	G-GP-04	Transmission Facilities	13.4	12.5	-0.9	11.4	13.2	1.8	N/A	N/A	N/A	N/A	Emergent Needs & Reprioritization
Information Solutions	G-GP-05	Hardware/Software Refresh and Maintenance	6.5	10.4	3.8	6.8	13.2	6.5	N/A	N/A	N/A	N/A	Emergent Needs
	G-GP-10	Physical Security Upgrade	8.4	8.3	-0.2	2.2	7.3	5.1	N/A	N/A	N/A	N/A	Reprioritization
	G-GP-11	Security Monitoring	7.5	4.2	-3.3	7.0	5.1	-2.0	N/A	N/A	N/A	N/A	Reprioritization
System Operations	G-GP-12	Common Operating Technology Infrastructure	3.0	3.1	0.1	3.1	4.6	1.6	N/A	N/A	N/A	N/A	Execution Factors
Operating Infrastructure	G-GP-19	Grid Control Network Sustainment	6.1	5.3	-0.8	6.0	4.0	-2.0	N/A	N/A	N/A	N/A	Execution Factors

[5] Where the cost allocation of the program is shared between Transmission and Distribution, the unit numbers reflect the total units allocated to both Transmission and Distribution for the respective investment.

The **Transport and Work Equipment (G-GP-01)** program had expenditures that were in line with the forecast. The program's unit variance was due to more light-duty vehicles (and fewer heavy-duty vehicles) being replaced than planned due to delays from the manufacturers.

The **Facilities and Accommodation (G-GP-03)** program had capital expenditures that were above the forecast and ISAs that were below forecast. The variance is primarily due to increased material and construction costs driven by design updates of the Orillia Warehouse new build project, which is expected to go into service in 2025 resulting in a net decrease in 2024 ISAs.

The **Transmission Facilities (G-GP-04)** program had capital expenditures that were slightly below the forecast and ISAs that were above forecast. The variance is due to work reprioritization to complete several smaller repair projects to mitigate emerging health and safety concerns and maintain operations in the transmission facilities, which led to the deferral of a new build project.

The **Hardware/Software Refresh and Maintenance (G-GP-05)** program had capital expenditures and ISAs that were above the forecast. The variance is due to several emerging program needs, including increased purchase of minor fixed assets to address end-of-life laptops and tablets, incremental costs to purchase additional licenses for identity access management and other systems as required to maintain cybersecurity, legal and privacy compliance.

The **Physical Security Upgrade (G-GP-10)** program's capital expenditures were consistent with the forecast, while ISAs exceeded the forecast. The ISA variance is due to the reprioritization of smaller projects that could be in-serviced within the same year as construction. The plan was adjusted based on threat risk assessment results and the opportunity to leverage concurrent construction activities in the same region.

The **Security Monitoring (G-GP-11)** program had capital expenditures and ISAs that were below the forecast due to the reprioritization of some investments, while continuing to address emergent cybersecurity risks.

The **Common Operating Technology Infrastructure (G-GP-12)** program had ISAs that were above the forecast due to the purchase of long-lead time hardware in 2023.

The **Grid Control Network Sustainment (G-GP-19)** program had capital expenditures and ISAs that were below the forecast. The variance is due to equipment delivery delays from manufacturers and the removal of one site from scope as it was no longer required.

2.2.2 TRANSMISSION PROJECT PERFORMANCE

Transmission-allocated General Plant Project variances are summarized in Table 3 and further discussed below:

1 **Table 3 - Transmission General Plant Project Summary**

				2024 Tx Capital Expenditures ($M)		2024 Tx In-Service Additions ($M)		Project End Total Cost ($M)[6]			In-Service Year			Performance
Functional Area / Project Name	**Allocation**	**Project Phase[7]**	**EB-2021-0110 ISD Number**	**Forecast**	**Actual**	**Forecast**	**Actual**	**Forecast**	**Actual / Latest Forecast**	**Variance**	**Forecast**	**Actual / Latest Forecast**	**Variance (Years)**	**Variance Category**
System Operations														
NMS Upgrade Project	Transmission	Complete	G-GP-16	0.0	6.3	0.0	25.0	38.0	46.0	8.0	2023	2024	1	Execution Factors
Operating Infrastructure														
Geomagnetically Induced Currents (GIC) Monitoring Installation	Transmission	Deferred	G-GP-Other	0.8	0	3.8	0	3.8	1.8	-2.0	2024	2026	2	Execution Factors

[6] Where the cost allocation of the project is shared, the project total reflects the total value allocated to both Transmission and Distribution for the respective investment.
[7] Phases: Planning, Execution, Complete, Cancelled, or Deferred.

The **NMS Upgrade Project (G-GP-16)** had capital expenditures and ISAs that were above the forecast. During project execution, incremental modeling improvements and testing resources were required to address data-related application issues affecting the state estimator. The additional effort resulted in deferred ISAs from 2023 into 2024.

The **GIC Monitoring Installation (G-GP-Other)** was deferred as the vendor discontinued the original equipment and replaced it with a new model. This equipment is essential for monitoring geomagnetic disturbances on transmission lines. To ensure the new equipment meets performance expectations, multi-year testing is being conducted prior to broader installation.

3.0 DISTRIBUTION-ALLOCATED GENERAL PLANT INVESTMENTS

3.1 PERFORMANCE AT THE DISTRIBUTION GENERAL PLANT CATEGORY

Table 4 below presents a breakdown of the actual 2024 capital expenditures and ISA for the Distribution General Plant category and compares them against the OEB-approved values.

Table 4 - 2024 Distribution Capital Expenditures and ISA[8]

OEB Category	Capital Expenditures – 2024			In-Service Additions – 2024		
	OEB-Approved ($M)[9]	Actual ($M)	Variance ($M)	OEB-Approved ($M)	Actual ($M)	Variance ($M)
General Plant - Dx	$182.2	$158.8	-$23.4	$185.5	$144.6	-$40.9

In 2024, Hydro One's Distribution-allocated General Plant capital expenditures were13% below the OEB-approved amount and ISAs were 22% below the OEB-approved amount. As described below, these variances are mainly driven by Information Solutions and System Operations project variances, including emergent cybersecurity needs and reprioritization of digital investments.

3.2 PERFORMANCE AT THE DISTRIBUTION PROJECT AND PROGRAM LEVEL

This section presents projects and programs with planned or actual ISA greater than or equal to $3M. A variance category is assigned to any project or program with material variances, as described in Section 1.3. Distribution-allocated General Plant programs are presented below in Table 5 and material projects are presented below in Table 6.

3.2.1 DISTRIBUTION PROGRAM PERFORMANCE

Distribution-allocated General Plant Program variances are summarized in Table 5 and further discussed below:

[8] Does not include Hydro One affiliates.
[9] EB-2021-0110, Decision and Order, November 29, 2022, Schedule A, p.257-58 (Table 25 and 26)

1 **Table 5 - Distribution General Plant Program Summary**

			2024 Dx Capital Expenditures ($M)			2024 Dx In-Service Additions ($M)			2024 Units[10]				Performance
Category	**EB-2021-0110 ISD Number**	**Program Description**	**Forecast**	**Actual**	**Variance**	**Forecast**	**Actual**	**Variance**	**Unit Description**	**Forecast**	**Actual**	**Variance**	**Variance Category**
Fleet	G-GP-01	Transport and Work Equipment	42.1	42.0	-0.1	42.1	42.0	-0.1	# of vehicles	311	587	276	Execution Factors
	G-GP-02	Helicopters	3.9	5.0	1.0	3.9	5.0	1.1	# of helicopters	1	1	0	Emergent Needs
Facilities and Real Estate	G-GP-03	Facilities and Accommodation	83.5	76.6	-7.0	32.7	35.6	2.9	N/A	N/A	N/A	N/A	Not Applicable
Information Solutions	G-GP-05	Hardware/Software Refresh and Maintenance	11.2	16.8	5.6	11.5	20.7	9.2	N/A	N/A	N/A	N/A	Emergent Needs
	G-GP-11	Security Monitoring	8.8	4.5	-4.2	8.2	5.7	-2.4	N/A	N/A	N/A	N/A	Reprioritization
System Operations	G-GP-12	Common Operating Technology Infrastructure	4.1	4.2	0.1	4.2	6.3	2.1	N/A	N/A	N/A	N/A	Execution Factors

[10] Where the cost allocation of the program is shared between Transmission and Distribution, the unit numbers reflect the total units allocated to both Transmission and Distribution for the respective investment.

The **Transport and Work Equipment (G-GP-01)** program had expenditures that were in line with the forecast. Please see the unit variance explanation provided in Section 2.2.1.

The **Helicopters (G-GP-02)** program had capital expenditures and ISAs that were above the forecast. The higher-than-expected spending was primarily driven by an unplanned helicopter engine overhaul required to continue operating the asset.

The **Hardware/Software Refresh and Maintenance (G-GP-05)** program had capital expenditures and ISAs that were above the forecast. Please see the explanation provided in Section 2.2.1.

The **Security Monitoring (G-GP-11)** program had capital expenditures and ISAs that were below the forecast. Please see the explanation provided in Section 2.2.1.

The **Common Operating Technology Infrastructure (G-GP-12)** program had ISAs that were above the forecast. Please see explanation provided in Section 2.2.1.

3.2.2 DISTRIBUTION PROJECT PERFORMANCE

Distribution-allocated General Plant Project variances are summarized in Table 6 and further discussed below:

1

Table 6 - Distribution General Plant Project Summary

				2024 Dx Capital Expenditures ($M)		2024 Dx In-Service Additions ($M)		Project End Total Cost ($M)[11]			In-Service Year			Performance
Functional Area / Project Name	**Allocation**	**Project Phase[12]**	**EB-2021-0110 ISD Number**	**Forecast**	**Actual**	**Forecast**	**Actual**	**Forecast**	**Actual / Latest Forecast**	**Project Total Variance**	**Forecast**	**Actual / Latest Forecast**	**Variance**	**Variance Category**
Information Solutions														
Customer Digital Experience Journey	Distribution	Deferred	G-GP-07 & G-GP-Other	17.6	0.0	9.7	0.0	32.2	32.2	0	2023	2032	9	Reprioritization
Itron Enterprise Edition (IEE) Upgrade	Distribution	Complete	G-GP-08	0.0	2.8	0.0	8.0	1.2	8.0	6.8	2023	2024	1	Work Definition
Net Metering Regulatory Compliance	Distribution	Complete	G-GP-NEW	0.0	2.7	0.0	3.9	0.0	3.9	3.9	-	2024	-	Emergent Needs
System Operations														
ORMS Upgrade	Distribution	Cancelled	G-GP-17	4.3	0.0	8.5	0.0	8.5	0.0	-8.5	2024	-	-	Work Definition
DMS	Distribution	Cancelled	G-GP-18	2.7	0.0	5.4	0.0	5.4	0.0	-5.4	2024	-	-	Work Definition

[11] Where the cost allocation of the project is shared, the project total reflects the total value allocated to both Transmission and Distribution for the respective investment.
[12] Phases: Planning, Executing, Complete, Cancelled, or Deferred.

The **Customer Digital Experience Journey (G-GP-07 & G-GP-Other)** project had expenditures that were below the forecast as it was deferred due to work reprioritization.

The **Itron Enterprise Edition (IEE) Upgrade (G-GP-08)** project had expenditures that were above the forecast due to scope changes identified during the discovery phase. This increased the level of effort and extended the project timeline. The upgrade is essential to ensure continued vendor support, cybersecurity protection, and accurate billing.

The **Net Metering Regulatory Compliance (G-GP-NEW)** is a new project**.** This project was required to implement changes in customer processes, ensuring that net-metered Regulated Price Plan (RPP) customers could choose pricing plan options, as directed by the OEB.

The **ORMS Upgrade (G-GP-17)** project was cancelled based on Hydro One's decision to pursue a single Advanced Distribution Management System (ADMS).

The **DMS (G-GP-18)** project was cancelled based on Hydro One's decision to pursue a single ADMS.

SECTION 4.9 – ATTACHMENT 4 – CAPITAL PROGRAM PERFORMANCE REPORT FOR GENERAL PLANT – 2025

1.0 CAPITAL PERFORMANCE REPORT OVERVIEW

1.1 BACKGROUND

This Capital Performance Report provides an overview of Hydro One's performance in 2025 in relation to the overall General Plant capital envelope for the year and reviews the performance of individual projects and programs. It addresses both capital expenditures and in-service additions (ISA) delivered by Hydro One, organized as follows:

This report consists of two sections:

- Section 2 presents Transmission-allocated General Plant investments
- Section 3 presents Distribution-allocated General Plant investments

1.2 APPROVED CAPITAL INVESTMENT

In Hydro One's application for Transmission Revenue Requirement and Distribution Rates for 2023 to 2027 (EB-2021-0110), Hydro One reached settlement with all parties (the Settlement Proposal) which was approved by the OEB on November 29, 2022. Under the terms of the Settlement Agreement, the OEB approved Hydro One's 2023 to 2027 capital expenditures and ISA.[1]

In December 2022, Hydro One revised the capital expenditure and ISA forecast on a multi-year envelope and OEB-category basis to implement the OEB-approved Settlement Proposal (the "Forecast"). This was the first time Hydro One allocated the impact of the Settlement Proposal to the project and program level. The Forecast is the basis for the Program and Project level variances described in this Capital Performance Report.

[1] EB-2021-0110, Decision and Order, November 29, 2022, Schedule A, p.254-255 and p. 257-258.

1.3 PERFORMANCE DEFINITIONS

Projects and programs with planned or actual ISA in 2025 greater than or equal to $3M have been summarized in the tables below along with variance explanations. The thresholds used by Hydro One to identify "material variances" were determined using the following criteria[2]:

- **Cost Variances** – Material cost variances were identified where the in-year variance in cost for programs, or the total project end cost variance is greater than or equal to $1M and greater than or equal to 10% of planned values.
- **Scope Variances** – For programs, material scope variances arise if the functional scope changes by +/-20% or more.
- **Date Variances** – Material date variances were identified for projects where the actual or projected in-service year shifted from 2025 or earlier to a later year.

The variances in these major projects and programs fall mainly into four categories: 1) Emergent Needs, 2) Execution Factors, 3) Work Definition, and 4) Reprioritization. These categories are used to identify the reasons for variances at the project and program level and are further defined below.

Emergent Needs

Emergent needs are investments that Hydro One made in response to a change of priority due to equipment condition or failure, as well as customer needs.

Execution Factors

Execution factors represent advances or delays encountered during the execution phase of work which can include timing changes that arise as a result of changing conditions, risks and priorities that need to be addressed during execution. As risks materialize, plans are adjusted to accommodate the change and mitigate the overall impact to cost, schedule and resources. This can change the year in which the project goes in-service without

[2] This report's variance criteria conform with Hydro One's internal variance reporting criteria which focuses on projects and programs with positive variances greater than the thresholds described below.

necessarily materially changing to the in-service amount or affecting the overall volume of work completed. Some of the main causes of delays are outage deferrals or cancellations, material delivery and logistics factors as well as customer needs.

Work Definition

Work definition variances arise from the process of refining a project's scope, the estimated budget and schedule as the project moves from the high-level planning phase to design and estimate, and execution phases. As the project is refined, there may be increases or decreases to the project cost as a result of new or changing information that becomes known during the design and estimation phase or in the execution stage of work.

Reprioritization

Reprioritization includes investments that are accelerated or deferred. Hydro One adjusts its capital investments through annual planning and in-year redirection processes.

2.0 TRANSMISSION-ALLOCATED GENERAL PLANT INVESTMENTS

2.1 PERFORMANCE AT THE TRANSMISSION GENERAL PLANT CATEGORY

Table 1 below presents a breakdown of the actual 2025 capital expenditures and ISA for the Transmission General Plant category and compares them against OEB-approved values.

Table 1 - 2025 Transmission Capital Expenditures and ISA[3]

OEB Category	Capital Expenditures – 2025			In-Service Additions – 2025		
	OEB-Approved ($M)[4]	Actual ($M)	Variance ($M)	OEB-Approved ($M)	Actual ($M)	Variance ($M)
General Plant – Transmission	111.8	111.0	-0.8	125.7	134.6	8.9

[3] Does not include Hydro One affiliates.
[4] EB-2021-0110, Decision and Order, November 29, 2022, Schedule A, p.254-55 (Table 22 and 23)

In 2025, Hydro One's Transmission-allocated General Plant capital expenditures were 1% below the OEB-approved amount and ISAs were 7% above the OEB-approved amount. As described below, these variances are mainly driven by Information Solutions program variances, including emergent cybersecurity needs, reprioritization of technology investments, and execution factors such as scope refinement and timeline shifts.

2.2 PERFORMANCE AT THE TRANSMISSION PROJECT AND PROGRAM LEVEL

This section presents projects and programs with planned or actual ISA greater than or equal to $3M. A variance category is assigned to any project or program with material variances, as described in Section 1.3. Transmission-allocated General Plant programs are presented below in Table 2 and material projects are presented below in Table 3.

2.2.1 TRANSMISSION PROGRAM PERFORMANCE

Transmission-allocated General Plant Program variances are summarized in Table 2 and further discussed below:

Table 2 - Transmission General Plant Program Summary

			2025 Transmission Capital Expenditures ($M)			2025 Transmission In-Service Additions ($M)			2025 Units[5]				Performance
Category	**EB-2021-0110 ISD Number**	**Program Description**	**Forecast**	**Actual**	**Variance**	**Forecast**	**Actual**	**Variance**	**Unit Description**	**Forecast**	**Actual**	**Variance**	**Variance Category**
Fleet	G-GP-01	Transport and Work Equipment	21.7	22.6	0.9	21.7	22.6	0.9	# of vehicles	407	439	32	Not Applicable
Facilities and Real Estate	G-GP-03	Facilities and Accommodation	8.6	10.1	1.5	30.7	37.8	7.1	N/A	N/A	N/A	N/A	Emergent Needs & Reprioritization
	G-GP-04	Transmission Facilities	13.5	13.6	0.1	16.2	15.7	-0.5	N/A	N/A	N/A	N/A	Not Applicable
Information Solutions	G-GP-05	Hardware/Software Refresh and Maintenance	9.0	8.4	-0.5	6.5	8.0	1.5	N/A	N/A	N/A	N/A	Reprioritization
	G-GP-10	Physical Security Upgrade	8.4	9.9	1.4	0.0	12.9	12.9	N/A	N/A	N/A	N/A	Reprioritization
	G-GP-11	Security Monitoring	1.9	4.1	2.2	1.5	4.4	2.9	N/A	N/A	N/A	N/A	Reprioritization
Operating Infrastructure	G-GP-19	Grid Control Network Sustainment	6.2	7.2	1.0	6.1	4.5	-1.7	N/A	N/A	N/A	N/A	Execution Factors

[5] Where the cost allocation of the program is shared between Transmission and Distribution, the unit numbers reflect the total units allocated to both Transmission and Distribution for the respective investment.

The **Facilities and Accommodation (G-GP-03)** program had capital expenditures that were above the forecast and ISAs that were above forecast. The variance is primarily due to funding reallocation for EV charging stations and substantial completion of various construction projects from prior years.

The **Hardware/Software Refresh and Maintenance (G-GP-05)** program had capital expenditures slightly below the forecast, but within threshold. ISA is slightly above. The variance is a result of reprioritization following shifting program needs, including increased purchase of minor fixed assets to address end of life laptops and tablets,

The **Physical Security Upgrade (G-GP-10)** program's capital expenditures were slightly above the forecast, while ISAs exceeded the forecast. The ISA variance is due to the reprioritization of projects that could be in-serviced within the same year as construction. The plan was adjusted, and included the opportunity to leverage concurrent construction activities in the same region.

The **Security Monitoring (G-GP-11)** program had capital expenditures and ISAs that were slightly above the forecast due to reprioritization and timing differences in the delivery of planned work for application rationalization and to reduce reliance on legacy systems and improve operational efficiency for Avesksa (Sailpoint).

The Grid Control Network Sustainment (G-GP-19) program had capital expenditures that were above the forecast and the ISAs that were below forecast. The variance was due to the completion of work deferred from earlier periods, together with ongoing manufacturer equipment delivery delays and resource constraints that affected the timing of planned in-service additions.

2.2.2 TRANSMISSION PROJECT PERFORMANCE

Transmission-allocated General Plant Project variances are summarized in Table 3 and further discussed below:

Table 3 - Transmission General Plant Project Summary

				2025 Transmission Capital Expenditures ($M)		2025 Transmission In-Service Additions ($M)		Project End Total Cost ($M)[6]			In-Service Year			Performance
Functional Area / Project Name	**Allocation**	**Project Phase[7]**	**EB-2021-0110 ISD Number**	**Forecast**	**Actual**	**Forecast**	**Actual**	**Forecast**	**Actual / Latest Forecast**	**Variance**	**Forecast**	**Actual / Latest Forecast**	**Variance (Years)**	**Variance Category**
System Operations														
UWPC Forms Package	Shared	Execution	G-GP-Other	1.1	0.2	3.0	0.0	7.0	11.0	4.0	2025	2027	2	Execution Factors

[6] Where the cost allocation of the project is shared, the project total reflects the total value allocated to both Transmission and Distribution for the respective investment.
[7] Phases: Planning, Execution, Complete, Cancelled, or Deferred.

The UWPC Forms Package Replacement projects (G-GP-Other) had project end actual/latest forecast is higher forecast primarily due to timing impacts and scope refinement during project execution. Implementation activities were deferred pending completion of a dependent ITOA (Integrated Tools for Operations Application) platform migration, resulting in the project in-service date being delayed later than originally planned. In addition, detailed design and requirements validation identified the need for expanded functionality, including electronic logging and control room resource scheduling capabilities, which increased the overall project scope and associated expenditures.

3.0 DISTRIBUTION-ALLOCATED GENERAL PLANT INVESTMENTS

3.1 PERFORMANCE AT THE DISTRIBUTION GENERAL PLANT CATEGORY

Table 4 below presents a breakdown of the actual 2025 capital expenditures and ISA for the Distribution General Plant category and compares them against the OEB-approved values.

Table 4 - 2025 Distribution Capital Expenditures and ISA[8]

OEB Category	Capital Expenditures – 2025			In-Service Additions – 2025		
	OEB-Approved ($M)[9]	Actual ($M)	Variance ($M)	OEB-Approved ($M)	Actual ($M)	Variance ($M)
General Plant - Distribution	149.5	118.7	-30.7	193.7	195.2	1.6

In 2025, Hydro One's Distribution-allocated General Plant capital expenditures were 21% below the OEB-approved amount and ISAs were 1% above the OEB-approved amount. As described below, these variances are mainly driven by Information Solutions and System Operations project variances, including emergent cybersecurity needs and reprioritization of digital investments.

[8] Does not include Hydro One affiliates.
[9] EB-2021-0110, Decision and Order, November 29, 2022, Schedule A, p.257-58 (Table 25 and 26)

3.2 PERFORMANCE AT THE DISTRIBUTION PROJECT AND PROGRAM LEVEL

This section presents projects and programs with planned or actual ISA greater than or equal to $3M. A variance category is assigned to any project or program with material variances, as described in Section 1.3. Distribution-allocated General Plant programs are presented below in Table 5 and material projects are presented below in Table 6.

3.2.1 DISTRIBUTION PROGRAM PERFORMANCE

Distribution-allocated General Plant Program variances are summarized in Table 5 and further discussed below:

1 **Table 5 - Distribution General Plant Program Summary**

			2025 Distribution Capital Expenditures ($M)			2025 Distribution In-Service Additions ($M)			2025 Units[10]				Performance
Category	**EB-2021-0110 ISD Number**	**Program Description**	**Forecast**	**Actual**	**Variance**	**Forecast**	**Actual**	**Variance**	**Unit Description**	**Forecast**	**Actual**	**Variance**	**Variance Category**
Fleet	G-GP-01	Transport and Work Equipment	42.6	44.2	1.7	42.6	44.2	1.7	# of vehicles	407	439	32	Not Applicable
	G-GP-02	Helicopters	4.0	5.2	1.2	4.0	5.2	1.2	# of helicopters	1	1	0	Execution Factors
Facilities and Real Estate	G-GP-03	Facilities and Accommodation	49.5	29.9	-19.6	135.3	99.6	-35.7	N/A	N/A	N/A	N/A	Emergent Needs & Reprioritization
Information Solutions	G-GP-05	Hardware/Software Refresh and Maintenance	14.4	13.3	-1.1	11.0	12.7	1.7	N/A	N/A	N/A	N/A	Reprioritization
	G-GP-11	Security Monitoring	1.2	5.6	4.4	0.6	6.0	5.4	N/A	N/A	N/A	N/A	Reprioritization
System Operations	G-GP-12	Common Operating Technology Infrastructure	2.9	3.5	0.6	3.0	3.5	0.5	N/A	N/A	N/A	N/A	Not Applicable

[10] Where the cost allocation of the program is shared between Transmission and Distribution, the unit numbers reflect the total units allocated to both Transmission and Distribution for the respective investment.

The **Helicopters (G-GP-02)** program had capital expenditures and ISAs that were above the forecast. The higher-than-expected spending was primarily driven by foreign exchange rate impacts.

The **Facilities and Real Estate (G-GP-03)** program had capital expenditures and ISAs that were lower than forecast. These variances were mainly driven by timing of execution of various construction projects.

The **Hardware/Software Refresh and Maintenance (G-GP-05)** program had capital expenditures and ISAs that were below the forecast. Please see the explanation provided in Section 2.2.1.

The **Security Monitoring (G-GP-11)** program had capital expenditures and ISAs that were above the forecast. Please see the explanation provided in Section 2.2.1.

3.2.2 DISTRIBUTION PROJECT PERFORMANCE

Distribution-allocated General Plant Project variances are summarized in Table 6 and further discussed below:

Table 6 - Distribution General Plant Project Summary

				2025 Distribution Capital Expenditures ($M)		2025 Distribution In-Service Additions ($M)		Project End Total Cost ($M)[11]			In-Service Year			Performance
Functional Area / Project Name	**Allocation**	**Project Phase[12]**	**EB-2021-0110 ISD Number**	**Forecast**	**Actual**	**Forecast**	**Actual**	**Forecast**	**Actual / Latest Forecast**	**Project Total Variance**	**Forecast**	**Actual / Latest Forecast**	**Variance**	**Variance Category**
Information Solutions														
Windows 11 Deployment	Shared	Execution	G-GP-Other	0.0	2.7	0.0	3.2	0.0	5.6	5.6	-	2026	-	Emergent Needs
System Operations														
UWPC Forms Package	Shared	Execution	G-GP-Other	1.4	0.3	4.0	0.0	7.0	11.0	4.0	2025	2027	2	Execution Factors

[11] Where the cost allocation of the project is shared, the project total reflects the total value allocated to both Transmission and Distribution for the respective investment.
[12] Phases: Planning, Executing, Complete, Cancelled, or Deferred.

The Windows 11 Deployment (G-GP-Other) had expenditures above the forecast due to Microsoft's announcement of the end of support for Windows 10 effective October 14, 2025, after the 2023-2027 Plan was established. As a result, Hydro One had to deploy Windows 11 across its user base to maintain vendor support, security updates, and compatibility with enterprise applications and security standards.

The UWPC Forms Package Replacement projects had lower expenditures and ISA than planned for 2025. Please see the explanation provided in Section 2.2.2.

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SECTION 4.9 – ATTACHMENT 5 – GENERAL PLANT CAPITAL PERFORMANCE SUMMARY – 2026 AND 2027

1.0 CAPITAL PERFORMANCE SUMMARY OVERVIEW

1.1 BACKGROUND

This Capital Performance Summary provides an overview of Hydro One's forecast performance for 2026 and 2027 in relation to individual projects and programs. It addresses both forecast capital expenditures and in-service additions (ISA), and is organized as follows:

- Section 2 presents Transmission - allocated General Plant investments
- Section 3 presents Distribution - allocated General Plant investments

1.2 APPROVED CAPITAL INVESTMENT

In Hydro One's application for Transmission Revenue Requirement and Distribution Rates for 2023 to 2027 (EB-2021-0110), Hydro One reached settlement with all parties (the Settlement Proposal) which was approved by the OEB on November 29, 2022. Under the terms of the Settlement Agreement, the OEB approved Hydro One's 2023 to 2027 capital expenditures and ISA.[1]

In December 2022, Hydro One revised the capital expenditure and ISA forecast on a multi-year envelope and OEB-category basis to implement the OEB-approved Settlement Proposal (the "Forecast"). This was the first time Hydro One allocated the impact of the Settlement Proposal to the project and program level. The Forecast is the basis for the Program and Project level variances described in this Capital Performance Report.

[1] EB-2021-0110, Decision and Order, November 29, 2022, Schedule A, p.254-255 and p. 257-258.

1.3 PERFORMANCE DEFINITIONS

Projects and programs with forecast ISA in 2026-2027 greater than or equal to $3M have been summarized in the tables below along with variance categories. The thresholds used by Hydro One to identify "material variances" were determined using the following criteria[2]:

- **Cost Variances** – Material cost variances were identified where the in-year variance in cost for programs, or the total project end cost variance is greater than or equal to $1M and greater than or equal to 10% of planned values.
- **Scope Variances** – For programs, material scope variances arise if the functional scope changes by +/-20% or more.
- **Date Variances** – Material date variances were identified for projects where the actual or projected in-service year shifted from either 2026 or 2027, or earlier to a later year.

The variance in these major projects and programs fall mainly into four categories: 1) Emergent Needs, 2) Execution Factors, 3) Work Definition, and 4) Reprioritization. These categories are used to identify the reasons for variances at the project and program level and are further defined below.

Emergent Needs

Emergent needs are investments that Hydro One made in response to a change of priority due to equipment condition or failure, as well as customer needs.

Execution Factors

Execution factors represent advances or delays encountered during the execution phase of work which can include timing changes that arise as a result of changing conditions, risks and priorities that need to be addressed during execution. As risks materialize, plans are adjusted to accommodate the change and mitigate the overall impact to cost, schedule and resources. This can change the year in which the project goes in-service without

[2] This report's variance criteria conform with Hydro One's internal variance reporting criteria which focuses on projects and programs with positive variances greater than the thresholds described below.

necessarily materially changing to the in-service amount or affecting the overall volume of work completed. Some of the main causes of delays are outage deferrals or cancellations, material delivery and logistics factors as well as customer needs.

Work Definition

Work definition variances arise from the process of refining a project's scope, the estimated budget and schedule as the project moves from the high-level planning phase to design and estimate, and execution phases. As the project is refined, there may be increases or decreases to the project cost as a result of new or changing information that becomes known during the design and estimation phase or in the execution stage of work.

Reprioritization

Reprioritization includes investments that are accelerated or deferred. Hydro One adjusts its capital investments through annual planning and in-year redirection processes.

2.0 TRANSMISSION-ALLOCATED GENERAL PLANT INVESTMENTS

2.1 PERFORMANCE FORECAST AT THE TRANSMISSION PROJECT AND PROGRAM LEVEL

This section presents projects and programs with forecast ISA greater than or equal to $3M. A variance category is assigned to any project or program with material forecast variances, as described in Section 1.3. Transmission-allocated General Plant programs are presented below in Table 1 and 2 and material projects are presented below in Table 3.

2.1.1 TRANSMISSION PROGRAM PERFORMANCE FORECAST

Transmission-allocated General Plant Program forecast variances are summarized in Table 1 and 2:

Table 1 - 2026 Transmission General Plant Program Forecast Summary

			2026 Transmission Capital Expenditures ($M)			2026 Transmission In-Service Additions ($M)			2026 Units[3]				Performance
Category	**EB-2021-0110 ISD Number**	**Program Description**	**Forecast**	**Latest Forecast**	**Variance**	**Forecast**	**Latest Forecast**	**Variance**	**Unit Description**	**Forecast**	**Latest Forecast**	**Variance**	**Variance Category**
Fleet	G-GP-01	Transport and Work Equipment	22.0	22.8	0.8	22.0	22.8	0.8	# of vehicles	167	404	237	Execution Factors
Facilities and Real Estate	G-GP-03	Facilities and Accommodation	3.5	1.3	-2.2	3.5	1.7	-1.8	N/A	N/A	N/A	N/A	Execution Factors
	G-GP-04	Transmission Facilities	11.1	11.7	0.6	11.2	9.1	-2.1	N/A	N/A	N/A	N/A	Emergent Needs
Information Solutions	G-GP-05	Hardware/Software Refresh and Maintenance	10.5	4.4	-6.1	12.9	4.2	-8.8	N/A	N/A	N/A	N/A	Reprioritization
	G-GP-10	Physical Security Upgrades	8.4	5.1	-3.4	0.0	3.6	3.6	N/A	N/A	N/A	N/A	Reprioritization
Operating Infrastructure	G-GP-19	Grid Control Network Sustainment	6.4	5.6	-0.8	6.3	3.6	-2.7	N/A	N/A	N/A	N/A	Execution Factors
	G-GP-Other	SVC Control Replacement	1.7	0.0	-1.7	4.2	0.0	-4.2	N/A	N/A	N/A	N/A	Work Definition
	G-GP-Other	Synchrophasors Program	4.2	5.6	1.4	16.8	2.1	-14.7	N/A	N/A	N/A	N/A	Work Definition

[3] Where the cost allocation of the program is shared between Transmission and Distribution, the unit numbers reflect the total units allocated to both Transmission and Distribution for the respective investment.

Table 2 - 2027 Transmission General Plant Program Forecast Summary

			2027 Transmission Capital Expenditures ($M)			2027 Transmission In-Service Additions ($M)			2027 Units[4]				Performance
Category	**EB-2021-0110 ISD Number**	**Program Description**	**Forecast**	**Latest Forecast**	**Variance**	**Forecast**	**Latest Forecast**	**Variance**	**Unit Description**	**Forecast**	**Latest Forecast**	**Variance**	**Variance Category**
Fleet	G-GP-01	Transport and Work Equipment	22.8	23.6	0.8	22.8	23.8	1.0	# of vehicles	166	399	233	Execution Factors
Facilities and Real Estate	G-GP-03	Facilities and Accommodation	3.4	1.1	-2.3	3.4	1.1	-2.3	N/A	N/A	N/A	N/A	Execution Factors
	G-GP-04	Transmission Facilities	10.2	10.3	0.1	10.3	13.2	2.9	N/A	N/A	N/A	N/A	Emergent Needs
Information Solutions	G-GP-05	Hardware/Software Refresh and Maintenance	7.6	6.0	-1.6	7.8	5.7	-2.1	N/A	N/A	N/A	N/A	Reprioritization
	G-GP-10	Physical Security Upgrades	4.2	5.2	0.9	33.6	3.4	-30.2	N/A	N/A	N/A	N/A	Execution Factors
	G-GP-11	Security Monitoring	1.9	1.2	-0.8	5.0	0.8	-4.2	N/A	N/A	N/A	N/A	Execution Factors
	G-GP-Other	Data and AI Use Case Program	0.0	2.1	2.1	0.0	3.5	3.5	N/A	N/A	N/A	N/A	Emergent Needs
Operating Infrastructure	G-GP-19	Grid Control Network Sustainment	6.6	5.8	-0.8	6.5	2.9	-3.6	N/A	N/A	N/A	N/A	Execution Factors
	G-GP-Other	Synchrophasors Program	4.3	5.0	0.8	4.3	1.5	-2.8	N/A	N/A	N/A	N/A	Work Definition

[4] Where the cost allocation of the program is shared between Transmission and Distribution, the unit numbers reflect the total units allocated to both Transmission and Distribution for the respective investment.

2.1.2 TRANSMISSION PROJECT PERFORMANCE

Transmission-allocated General Plant Project forecast variances are summarized in Table 3:

Table 3 - 2026 and 2027 Transmission General Plant Project Forecast Summary

				2026 Transmission Capital Expenditures ($M)		2026 Transmission In-Service Additions ($M)		2027 Transmission Capital Expenditures ($M)		2027 Transmission In-Service Additions ($M)		Project End Total Cost ($M)[5]			In-Service Year			Performance
Functional Area / Project Name	**Allocation**	**Project Phase[6]**	**EB-2021-0110 ISD Number**	**Forecast**	**Latest Forecast**	**Forecast**	**Latest Forecast**	**Forecast**	**Latest Forecast**	**Forecast**	**Latest Forecast**	**Forecast**	**Latest Forecast**	**Variance**	**Forecast**	**Latest Forecast**	**Variance (Years)**	**Variance Category**
Information Solutions																		
OT Vulnerability Management for Stations	Transmission	Execution	G-GP-09	0.0	1.9	0.0	4.8	0.0	1.3	0.0	1.3	0.5	17.0	16.5	2023	2029	6	Work Definition
System Operations																		
UWPC Forms Package Replacement CAP	Shared	Execution	G-GP-Other	0.0	3.0	0.0	4.4	0.0	0.0	0.0	0.0	7.0	11.0	4.0	2025	2027	2	Execution Factors
Operating Infrastructure																		
Transmission Asset Data Management System	Transmission	Execution	G-GP-Other	5.0	4.2	19.7	5.7	0.0	3.0	0.0	5.9	19.7	11.6	-8.1	2026	2027	1	Work Definition

[5] Where the cost allocation of the project is shared, the project total reflects the total value allocated to both Transmission and Distribution for the respective investment.
[6] Phases: Planning, Execution, Complete, Cancelled, or Deferred.

3.0 DISTRIBUTION-ALLOCATED GENERAL PLANT INVESTMENTS

3.1 PERFORMANCE AT THE DISTRIBUTION PROJECT AND PROGRAM LEVEL

This section presents projects and programs with forecast ISA greater than or equal to $3M. A variance category is assigned to any project or program with material forecast variances, as described in Section 1.3. Distribution-allocated General Plant programs are presented below in Table 4 and 5 and material projects are presented below in Table 6.

3.1.1 DISTRIBUTION PROGRAM PERFORMANCE

Distribution-allocated General Plant Program forecast variances are summarized in Table 4 and 5:

Table 4 - 2026 Distribution General Plant Program Forecast Summary

			2026 Distribution Capital Expenditures ($M)			2026 Distribution In-Service Additions ($M)			2026 Units[7]				Performance
Category	**EB-2021-0110 ISD Number**	**Program Description**	**Forecast**	**Latest Forecast**	**Variance**	**Forecast**	**Latest Forecast**	**Variance**	**Unit Description**	**Forecast**	**Latest Forecast**	**Variance**	**Variance Category**
Fleet	G-GP-01	Transport and Work Equipment	43.2	44.8	1.6	43.2	44.7	1.5	# of vehicles	167	404	237	Execution Factors
	G-GP-02	Helicopters	4.0	0.5	-3.4	4.0	0.5	-3.4	# of helicopters	1	0	-1	Execution Factors
Facilities and Real Estate	G-GP-03	Facilities and Accommodation	11.5	26.8	15.4	11.6	2.6	-9.1	N/A	N/A	N/A	N/A	Execution Factors
Information Solutions	G-GP-05	Hardware/Software Refresh and Maintenance	19.9	7.6	-12.3	23.2	7.2	-15.9	N/A	N/A	N/A	N/A	Reprioritization
System Operations	G-GP-12	Common Operating Technology Infrastructure	3.2	3.6	0.4	3.2	1.2	-1.9	N/A	N/A	N/A	N/A	Work Definition

Table 5 - 2027 Distribution General Plant Program Forecast Summary

			2027 Distribution Capital Expenditures ($M)			2027 Distribution In-Service Additions ($M)			2027 Units[8]				Performance
Category	**EB-2021-0110 ISD Number**	**Program Description**	**Forecast**	**Latest Forecast**	**Variance**	**Forecast**	**Latest Forecast**	**Variance**	**Unit Description**	**Forecast**	**Latest Forecast**	**Variance**	**Variance Category**
Fleet	G-GP-01	Transport and Work Equipment	44.7	46.3	1.6	44.7	46.7	2.0	# of vehicles	166	399	233	Execution Factors
Facilities and Real Estate	G-GP-03	Facilities and Accommodation	11.9	24.2	12.3	11.9	53.6	41.7	N/A	N/A	N/A	N/A	Execution Factors
Information Solutions	G-GP-05	Hardware/Software Refresh and Maintenance	18.6	10.9	-7.7	18.8	10.5	-8.3	N/A	N/A	N/A	N/A	Reprioritization
	G-GP-11	Security Monitoring	1.2	0.6	-0.6	3.9	0.1	-3.8	N/A	N/A	N/A	N/A	Execution Factors
	G-GP-Other	Data and AI Use Case Program	0.0	2.9	2.9	0.0	4.8	4.8	N/A	N/A	N/A	N/A	Emergent Needs

[7] Where the cost allocation of the program is shared between Transmission and Distribution, the unit numbers reflect the total units allocated to both Transmission and Distribution for the respective investment.
[8] Where the cost allocation of the program is shared between Transmission and Distribution, the unit numbers reflect the total units allocated to both Transmission and Distribution for the respective investment.

3.1.2 DISTRIBUTION PROJECT PERFORMANCE

Distribution-allocated General Plant Project forecast variances are summarized in Table 6:

Table 6 - 2026 and 2027 Distribution General Plant Project Forecast Summary

				2026 Distribution Capital Expenditures ($M)		2026 Distribution In-Service Additions ($M)		2027 Distribution Capital Expenditures ($M)		2027 Distribution In-Service Additions ($M)		Project End Total Cost ($M)[9]			In-Service Year			Performance
Functional Area / Project Name	**Allocation**	**Project Phase[10]**	**EB-2021-0110 ISD Number**	**Forecast**	**Latest Forecast**	**Forecast**	**Latest Forecast**	**Forecast**	**Latest Forecast**	**Forecast**	**Latest Forecast**	**Forecast**	**Latest Forecast**	**Project Total Variance**	**Forecast**	**Latest Forecast**	**Variance**	**Variance Category**
System Operations																		
UWPC Forms Package Replacement CAP	Shared	Execution	G-GP-Other	0.0	4.1	0.0	6.0	0.0	0.0	0.0	0.0	7.0	11.0	4.0	2025	2027	2	Execution Factors
System Capability Reinforcement																		
Lauzon TS DESN1 Distribution Feeder Egress Build	Distribution	Planning	G-GP-22	2.2	2.0	0.0	0.0	0.0	2.5	0.0	4.5	2.2	5.0	2.8	2026	2027	1	Work Definition
Whitedog DS Relocation Distribution Contribution to Transmission	Distribution	Planning	G-GP-22	0.0	0.0	0.0	0.0	0.0	3.1	0.0	3.1	0.0	3.1	3.1	-	2027	-	Emergent Needs
Margach DS Third Transformer Distribution Contribution to Transmission	Distribution	Planning	G-GP-22	0.0	0.0	0.0	0.0	0.0	3.0	0.0	3.0	0.0	3.0	3.0	-	2027	-	Emergent Needs

[9] Where the cost allocation of the project is shared, the project total reflects the total value allocated to both Transmission and Distribution for the respective investment.
[10] Phases: Planning, Executing, Complete, Cancelled, or Deferred.

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SECTION 4.10 – GSP – CAPITAL WORK EXECUTION STRATEGY

4.10.1 INTRODUCTION

This Exhibit details how Hydro One delivers a large and complex General Plant work program. The planning and execution of these work programs vary reflecting the distinct execution challenges and strategies of each line of business. Accordingly, this Exhibit is divided into four sections: Fleet & Aviation (Fleet), Facilities & Real Estate (FRE), Digital & Technology Solutions (DTS), and System Operations.

As described below, the work planning and execution activities for these lines of business fulfill the company's core business objectives, including safety, quality, efficiency, and meeting customer commitments.

4.10.2 FLEET & AVIATION

Fleet manages approximately 10 helicopters, 8,000 Transport and Work Equipment (TWE), as well as approximately 1,000 small off-road equipment to support the Distribution and Transmission work programs and staffing requirements.

This section presents:

i. planning considerations for TWE replacements;
ii. planning for additional TWE to support work program sustained growth;
iii. the delivery and execution of the TWE program;
iv. the execution strategy for the helicopter fleet; and,
v. the workforce resourcing strategy for the execution of Fleet capital work.

4.10.2.1 TWE REPLACEMENT PLANNING

Every year, Fleet undertakes a systematic approach to fleet equipment replacement that is focused on ensuring staff have the equipment they need to execute their work. This process begins by identifying the end of life equipment that needs to be replaced and then prioritizing available funding based on organizational needs, as well as mechanical, financial, and environmental stewardship criteria.

As described in GSP Section 4.2.2, every vehicle in Hydro One's fleet undergoes an annual inspection to assess its condition. The inspection considers the vehicle's age, mileage, maintenance cost per kilometre, engine hours, and the deficiencies noted during the inspection. Fleet then uses a series of factors to determine which vehicles are provisionally eligible for replacement. For vehicles that narrowly exceed the eligibility threshold (e.g., they meet the age threshold but not the mileage threshold), Hydro One performs a case-by-case assessment to determine whether the vehicle should qualify for replacement.

Following the annual inspections, Fleet ranks the eligible vehicles based on (i) the indicators discussed in GSP Section 4.2.2 and (ii) the extent to which their replacement will drive value for work programs in the coming year. The purpose of this ranking exercise is to maximize financial benefits (i.e., savings on operating costs) and to minimize vehicle downtime by replacing equipment that is prone to breakdowns.

Fleet also collaborates with other Lines of Business to ensure an up-to-date understanding of the types and volume of TWE assets they need, detailed in GSP Section 4.7.2.2.1.

Fleet standardizes TWE assets based on safety, reliability and work program execution needs. Fleet engineers review each request for equipment to ensure that it meets the technical capabilities required to fulfil the work program. Fleet holds regular meetings with the original equipment manufacturer to confirm that Hydro One's configurations are in line with those of other similarly situated utilities. Fleet also holds membership in various utility forums to ensure alignment with industry standards.

Hydro One's fleet management plays a role in environmental stewardship, as well as in the company's planned reduction of greenhouse gas emissions. Direct emissions from fossil fuel owned and operated fleet vehicles represent approximately 44% of Hydro One's operational emissions. To help meet Hydro One's plan to reduce operations-driven emissions by 30% by 2030, Fleet has committed to replacing 100% of its sedan and sport

utility vehicle (SUV) fleet with electric vehicles (EVs), plug-in electric or hybrid electric vehicles by 2030.[1]

Hydro One has also begun to test the viability of other equipment including alternate fuel pickup trucks and electric power take-off units. In support of its planned transition to a greener fleet, Hydro One monitors new developments such as battery technology, the increased driving range of green vehicles, the growth in public fueling infrastructure and improved economics, as well as monitoring industry total cost of ownership for green vehicles. For more details, please see GSP Section 4.11 G-GP-01, Subsection 2.1.

4.10.2.2 TWE FOR WORK PROGRAM GROWTH

TWE Growth Program

To support increasing electricity demand and the increase in the distribution and transmission work programs, as detailed in Exhibit E-06-02, Section 4.0, and the associated growth in incremental headcount, Fleet will need to acquire additional equipment.

To determine the amount of additional equipment needed, Fleet assumes that the current crew to vehicle/equipment approach will continue into the planning period. Accordingly, Fleet calculates a staffing-to-equipment ratio for each line of business that it supports. Using this ratio and the planned number of new employees for each line of business, Fleet has calculated the amount of additional equipment needed each year and included these investments in GSP Section 4.11 G-GP-01, Subsection 2.2.

Fleet meets with the Lines of Business on an ongoing basis to discuss the specific equipment needed to support their planned work program and workforce numbers. Any temporary growth in staff or work will be supported using existing equipment or rentals.

[1] Hydro One Limited, Hydro One 2025 Sustainability Report, (May 7, 2026), p. 12-13, Section "Environment" and "Climate change mitigation" (https://www.hydroone.com/Sustainability/Documents/CSR_2025/2025-Sustainability-Report.pdf)

4.10.2.3 FLEET DELIVERY AND EXECUTION

TWE Replacement Program

Fleet has processes in place to ensure that equipment is ordered efficiently, delivered on time, and in proper working condition. The timeline for procuring light-duty vehicles from the date of purchase to the date of in-service operation is approximately nine months. This includes the time required for upfitting (i.e. adding compartments and safety equipment) to meet work needs. The timeline for heavy-duty vehicles is approximately 24 months.

The in-year strategy for Fleet is to complete equipment orders at various times during the year to meet delivery outcomes in line with the replacement lifecycle. Fleet generally purchases equipment directly from manufacturers to leverage volume discounts. To ensure that Hydro One can secure required equipment on time, Hydro One reserves build slots with original equipment manufacturers. Fleet's approach to purchasing replacement equipment provides the opportunity to work with original equipment manufacturers to ensure security of supply.

Hydro One has contracts in place with most original equipment manufacturers. The contract pricing covers upfitting as well as the costs of the chassis. The contracts also include potential penalties for late delivery, failure to deliver, and deficiencies on arrival.

The delivery of the equipment does not mark the end of Fleet's oversight process. Before Hydro One accepts any piece of delivered equipment, fleet inspectors confirm that the vehicle or piece of equipment meets Hydro One's specifications. Anything that does not meet these specifications is addressed by the supplier prior to acceptance of delivery. This inspection process avoids future downtime and ensures that the integration of new equipment into work programs is as seamless as possible.

If a vehicle needs to be retired before the arrival of its replacement, Fleet works with the internal client to develop a solution that meets their needs. This could involve leveraging equipment from another Hydro One location or renting equipment from an external source.

Fleet continuously monitors equipment performance to ensure that it represents value for Hydro One's customers, meets work program needs, and justifies the initial investment. Fleet tracks the total cost of ownership as well as uptime and equipment utilization. With the use of telematics, Fleet can collect and leverage valuable operational data to ensure that the optimal number of vehicles for work programs and staffing requirements are available. The data is analyzed monthly to identify utilization and to redistribute existing units to work programs in need. This performance data allows Fleet to assess the efficiency of the equipment used to support work execution activities.

TWE Growth Program

The options for meeting short-term or in-year Transmission and Distribution work program growth include increased utilization of existing equipment and/or rentals. In 2025, 57% of requests for additional, short-term equipment were satisfied by redistributing existing equipment instead of rentals. External rentals are used for short-term projects and work programs where required, but their costs are approximately 63% higher than owned-equipment rates.

As illustrated in the 2024 Fleet Operation Benchmarking Report (presented in GSP Section 4.3 attachment 1 page 21-24), only 12.8% of Hydro One's on-road vehicles operate at low mileage levels, better than the industry average of 26%. This has improved compared to the 2019 Fleet Operations Benchmarking report where Hydro One was at 17%. This is the lowest percentage of vehicles having low mileage among the comparator group, which demonstrates Hydro One's ability to effectively manage utilization levels.

For the Transmission and Distribution work programs growth Hydro One is expecting over the 2028-2032 planning period, utilization of existing equipment and/or rentals would not be sufficient, and rentals for this specialized equipment is limited. As a result, Fleet will invest in new equipment to support the work program and headcount increases over the planning period to ensure that employees have appropriate equipment to do their job in a safe and effective manner.

4.10.2.4 HELICOPTER FLEET MANAGEMENT

Helicopters are an efficient way for crews to access work sites, to deliver materials to power line technicians as part of Hydro One's insulator change program, and to deliver distribution poles after a destructive storm. The use of helicopters contributes to faster outage response, as well as worker safety. The helicopter fleet is also important for patrolling large areas, which drives efficiencies for Hydro One's inspection programs.

Hydro One's acquisition strategy for helicopters is distinct from that used for other types of fleet equipment. Unlike other types of fleet equipment, helicopters must undergo a rebuild every 12 years of service to extend their lifespan. Further details of the helicopter maintenance program are described in GSP Section 4.2.3.2.

Utilimarc conducted a Helicopter Lifecycle Study[2] which showed that it is prudent to replace Hydro One's type of aircraft between 15 to 20 years of age, assuming 350-400 annual flight hours. This recommendation optimizes the lifecycle and annualized costs of the helicopter fleet. Three of Hydro One's current helicopters will meet these replacement criteria before or during the rate period (See GSP Section 4.11 G-GP-02, Subsection 2.1).

Hydro One's aviation strategy is flexible and scalable. Replacing the aircraft at its optimal lifecycle will maintain operational readiness. Hydro One will continue to use third-party vendors for specialized work that cannot be completed by Hydro One and for work when additional capacity may be required to accommodate peak work requirements, as this is the most cost-effective approach.

4.10.2.5 WORKFORCE RESOURCING STRATEGY

Fleet plans to add additional technicians to support the increase in planned capital and OM&A work over the planning period. Based on industry recognized ratios as well as internal data, Fleet has calculated that for every 20 new pieces of heavy or off-road equipment, it will need one new heavy-duty technician to service this equipment in addition

[2] Utilimarc Helicopter Lifecycle Analysis Report is provided under GSP Section 4.3 Attachment 3, p. 5.

to leveraging its casual workforce and/or outsourcing work when appropriate as described in the workforce planning Exhibit E-06-02 Section 4.0.

The workforce for Aviation Services is forecast to remain constant throughout the rate period. To cover high demand periods, a temporary or seasonal pilot can be hired to support the work programs as needed, thereby reducing costs during the slower months, which are typically from November to March.

4.10.3 FACILITIES & REAL ESTATE

FRE is responsible for executing the major capital projects and sustainment programs for Hydro One's real estate assets. This asset portfolio includes 1,474 buildings at 529 sites across the province of Ontario.

This section describes the work execution considerations and delivery mechanisms that FRE will use to ensure the successful deployment of its 2028-2032 capital investment plans.

This section is divided into the following sub-sections: Section 4.10.3.1 describes delivery and execution considerations unique to FRE, Section 4.10.3.2 describes FRE and Outsourced Service Providers (OSP); Section 4.10.3.3 describes the Capital Project Execution Process, and Section 4.10.3.4 describes FRE's Workforce Resourcing Strategy.

4.10.3.1 DELIVERY AND EXECUTION FACTORS UNIQUE TO THE CORPORATE REAL ESTATE PORTFOLIO

The FRE portfolio includes a large and diverse set of buildings that are spread across Ontario in urban, rural, and remote settings.

The technical breadth of the portfolio is extensive. A single building may contain hundreds of components spanning structural, building envelope, HVAC, electrical, plumbing, fire protection, and sitework systems. Each carries distinct lifecycle profiles, maintenance schedules, repair needs, and failure/replacement requirements. Execution therefore

depends on access to a broad range of qualified trades and technical specialties capable of supporting this complexity at scale across the province.

The diversity and geographic extent of the portfolio further shape delivery requirements. FRE is responsible for several highly differentiated asset classes: consolidated offices in the GTA, transmission station buildings, fleet garages, warehouses, operations centers, training facilities and heliports across the province. Serving this dispersed, diverse portfolio requires delivery approaches that can adapt to region-specific conditions, market availability, and the varying technical characteristics of each facility type.

FRE also has to consider the unique working environments that are associated with high-energy Transmission Station sites. This work involves careful consideration of overlapping capital project works, execution considerations (grounding, bonding, limits of approach, etc.) that must be planned when working in these critical environments. Building elements at transmission station sites fall under FRE's accountability and require certified technicians who are trained to work safely on building infrastructure at energized sites.

These unique delivery and execution factors establish the foundation for FRE's capital work execution approach. The next sub-section - Outsourced Service Model - describes how FRE meets these requirements by leveraging external providers. It also explains why this model serves the complexity, diversity, and provincial scope of the portfolio.

4.10.3.2 REAL ESTATE AND OUTSOURCED SERVICE PROVIDERS

An OSP in the facility management context refers to a third-party organization contracted to perform a range of operational, technical, and project delivery services on behalf of a facility owner or operator.

Rather than maintaining all facilities & real estate capabilities in-house, Hydro One largely relies on its OSP to perform maintenance, inspections, work order management, and capital project execution using external resources and established vendor partners. OSPs provide access to specialized expertise, supply chains, and regional contractor bases, enabling efficient delivery of services through standardized processes and scalable

resource models. This model allows the asset owner to retain governance, oversight, and strategic decision-making responsibility, while leveraging the OSP's capacity to manage execution, optimize costs, and respond to varying workload demands across geographically dispersed portfolios.

OSPs play a critical role in delivering FRE's capital investment plans. OSPs provide FRE with access to the broader Ontario construction and building services marketplace - leveraging established sub-contractor relationships, regional presence, and volume-based efficiencies to secure skilled labour, competitive pricing, and reliable execution across the province. This model supports customer value by providing FRE with scalable access to specialized expertise, regional contractor networks, established supply chains, and competitive procurement mechanisms, without requiring Hydro One to maintain the full range of specialty trades internally.

The FRE portfolio requires expertise across structural, mechanical, electrical, HVAC, building envelope, plumbing, sitework, and other systems. Each building system has distinct lifecycle profiles, maintenance schedules, repair needs, and failure/replacement requirements. OSPs maintain technical expertise across these disciplines. They also have the ability to draw on specialized trades through existing sub-contractor relationships when technical work is required (e.g., roof replacements, complex HVAC upgrades, building envelope remediation).

Since building systems require a different skillset than those of Hydro One's core transmission and distribution workforce, OSPs allow FRE to access the full range of certified trades without carrying the fixed labour costs, idle time risk, or administrative overhead that would come with an insourced model. This ensures technical quality while maintaining cost discipline, especially for components that need intermittent, project-specific expertise.

In general, Ontario's construction and building-services market is regionalized. Local labour availability, trade specialization, and material lead times can vary significantly across the province. OSPs maintain extensive contractor networks across the urban, rural,

and remote northern communities where Hydro One operates. Leveraging an OSP enables FRE to engage local, certified trades where appropriate while retaining an opportunity to source from broader markets when local capacity is limited.

For example, the OSP supports FRE's geographically dispersed roof-replacement program through an established roofing contractor relationship. Aggregating work across locations supports more consistent specifications, coordinated scheduling, improved access to materials and labour, and pricing that reflects a larger volume of work. Hydro One remains responsible for approving the program scope, budget, and delivery requirements. As a benefit of maintaining multiple clients and the consequential volume of work, OSPs are able to extend Hydro One volume pricing for its roofing program. The OSP's broader purchasing volumes and established vendor relationship provide Hydro One with access to pricing and delivery capacity that would be more difficult for FRE to obtain independently for a geographically dispersed program of this nature.

This market access translates into direct value for customers through:

- volume-based pricing: OSPs leverage the procurement scale driven from their portfolio of accounts
- established supplier relationships: enabling faster material acquisition and reduced lead-time risk
- regional cost optimization: using the best-priced and best-qualified trades available in each region
- performance partnership and issue resolution: encouraging responsive vendor performance by leveraging broader OSP relationships to support timely resolution of issues, reinforce accountability where expectations are not met, and recognize strong performers through potential future competitive opportunities across other accounts where appropriate

For a portfolio as broad and varied as FRE's, OSPs enable cost-effective delivery through:

- flexible resource allocation, matching labour supply to actual workload
- avoiding the need for internal, full-time specialty trades
- reduced travel and mobilization costs, by leveraging regional contractor footprints

- improved equipment utilization, as OSPs manages the provision of specialized tools
- performance based contracting, aligning cost with delivered outcomes while reducing fixed labour costs, idle capacity, recruitment and training burden, overtime exposure, and long term staffing commitments

FRE's plan presents an increase in capital investment to stabilize portfolio condition, support grid reliability, customer response, respond to growth, and compliance and governance requirements. The outsourced delivery model is structured to provide the scalable trade capacity, regional market access, and program-management support required to deliver the planned increase in building-system renewals and replacements.

Since 2015, Hydro One has retained Brookfield Global Integrated Solutions (BGIS) as its OSP through the model described above. Under the OSP contract, BGIS performs facility operations and capital project execution on behalf of Hydro One. It is FRE's intention to continue utilizing an outsourced service provider model for these functions.

As part of the development of FRE's capital investment plan, Hydro One has engaged its OSP on the pacing and value of the proposed capital outlook, taking into consideration internal and external resources and execution factors. This engagement included the scale, timing, complexity, and geographic distribution of the proposed investments, drawing on the experience and market knowledge of Hydro One's OSP.

Hydro One and the OSP concluded that the proposed capital investment plan is achievable within the planning period and can be effectively supported through established delivery models and supply chains. Based on this review and the delivery mechanisms described in this Exhibit, FRE determined that the proposed plan is appropriately paced and executable over the planning period. Further, no material market-capacity constraint was identified that would prevent delivery of the plan as proposed.

Hydro One will continue to actively monitor execution performance of its OSP, resource requirements, and market conditions throughout the investment period and make adjustments, where necessary, to support efficient program delivery.

4.10.3.3 CAPITAL PROJECT EXECUTION PROCESS

This section summarizes the planned approach to capital project execution, including current and future state improvements and considerations that will enable FRE to successfully deliver the proposed work program.

Although the OSP performs significant operational and project-delivery activities, Hydro One retains accountability for the capital plan and associated customer outcomes. FRE establishes investment priorities, approves project scopes and budgets, authorizes progression through the applicable stage gates, monitors cost and schedule performance, and oversees the OSP's compliance with contractual and performance requirements. The OSP provides delivery capacity and technical expertise within this Hydro One-led governance framework.

Throughout the program planning process, FRE engages OSP subject matter experts to validate technical requirements, refine scopes, and improve the accuracy of early-stage budgets. FRE also conducts a comprehensive stakeholder engagement process with internal Lines of Business to incorporate business requirements, system priorities, operational constraints, and site-specific considerations into project selection.

Following this planning and consultation process, the annual capital plan is finalized and approved by Hydro One senior management. Once approved, projects formally transition from planning to execution.

The remainder of this section describes the following process improvements throughout the 2023-2027 rate period that have been implemented to strengthen FRE's ability to successfully deliver the proposed 2028–2032 capital investment plan:

- Evolving from Project Delivery to Program Delivery
- Modernizing Technology to Support Higher-Volume Delivery

- Creating an Integrated CRE/OSP Delivery System
- Building Organizational Capacity for a Larger Capital Portfolio
- Strengthening Oversight, Visibility, and Financial Control
- Governance and Accountability of Work Executed by OSPs
- Capital Projects and Program Execution

Evolving from Project Delivery to Program Delivery

FRE is transitioning from a project-by-project delivery model to a program-based framework. This change ensures consistent, repeatable delivery structures that support large, geographically dispersed facility portfolios. A program-based model allows FRE to manage sustainment, modernizations, and new build facilities as coordinated streams of work rather than as discrete projects, improving predictability and output while reducing variance.

Within this framework, a formalized Stage-Gate Process (SGP) has become central to how FRE plans, evaluates, and advances work. The process establishes a structured sequence of checkpoints from pre-planning through commissioning, ensuring that scope, schedule, cost, and risk are validated at each stage. Each stage gate includes a formal Go/No Go decision to confirm whether the project should proceed, be refined, placed on hold, or stopped before advancing to the next phase. FRE refined this process to improve decision quality, identify issues earlier, and better align planning with execution. This is further outlined in Figure 1 below.

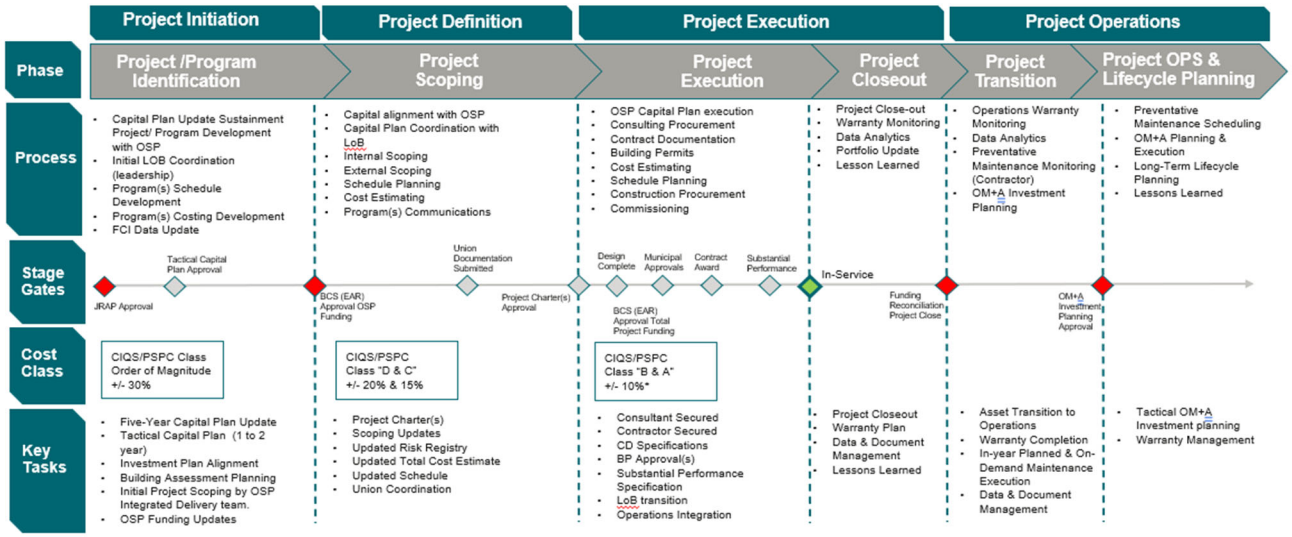

Figure 1: FRE's Stage Gate Process for Capital Projects

This governance discipline now serves as the backbone of FRE's capital delivery approach and will support consistent execution as capital volumes increase. Further expected long-term benefits include a reduction in rework, shortening of planning timelines, an increase in capital throughput per resource, and an increase in the reliability of annual delivery.

Modernizing Technology to Support Higher-Volume Delivery

FRE expects that its OSP will make upgrades across core platforms, reporting tools, automation solutions, and data analytics to improve capital delivery. For example, the current OSP implemented dynamic capital planning tools and project management system upgrades to align with the SGP and integrate with Hydro One's financial reporting systems. These enhancements improve collaboration between FRE and the OSP, reduce manual processes, and provide real-time information to support decision-making. With stronger data quality and streamlined workflows, FRE is better equipped to manage larger capital volumes with greater efficiency and accuracy.

Creating an Integrated FRE/OSP Delivery System

FRE has harmonized its internal planning and delivery workflows and clarified roles and responsibilities across the planning-to-delivery lifecycle to allow for the seamless

alignment between Hydro One's internal planning functions and the OSP's delivery operations. Planning remains mostly FRE-led, project management is jointly-led, and the delivery activities of programs in the field are OSP-led with programmatic oversight from FRE. This division of accountability enables efficient handoffs, reduces duplication, and provides the structure necessary to manage higher work volumes, as further outlined in Figure 2.

Activity	Strategic Planning	Program/ Project Management	Delivery & Execution
Work Scope	OM&A Capital Workforce	New Builds Sustainment Operations	
FRE's Role	Lead & Direct	Oversight, Governance & Reporting	Monitor Escalations & Complex Projects
OSP's Role	Validate Feasibility of Delivery	Manage Contractors & Vendors	Lead & Execute

Figure 2: FRE and OSP Accountabilities in Planning, Project/Program Management, and Delivery/Execution

Building Organizational Capacity for a Larger Capital Portfolio

The ability to deliver a much larger capital program also requires the right delivery organization. FRE and the OSP have updated and aligned their organizational structures to reflect a program-based model. FRE has centralized its planning and strategy function, introduced greater specialization in program management roles, and improved alignment across internal partners such as operations, technical services, finance, and environmental. The OSP has structured its teams to scale resources up or down

depending on FRE's program requirements and has synchronized its own organizational design to FRE's updated organizational structure.

This realignment is complemented by deeper integration across FRE, the OSP, and internal partners. Integration now spans planning, delivery, operations, technical functions, and financial oversight, ensuring that capital work is coordinated, conflicts with operational activities are minimized, and projects are executed in a predictable and efficient manner. This inter-organization integration enables FRE to manage increases in work volume while maintaining service continuity and operational stability.

Strengthening Oversight, Visibility, and Financial Control

As part of its shift to a program-based delivery model, FRE strengthened its governance structures to enhance oversight of internal operations and outsourced work. The governance framework now includes clearer escalation pathways, more consistent reporting cadences, and enhanced visibility at the project, program, and portfolio levels.

These improvements support transparency, coordination, and disciplined decision-making. Each of these improvements is critical to responsibly delivering a larger capital investment plan.

Financial administration and reporting processes have also been modernized to support real-time visibility into program spending and cost performance. Updated tools and workflows provide more accurate forecasting and more timely performance insights, improving Hydro One's ability to manage capital budgets effectively. These enhancements also ensure that FRE can detect variances early, enabling corrective action before impacts materialize at the portfolio level.

Governance and Accountability of Work Executed by OSPs

FRE applies a strengthened governance and accountability framework to ensure that outsourced delivery remains cost-effective, resilient, and aligned with customer expectations. FRE leads the planning process and engages the OSP throughout to ensure

capital plans are optimized and they embed cost discipline beginning at the prospecting stages which minimizes in-year adjustments and improves cost certainty.

A set of financial and project delivery controls have been introduced into the planning assumptions and execution oversight to facilitate OSP oversight. These controls are tied to organizational objectives and OSP commitments, reinforcing shared accountability and enabling performance management. FRE further drives accountability through structured procurements, competitive vendor engagement, and delivery strategies such as work bundling, standardized designs, and regional vendor expansion. Together, these mechanisms ensure that OSPs are held to clear, measurable expectations and deliver consistent value, predictability, and efficiency across the capital program.

4.10.3.4 WORKFORCE RESOURCING STRATEGY

To deliver the proposed increase in capital investments, FRE's resourcing strategy will be predominantly managed by Hydro One's OSP since the OSP will be responsible for delivery and execution the work itself. No internal workforce increases are planned to address increased financial controllership, reporting requirements, and governance of jointly managed work programs. Full details about the internal resourcing plan is available in Exhibit E-06-02, Section 4.0.

4.10.4 DIGITAL & TECHNOLOGY SOLUTIONS

Hydro One's DTS is accountable for executing Information Technology (IT), Operating Technology (OT), and Security investments. The DTS work execution strategy follows a five-stage governance process and utilizes organizational structures designed to streamline the execution of programs and projects. These are discussed further below in Sections 4.10.4.1 and 4.10.4.2, respectively. This section also addresses the workforce resourcing strategy for the execution of DTS work under Section 4.10.4.3.

DTS has seen an increase in cloud-based solutions in several technology streams. As a result, this evidence speaks to both traditional "capital delivery" model as well as delivery for cloud solutions. Within this evidence, both traditional capital and cloud-based work execution will be referred to as "Technology Delivery".

4.10.4.1 TECHNOLOGY DELIVERY GOVERNANCE

Hydro One's technology work execution strategy for DTS investments is governed by a formal five-stage governance framework: (i) Project Initiation, (ii) Planning, (iii) Design, (iv) Execution, and (v) Closing. The Initiation, Planning, and Design stages constitute project discovery, while Execution and Closing govern controlled delivery and transition to sustainment. This framework is applied consistently to all projects, irrespective of delivery methodology, to ensure prudent development, oversight, and monitoring of investments.

The framework establishes mandatory approval gates at each stage. During project discovery, scope, solution approach, schedule, risks, and business and technical requirements are defined in accordance with the governance framework standards and formally approved. Projects advance through each gate only when all defined stage requirements have been satisfied, a control administered by the Project Control Office. Execution and Closing are subject to governance gates confirming readiness, compliance, and accountability, including security risk assurance approvals, user acceptance testing (UAT) acceptance, and Go-Live authorization, approved at the designated authority level.

In 2024, DTS undertook a detailed review of its 5-stage project delivery framework as part of a commitment to continuous improvement. This review focused on ensuring the framework enables efficient project delivery while maintaining strong and appropriate governance.

As a result of this review, the framework was refined to better align governance rigour with project complexity through a tiered approach. Projects are now assessed and assigned a delivery tier that establishes a fit-for-purpose level of governance, ensuring that governance activities and deliverables are meaningful and proportionate to the work being undertaken. This approach reduces unnecessary effort for smaller, lower-complexity initiatives, while preserving robust oversight for more complex projects.

The right-sizing of governance is established collaboratively through the definition of a project profile at the project's outset with key stakeholders to define the project's risk and complexity, with frequent reviews as the project flows through the delivery framework. This

enables tailoring of governance requirements to the specific needs of each project, supporting timely delivery, effective decision-making, and continued accountability across the portfolio.

Each of the five stages is discussed below.

STAGE 1 - PROJECT INITIATION

The first stage in the project delivery lifecycle for DTS investments is Project Initiation. This stage establishes the foundational definition, governance, and oversight required to proceed with confidence into subsequent phases of delivery.

A Project Charter is completed during this stage. The Charter formally defines the project's objectives, scope, key stakeholders, high-level deliverables, and success criteria, and identifies material considerations such as change management, organizational impacts, and dependencies. Lessons learned from prior initiatives are reviewed, initial technology requirements are gathered, and impacted stakeholders are identified. The appropriate project delivery methodology is also confirmed, establishing the delivery approach and associated governance expectations for subsequent stages.

A Project Profile is developed as a key control artifact in the initiation stage. The profile includes a structured assessment of project characteristics and risk indicators and is used to determine the need for early engagement with relevant business and governance functions such as Enterprise Risk Management, Legal, Human Resources, Data Governance, Organizational Change Management (OCM), and other subject matter areas, as appropriate. The Project Profile is reviewed with subject matter experts from core governance and delivery functions, including Security, Enterprise Architecture, Organizational Change Management, and Sustainment, through a formal Governance Meeting. This meeting serves two primary purposes:

1. To determine the appropriate governance tier, based on project complexity and risk, which establishes the baseline set of required governance deliverables and controls; and
2. To ensure all relevant stakeholders are informed of the initiative and aligned on their anticipated roles and involvement.

During Project Initiation, the project is supported by either an approved “discovery business case” or, for well-defined initiatives, an approved full “execution business case”. A discovery business case only funds the project through its discovery phases and requires an execution business case for the remaining phases of the project. The focus of this stage is to confirm the business need, define the proposed technology solution or combination of solutions, and ensure alignment with desired business outcomes and capability gaps.

The approach taken during project initiation varies based on the nature of the investment. For example, initiatives involving new or significantly changed technology solutions may require additional solution definition activities, such as market scans, requests for information RFIs, or procurement processes to identify and select appropriate vendors or platforms. In contrast, like for like upgrades or extensions of existing, well understood solutions may proceed directly to scoping, as the technology, vendor, and business justification are already established.

Completion of the Initiation stage confirms that the project is appropriately defined, governed, and tiered, with required approvals in place, enabling progression to the next stage in accordance with the DTS governance gating framework.

STAGE 2 - PLANNING

The Planning stage establishes the approved baseline for scope, requirements, delivery approach, and governance prior to Design and Execution. This stage refines the project definition to ensure readiness to proceed in a controlled manner.

A primary objective of the Planning stage is the documentation and validation of business requirements. High-level and detailed requirements are developed and consolidated into a formal Business Requirements Document. A Requirements Quality Assessment is a governance assessment that is completed to confirm completeness, quality, and traceability prior to gate approval.

A conceptual design document is completed that defines the proposed solution architecture of major components, supported by an approved testing strategy. These artifacts are reviewed by the appropriate governing authorities to confirm alignment with enterprise, security, and delivery standards.

Additional Planning stage activities include development of an integrated project plan that includes schedule, resourcing, and dependencies, facilitation of a risk assessment workshop, initiation of business benefits identification and value realization planning, identification of the estimated five-year sustainment spend, and initiation of OCM activities, as required.

Completion of the Planning stage confirms that requirements, design intent, risks, and delivery plans are sufficiently defined and approved, enabling progression to the Design stage in accordance with the DTS governance gating framework.

STAGE 3 - DESIGN

The Design stage establishes the approved solution, security, testing, and sustainment baselines required to proceed to execution. This stage confirms that the solution is technically sound, secure, testable, and supportable, and that key delivery risks are identified and managed.

During this stage, project risks are identified and documented with defined mitigation and response strategies, and OCM deliverables are advanced as required. A Logical Design Document is completed and reviewed for approval to confirm alignment with enterprise architecture standards and long-term maintainability.

A Security Impact Assessment and data classification are completed by the Security team to ensure compliance with security, privacy, and regulatory requirements. The Master Test Plan and Performance Test Plan are created, and test cases and requirements traceability are reviewed and approved to confirm execution readiness.

The Sustainment Requirements Document is initiated to define operational support and lifecycle considerations. Where full execution funding has not been previously approved, full project funding is formally requested and authorized through the execution business case approval process during this stage. DTS follows the same general business case process described above.

Completion of the Design stage confirms that design, security, testing, risk, funding, and sustainment requirements are approved, enabling controlled progression to the Execution stage in accordance with the DTS governance gating framework.

STAGE 4 - EXECUTION

The Execution stage governs the controlled build, testing, and deployment of the approved solution. Project delivery is actively monitored for schedule and budget performance, with identified risks managed and closed in accordance with approved mitigation strategies. Final architecture documentation is completed, and approved sustainment resources are confirmed to support ongoing operations.

Testing is executed in accordance with approved plans, with formal user UAT sign off obtained. As a condition of technology deployment, no high severity defects may be open at the point of release. A formal Go-Live decision is made by the appropriate authorizing body, confirming operational, security, testing, and sustainment readiness. Where applicable, multiple controlled releases may occur, subject to the same governance requirements.

Once a solution is live, it enters technical in servicing, which begins with “Hypercare Support” – a defined period of heightened support by the project team to ensure that solution is functioning as planned. The length of this period varies depending on the size

and complexity of the project; it can be as short as two weeks but could also be as long as several months for a multi-year project.

Completion of the Execution stage enables transition to the Closing stage and sustainment operations.

STAGE 5 - CLOSING

The Closing stage governs the formal completion of the project and transition to sustainment. Following Hypercare, the Sustainment Requirements Document is finalized, a Project Closing Report is completed, and financial closeout activities are performed, including confirmation of in-servicing and closure of project financials. Lessons learned are documented and archived in accordance with governance requirements, confirming full project closure under the DTS gating framework.

In addition to formal projects, this governance framework is applied, in a fit-for-purpose manner, to select ongoing technology programs where the scale, complexity, and risk profile warrant structured oversight. Technology programs differ from projects in that they consist of continuous or cyclical work streams (for example: sustainment, upgrades, and regulatory or security-driven changes) without a defined end state, but which collectively deliver critical business capabilities. DTS applies governance discipline to programs that exhibit characteristics such as high technical or delivery complexity, elevated cybersecurity or regulatory risk, material impact to enterprise system availability or customer service, significant coordination across multiple technology domains or vendors, or substantial financial and resource commitments.

For example, annual patch upgrades introduce coordinated changes across a critical enterprise platform supporting financial, operational, and customer processes. Given its enterprise-wide impact, integration dependencies, and the need to maintain system stability and security, it is governed using structured delivery controls aligned to the broader technology delivery framework.

As the DTS work program continues to expand, driven by increased adoption of cloud-based technologies, growing cybersecurity requirements, and ongoing modernization, the use of this governance approach will continue to be applied across the full range of work. This provides proportionate oversight, disciplined decision-making, and performance monitoring for project-based and programmatic activities.

4.10.4.2 OPERATING MODEL

DTS delivers technology solutions and operational sustainment through a mature, integrated operating model that is designed to support Hydro One's business objectives over the full lifecycle of technology solutions. The organization is structured to enable the delivery of new capabilities that align with customers' needs and the reliable sustainment of existing platforms that employees and customers depend on every day.

The DTS operating model builds on proven delivery practices while incorporating modern delivery approaches, integrated technology toolsets, and strong business alignment. The focus is on delivering value by organizing teams around technology outcomes, building deep in-house knowledge of critical systems, and leveraging external partners strategically for implementation and scaling. This model enables DTS to support Hydro One as it continues to manage its grid, operations, and customer experience through increasing digital and data-driven capabilities.

ORGANIZATION

DTS is organized into Towers, with each Tower accountable for a distinct set of technology capabilities. Within each Tower, domains are established to align directly with business technologies, platforms, and objectives. This structure ensures clear ownership, accountability, and alignment between domains and the business functions they support. Additionally, where they are shared accountabilities, it is easily identified and managed.

Each domain is responsible for end-to-end lifecycle of its assigned technologies. This responsibility includes:

- Strategic planning and future-state development aligned to business objectives;

- The delivery or optimization of new or existing capabilities through projects and incremental enhancements;
- Ongoing operational sustainment, reliability, and performance management; and,
- Continuous improvement, modernization, and obsolescence management.

This structure ensures that technologies are managed holistically rather than as disconnected projects or operations. Domains maintain a deep understanding of both the business context and the underlying technology, enabling informed prioritization between new delivery, enhancements, and sustainment activities.

DTS Towers are organized to optimally deliver both project work and operational sustainment across Hydro One, aligned to the strategic objectives of both DTS and overall enterprise. Rather than separating delivery from operations, the operating model integrates these responsibilities within the same organizational structures. This approach ensures continuity of knowledge, accountability for outcomes, and smoother transitions from implementation into steady-state operations. The result is a delivery and sustainment model that supports reliable technologies for employees, customers, and field crews, while maintaining the agility required to respond to evolving business.

This organizational alignment supports consistent execution across the enterprise and ensures that technology investments continue to deliver value throughout their lifecycles.

END-TO-END LIFECYCLE MANAGEMENT

The DTS operating model focuses on full lifecycle ownership. Technologies are supported from their initial ideation through design, build, deployment, operations, and eventual modernization or retirement. This approach ensures that decisions made early in the lifecycle consider long-term operational impacts, sustainability, and cost efficiency.

Lifecycle ownership enables:

- Better alignment between business requirements and technical solutions
- Improved quality through continuous testing, security, and monitoring

- More effective management of legacy technology, obsolescence, and modernization
- Greater predictability in costs, performance, and risk

By maintaining ownership throughout the lifecycle, DTS ensures that technologies remain fit for purpose as business needs evolve and as Hydro One continues to adopt new operating models and regulatory requirements.

IN-HOUSE EXPERTISE WITH STRATEGIC PARTNER SUPPORT

A core principle of the DTS operating model is maintaining key knowledge and decision-making capability in-house. DTS continues to build and retain deep expertise in critical business systems, architectures, and technologies. This ensures Hydro One has the internal expertise required to make informed decisions on strategic direction, solution design, and investment prioritization.

External partners and contractors are leveraged strategically to support implementation, specialized skills, and workforce scaling where appropriate. This model allows DTS to access additional capacity and expertise while preserving institutional knowledge and long-term accountability within the organization. Capgemini has been retained as the primary outsourcing partner for DTS, performing support for Hydro One's help desk, IT infrastructure support, as well as application support.

ENTERPRISE ARCHITECTURE, OPERATIONS AND SECURITY AS FOUNDATIONAL CAPABILITIES

Enterprise Architecture, Operations, and Security functions underpin the DTS organizational structure and delivery model, providing the standards, governance, and operational rigour required to deliver and sustain technology at scale. These functions are managed centrally and operate horizontally across Towers and domains, ensuring consistency, resilience, and alignment to enterprise objectives while enabling teams to deliver effectively within their respective technological areas.

Enterprise Architecture establishes strategic and technical direction for technology across Hydro One. This includes defining target architectures, integration patterns, technology standards, and roadmaps that guide solution design and delivery. By embedding architectural oversight early and throughout the lifecycle, DTS ensures that new capabilities align to enterprise platforms, support long-term sustainability, and enable interoperability across systems critical to intelligent grid and operational outcomes.

The Technology Operations function provides the foundation for reliable, secure, and high-performing services. Operational capabilities such as monitoring, incident and problem management, performance management, and service continuity are integrated with delivery teams to ensure that solutions transition smoothly into steady-state operations and continue to meet business expectations. This tight integration reinforces end-to-end lifecycle ownership and supports consistent service experiences for employees, customers, and field operations.

Security is embedded as a core enabling capability across DTS, with ownership and oversight from the Security Tower. Security functions define enterprise security standards, risk management practices, and compliance requirements, while working closely with domains throughout design, delivery, and operations. This integrated approach ensures that security considerations are addressed proactively rather than retrospectively, supporting regulatory compliance, data protection, and system resilience without impeding delivery velocity.

Together, these underpinning functions enable DTS to scale delivery, manage risk effectively, and sustain complex technology environments while supporting ongoing modernization and transformation initiatives.

DATA ANALYTICS AND ARTIFICIAL INTELLIGENCE (DAAI)

Data Analytics and Artificial Intelligence (AI) are foundational enablers in the effective execution of IT, OT, and Security functions. The Data Analytics and AI (DAAI) Domain was introduced in 2025 as strategic enablers for the execution of Hydro One’s IT work program. This is accomplished by providing the data, analytics, and AI capabilities

required to plan, deliver, monitor, and sustain both capital initiatives and ongoing operations. DAAI supports IT, OT, and Security functions by ensuring execution decisions are informed by reliable, timely, and governed data, and by equipping delivery teams with the analytical tools needed to manage performance, risk, and outcomes across the full lifecycle of work.

DAAI underpins day-to-day execution by enabling real-time and near-real-time visibility into systems, services, and delivery activities. Through centralized data platforms, streaming data, and advanced analytics, DAAI supports the governance and oversight of data and information flowing between systems and lines of business. Capabilities surrounding the management of data allow for early identification of emerging issues, and include proactive incident management through integrations and data integrity monitoring. These capabilities allow teams to respond quickly to operational events, maintain service stability, and execute planned capital and sustainment work with greater predictability. In Security and OT environments, this enhanced visibility strengthens situational awareness and supports timely detection and response to operational and cyber risks.

DAAI also enables efficient and disciplined delivery by embedding analytics and automation into execution and operational workflows. Predictive and diagnostic insights support application and asset sustainment by identifying trends, forecasting failures, and informing preventative actions, reducing unplanned outages and rework. Data-driven insights improve prioritization and resource allocation across competing demands, ensuring capital investments and sustainment activities are aligned with risk, performance, and business outcomes. Increasingly, valuable insights are obtained through the connection of multiple data sources. DAAI supports the connection of these data sources, validating the reliability, data definition, lineage mapping, and therefore the integrity of the insights and outcomes. Collectively, DAAI acts as a force multiplier for execution - improving delivery discipline, strengthening operational resilience, and enabling the organization to execute its technology accountabilities more effectively and efficiently.

CONTINUOUS IMPROVEMENT AND OPERATIONAL MATURITY

The DTS operating model emphasizes continuous improvement in delivery and operations. Teams regularly reflect on outcomes, performance, and ways of working to identify opportunities to improve efficiency, quality, and predictability. This focus has resulted in measurable improvements across delivery execution, operational stability, and business alignment. For example, as part of DTS' 5-stage governance framework, upon completion each project must conduct a "lessons learned" workshop with all key stakeholders. These workshops produce a structured and documented set of insights, capturing practices to be sustained and opportunities for improvement identified during delivery. The outputs are systematically consolidated and shared across DTS, enabling lessons learned on individual initiatives to inform and improve future projects and organizational delivery practices.

Key improvements include:

- More predictable delivery timelines through better decomposition and planning of work
- Improved cost management through earlier validation of requirements and incremental delivery
- Stronger alignment with business needs, leading to higher adoption and realized value
- Enhanced operational reliability through integrated delivery and sustainment ownership

These improvements support the efficient management of technology for both employees and customers, ensuring that Hydro One's technology environment remains reliable, secure, and responsive to change.

BENEFITS OF THE CURRENT DELIVERY MODEL

The current DTS delivery and sourcing model provides several benefits to Hydro One's customers:

- Operational stability and reliability, achieved through a dedicated sustainment partner responsible for day-to-day support of core platforms and infrastructure;

- Retention and growth of institutional knowledge, by maintaining strong internal capabilities in architecture, product ownership, service management, and technology governance;
- Flexibility and scalability, enabling Hydro One to scale delivery capacity up or down by drawing on delivery partners as needed;
- Access to specialized expertise, allowing DTS to engage partners with deep domain or technical knowledge for complex or emerging technology needs;
- Improved delivery focus, by enabling internal teams to concentrate on strategic planning, business engagement, and oversight while partners execute defined scopes of work;
- A competitive and diversified partner landscape, reducing dependency on any single provider for project delivery and enabling Hydro One to select partners best suited to specific initiatives; and,
- Alignment with industry best practices, supporting a modern technology operating model that balances internal accountability with external delivery capability.

While DTS maintains strong internal teams to provide leadership, direction, and oversight, third-party delivery partners remain a key pillar of Hydro One's technology delivery strategy. DTS continues to work closely with Supply Chain to maintain vendors of record that support major projects, sustainment activities, business enablement initiatives, and specialized technology work. This model is intended to provide comprehensive support to Hydro One's technology organization, ensure delivery resilience, and enable the organization to manage varying levels of capital and operational throughput effectively.

4.10.4.3 WORKFORCE RESOURCING STRATEGY

DTS regular headcount is projected to increase moderately over the 2028–2032 period as technology becomes more deeply embedded across Hydro One's operations. Digital platforms, data-enabled tools, and secure connectivity are increasingly supporting grid operations, field staff, and business users that were not as extensively technology-enabled, expanding the scope of services required to maintain reliable, resilient, and secure critical infrastructure.

The upward trend reflects sustained growth in the DTS work program, driven by greater reliance on enterprise systems, data as a strategic asset, cybersecurity capabilities, and user-centric digital services that support workforce effectiveness and safety. With the growing use of AI in technology to both identify vulnerabilities and provide fixes, a moderate increase in resources is required in DTS to support the additional operations maturity and effort to account for vendor provided patches and upgrades. While time-bound initiatives continue to leverage temporary resources where appropriate, the expanding baseline of operational, regulatory, and service demands requires additional permanent capacity to ensure stability, resilience, and effective oversight of core technology environments.

Headcount growth is therefore focused on strengthening internal capabilities across analytics and AI, enterprise application management, security and infrastructure, experience delivery, and strategic planning. This approach supports disciplined technology modernization, improved governance and regulatory compliance, and the long-term enablement of customers and employees as digital capabilities continue to proliferate across the organization.

For more information about the DTS regular headcount, please see workforce planning Exhibit E-06-02, Section 2.0.

The key drivers of the DTS resourcing plans include the following:

- **Service delivery**: support business enablement by ensuring that the right skills and methods are focused on business outcomes and corporate strategy.
- **Enhanced trust and transparency**: increased collaboration with embedded cross-functional teams.
- **Efficiency**: improved digital capabilities enabling faster outputs, better data, and more value delivered to all lines-of-business.

These drivers support DTS' resourcing decisions. These include the decision to maintain key knowledge in-house while outsourcing commodity work to partners and to continue delivering project and sustainment excellence through the operating model described

above. Accordingly, the work program of DTS is based on collaboration with the business to provide capabilities and enhanced services that will enable their business outcomes.

As Hydro One's primary sustainment partner, Capgemini supports the ongoing operation of foundational technology services, including the enterprise Help Desk, infrastructure management services, and selected application services. This sustainment partnership provides continuity of service, operational stability, ongoing automation efficiencies, and access to specialized skills required to operate complex enterprise platforms at scale.

In addition to Capgemini, DTS maintains relationships with a range of other delivery partners, which are engaged based on their individual strengths, technical expertise, and alignment to specific business or technology needs. These partners are leveraged primarily for project-based delivery, specialized initiatives, and transformation work where additional capacity or niche skills are required. This diversified partner ecosystem enables DTS to access best-in-class capabilities while maintaining flexibility in how work is delivered.

DTS's resourcing strategy balances internal capability development augmented with outsourced delivery. Hydro One continues to build and retain in-house knowledge in areas that are critical to enterprise oversight, solution design, integration, vendor management, and long-term technology stewardship. At the same time, work that benefits from scale, specialization, or variable capacity - such as sustainment services, infrastructure operations, and discrete project delivery - is delivered through external partners. This approach allows DTS to focus internal resources on high-value activities while leveraging partners where it is most effective to do so.

4.10.5 SYSTEM OPERATIONS

The Systems Operation portfolio includes the Integrated System Operations Centre (ISOC) and the Backup Ontario Grid Control Centre (BU-OGCC). These facilities are mission-critical assets that enable safe, reliable, and real-time operation of Hydro One's transmission and distribution systems. The Systems Operations capital portfolio consists of a discrete portfolio of primarily facilities related investments associated with the ISOC and BU-OGCC. These projects will be delivered by contracted resources, with project oversight provided by internal System Operations resources. For more information about the headcount within the System Operations function, please see workforce planning Exhibit E-06-02, Section 4.0. Investments pertaining to the operational technology within the ISOC and BUOGCC are included within the DTS capital portfolio and are executed by DTS and external resources. The DTS work execution strategy is described above in Section 4.10.4.

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SECTION 4.11 – GSP – MATERIAL INVESTMENT SUMMARY DOCUMENTS

4.11.1 INTRODUCTION

General Plant System Plan (GSP) Investment Summary Documents (ISD) are attached to this section. ISDs are provided where any proposed capital expenditure or prepaid expenditure for cloud computing solution implementation within the GSP meets either of the following conditions:

- The Transmission-allocated portion exceeds the materiality threshold of $4M in a single year; or
- The Distribution-allocated portion exceeds the materiality threshold of $1M in a single year.

Hydro One has endeavored to maintain the ISD structure from its previous Transmission and Distribution Application (EB-2021-0110) and, where applicable, has added new ISDs and retired ISDs that are completed or are no longer required. To present expenditures consistently across the current and forecast rate periods, Hydro One has mapped certain investments from the prior rate application to new ISDs in this application. Where material, these mappings are discussed in the relevant ISDs. The mapping does not change the overall expenditures established to implement the OEB-approved Settlement Proposal in EB-2021-0110.

In the previous Application, investments that had capital expenditures below the materiality threshold were grouped within each OEB category as “Other” investments. In this Application, investments (material or below materiality) have been assigned to an applicable ISD.

Based on the foregoing, expenditures may be assigned to one ISD (or “Other”) in the 2023-2027 period and to a different ISD in the 2028-2032 period. As a result, the variance analyses in some ISDs may include historical expenditures from another ISD from the

previous Application to present expenditure trends on a comparable basis between the two periods. Table 1 below presents the material ISDs included in the GSP.

Table 1 - GSP - Material General Plant Capital Investments

ISD	Investment Title
Fleet & Aviation	
G-GP-01	Transport and Work Equipment (TWE)
G-GP-02	Helicopter Renewal
Facilities & Real Estate (FRE)	
G-GP-03	Facilities and Accommodations
G-GP-04	Transmission Facilities
Digital & Technology Solutions (DTS)	
G-GP-05	Information Technology Services Enablement
G-GP-06	Corporate Services Enablement
G-GP-07	Customer Service Technology Enablement
G-GP-08	Work and Asset Management Enablement
G-GP-10	Physical Security Upgrades
G-GP-11	Cybersecurity and Digital Protection
G-GP-12	Common Operations Technology Infrastructure
G-GP-16	Network Management System Investments
G-GP-25	Operations Projects
G-GP-26	Data, Analytics, and AI Enablement
G-GP-29	SAP S/4HANA OneCore Transformation
G-GP-30	Enterprise Security Platforms and Controls
G-GP-31	Control Room Equipment
System Operations	
G-GP-13	Operating Technology Facilities Sustainment
G-GP-15	BU-OGCC & ISOC Office Remediation
Other General Plant	
G-GP-19	Grid Control Network Sustainment
G-GP-22	Distribution Capital Contribution to Hydro One Transmission

ISD	Investment Title
G-GP-23	PMU Synchrophasors Program
G-GP-27	Transmission Capital Contribution to Third Party

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G-GP-01	TRANSPORT AND WORK EQUIPMENT (TWE)
Primary Trigger:	Business Support Sustainment and System Reliability
OEB RRF Outcomes:	Customer Focus, Operational Effectiveness, Public Policy Responsiveness, Financial Performance

Net Capital Expenditures:

($M)	2028	2029	2030	2031	2032	Total
Hydro One	266.1	148.7	170.6	133.6	131.0	850.1

Summary:

This investment involves the acquisition of transport and work equipment. It is driven by the condition of the existing fleet, the operational demands of the Transmission and Distribution businesses, and the need for new equipment to support the growing work program. The investment is comprised of two related but distinct plans: the Replacement Program and the Planned Growth Program.

The primary trigger for the Replacement Program is business support sustainment. Through this investment, the necessary planned replacement of end of life vehicles will be carried out, ensuring the ongoing availability of a functional fleet of transport and work equipment. This fleet acquisition is crucial to maintaining the company's operational continuity and avoiding adverse impacts on work program delivery and customer reliability.

The primary trigger for the Planned Growth Program is the acquisition of additional fleet equipment to support the significant work program growth during the planning period, as seen in Exhibit E-06-02, Section 4.0.

1.0 OVERVIEW

The Transport & Work Equipment (TWE) Program involves the acquisition of transport and work equipment. It is comprised of two related but distinct plans: the Replacement Program and the Planned Growth Program.

The TWE Replacement Program involves the replacement of end of life fleet vehicles and equipment. Under this program, vehicles and equipment are replaced based on their overall condition. This condition is assessed relative to a range of factors, including expected service life (ESL) including age, mileage and/or engine hours, mechanical condition and maintenance history. Other key program considerations include the needs of Hydro One's work programs and planned staffing levels. TWE Asset information and the lifecycle strategies are detailed in GSP Section 4.2.2 and in the asset management and Investment Planning Process in GSP Section 4.7.3.1.

The TWE Replacement Program is required to minimize fleet lifecycle costs and equipment downtime and allows Hydro One to optimize fleet equipment levels to meet work program demands. The program mitigates potential delays in responding to unplanned system and customer incidents, such as trouble calls and storm response. In addition, the TWE Replacement Program will ensure that employees have appropriate equipment to do their job, minimizing the risk of injury and supporting employee satisfaction. It also allows Hydro One to comply with applicable codes, standards and regulations while sustainably managing its TWE-related environmental footprint.

The Planned Growth Program is a new program that will be used to invest in new equipment to support the work program and headcount increases over the planning period, as detailed in Exhibit E-06-02 Section 4.0. Like the Replacement Program, the Planned Growth Program is required to ensure that employees have appropriate equipment to do their job in a safe and effective manner. The growth of Hydro One planned work programs in the 2028-2032 rate period requires investment in additional work equipment to enable that work to be completed in a timely and safe manner.

2.0 INVESTMENT NEED

2.1 REPLACEMENT PROGRAM

TWE Replacement Program investments are driven by the condition of Hydro One's fleet and the operational demands of the Transmission and Distribution Businesses.

A key input for the company's fleet lifecycle management approach is ESL. The ESLs of different categories of TWE help identify the assets that are considered beyond ESL, as described in GSP Section 4.10.2.1. These assets are then further examined by technicians to verify their condition prior to replacement. Replacing fleet equipment at the recommended ESL helps to control day-to-day operating costs and maximizes line of business operating efficiencies by improving uptime through equipment availability.

Hydro One engaged Utilimarc to benchmark various aspects of Fleet Services' operations (i.e., 2024 fleet costs, fleet unit information, fleet utilization and staffing) against a group of North American utilities. Utilimarc found that Hydro One's fleet of vehicles is older than that of other Utilimarc participants (7.4 vs. 6.5 years). Hydro One's other equipment is also older than that of other Utilimarc participants (12.6 vs. 11.3 years). Additionally, Hydro One had the second lowest percentage of low mileage vehicles (12.8%) in the group. This means Hydro One is 13.3% below the participant average and that the average Hydro One vehicle drives 2,800 more kilometers on average than its peers.[1]

Hydro One also engaged Utilimarc to review Hydro One's current lifecycle management and to recommend the optimal time for replacing various classes of fleet assets. As an illustrative example of Utilimarc's analysis, Figure 1 depicts the annualized total cost for a light duty pickup truck over its lifespan.[2] It shows that the optimal timing for replacement occurs before the truck's maintenance costs exceed the ownership costs.

[1] Utilimarc Hydro One Benchmarking Report is provided as an attachment under GSP Section 4.3 Attachment 1 page 21-22. Values reported to one decimal place. Further details found in report
[2] Utilimarc, Hydro One Fleet Lifecycle Study – GSP Section 4.3 Attachment 2, page 9

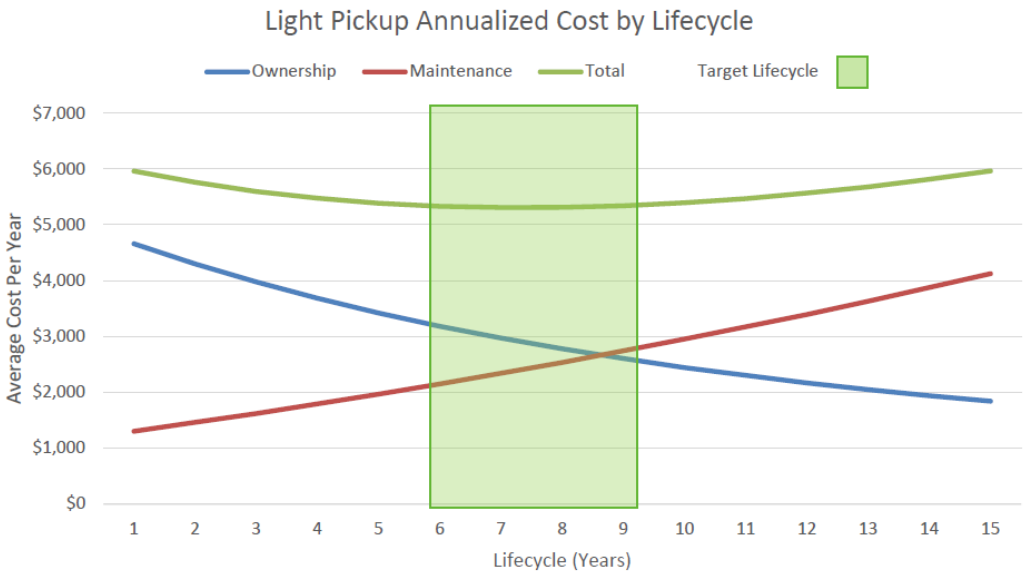

Figure 1: Light Pickup Annualized Cost by Lifecycle [3]

If Hydro One's TWE investment levels for on-road vehicles remain at current levels through the planning period (i.e. a sustained funding scenario), maintenance costs would increase by 18% from 2028 to 2032.[4] This is due to the compounding effect of greater volumes of equipment operating beyond its target lifecycle[5] (the projected average age of equipment is provided in Figure 2 below), and equipment that is operating beyond its target lifecycle costs more to repair and maintain.

Under this sustained funding scenario, as unit costs rise due to inflation, the average age of the fleet will hold steady and mirror current operating conditions which are beyond the optimal lifecycle age as indicated in the Utilimarc Lifecycle Study. In addition to maintenance costs, maintenance labour hours are expected to increase by about 70,000 hours or 13% from 2028 to 2032.[6] The increases in maintenance costs and corresponding downtime will adversely affect the utility's work programs that are crucial to ensuring

[3] Utilimarc, Hydro One Fleet Lifecycle Study – GSP Section 4.3 Attachment 2, p. 9.
[4] Utilimarc, Hydro One Fleet Lifecycle Study – GSP Section 4.3 Attachment 2, p. 14, *Sustained Funding - Annual Maintenance.*
[5] The recommended target lifecycles for various Hydro One vehicles classes are provided on page 11 of Utilimarc's Fleet Lifecycle Study.
[6] Utilimarc, Hydro One Fleet Lifecycle Study – GSP Section 4.3 Attachment 2, p. 14, *Total Labour Hour Increase (Assuming Sustained Funding)*.

customer service and reliability. Furthermore, these maintenance events would lead to equipment being unavailable due to overall mechanical condition.

To counteract the expected increase in downtime and to maintain equipment availability, Fleet Services plans to increase the replacement rate of TWE equipment over the planning period. This will move the overall fleet age closer to the optimal lifecycles for equipment, as recommended by Utilimarc. The proposed funding levels are a more balanced approach to managing investment levels and provide for a gradual return to optimal lifecycle recommended by Utilimarc.

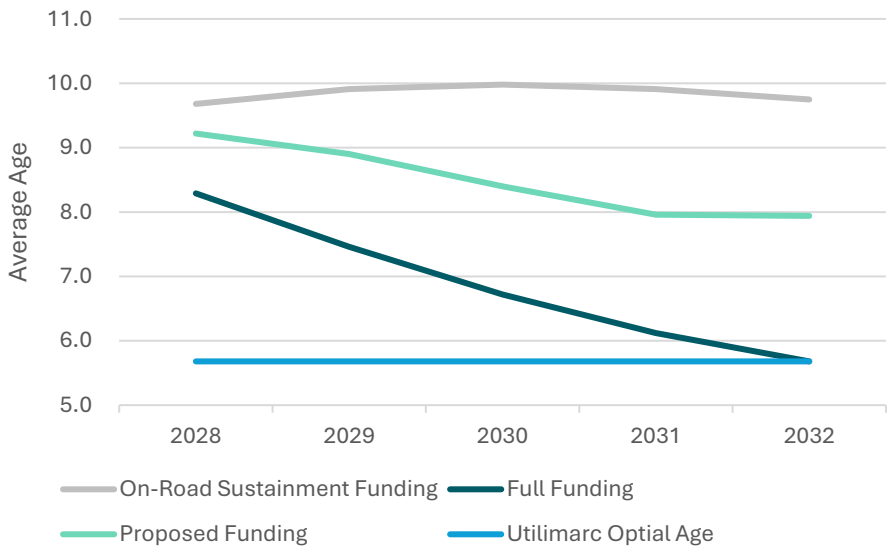

Figure 2: Average Age of Fleet [7]

Under the Replacement Program, Hydro One will not increase fleet size in order to meet operational demands. Any fleet growth will be managed under the Planned Growth Program and all equipment growth will be tied back to headcount increases as described in Exhibit E-06-02 Section 4.0.

Beyond the planned like-for-like replacements, Fleet Services has begun the transition to low or zero emission technologies. Hydro One's Integrated Green Fleet Charging Strategy

[7] Utilimarc, Hydro One Fleet Lifecycle Study – GSP Section 4.3 Attachment 2, p. 14-15, *Sustainment Funding – Average Age.*

(IGFCS) is to replace internal combustion engine vehicles with low or zero emission technology where market conditions and availability allow. Due to disruption in the electric vehicle (EV) market, some Original Equipment Manufacturers ("OEMs") are slowing the production of EV and Plug-in Hybrid Electric Vehicle (PHEV) vehicles which may affect future Green Fleet targets. To offset disruptions, Fleet Services is moving to more fuel-efficient vehicles, where applicable, to support continued greenhouse gas (GHG) reduction.

Hydro One has committed to transitioning 100% of its sedan and SUV fleet to plug-in electric or hybrid electric vehicles by 2030. Fleet Services will initially focus on replacing light-class vehicles (primarily, SUVs and sedans). In the future, as options for EV or plug-in hybrid electric pickup trucks and work trucks mature, they may be incorporated into the Replacement Program. The Proposed Funding Scenario provides a CO_2 offset of up 20 million kg over the plan period through the increase purchase of EV and Hybrid Electric Vehicles.[8]

2.2 PLANNED GROWTH PROGRAM

The Planned Growth Program includes investments in an additional 1,141 TWE necessary to support the delivery and timely completion of the Transmission and Distribution 2028-2032 planned work program. These investments are required because the growth in the work program and the associated headcount growth (see Exhibit E-06-02, Section 4.0) exceeds Fleet Services' ability to meet demand through redeployment of under-utilized equipment or the use of rental units. Fleet Services will continue to maximize the use of existing assets and evaluate rental opportunities where practical. However, the scale of the planned work program growth in 2028-2032, combined with the limited availability of low-mileage units and the cost and availability constraints associated with rentals, necessitates the acquisition of additional fleet equipment.

[8] Utilimarc, Hydro One Fleet Lifecycle Study – GSP Section 4.3 Attachment 2, p. 14, *Proposed Funding – CO2 offset*

The proposed fleet additions have been determined based on the approved headcount against the current fleet equipment mix for each of the impacted lines of business. This methodology is explained in GSP Section 4.10.2.2.

3.0 INVESTMENT DESCRIPTION

3.1 REPLACEMENT PROGRAM

The TWE Replacement Program involves capital investment to replace on average 500 units per year. This overall unit count is in line with historic investment levels, however the composition of equipment being replaced in this planning period differs from the previous period. There will be a focus on Heavy Power Take-Off (PTO) and Non-PTO equipment. Equipment quantities may vary to manage OEM availability requiring in-year flexibility. This will also allow Fleet Services to replace TWE assets in closer alignment with their optimal lifecycles as recommended by Utilimarc.

In 2025, Utilimarc conducted a Fleet Lifecycle Study on Hydro One's fleet to ascertain what the recommended lifecycle for its top eight vehicle types are.[9] The study showed, among other things, that Hydro One will need to invest more capital to replace equipment due to the price increase for TWE. The Utilimarc purchase price used for a bucket truck in the 2025 study is $515,148[10] compared to the $350,000 purchase price used in the 2020 Utilimarc Fleet Lifecycle study,[11] which is a 47% increase. Hydro One has also found Pick-up trucks have increased by 35% since 2020 as demonstrated in SPF Section 1.8, Table 1.

Under the proposed investment levels, maintenance costs (labour and parts) for on-road vehicles will remain relatively flat year-over-year, as shown in Figure 3. During the planning period, the proposed replacements will result in increased equipment availability due to reduced breakdowns and will reduce overall exposure to maintenance requirements. The average age of the on-road units is expected to decrease from 9.31 years in 2027 to 7.94 years in 2032.

[9] Utilimarc Hydro One Fleet Lifecycle Study is provided as an attachment under GSP Section 4.3. Attachment 2.
[10] Utilimarc Hydro One Fleet Lifecycle Study is provided as an attachment under GSP Section 4.3. Attachment 2, p. 11
[11] EB-2021-0110, Exhibit B-4-1, Section 4.3 Attachment 2, p. 11

On-Road Proposed Funding	2026	2027	2028	2029	2030	2031	2032
Annual Capital ($M)	$37,232,620.0	$35,264,637.0	$75,282,229.0	$77,360,431.0	$78,018,559.0	$80,817,503.0	$84,551,768.0
Units Replaced	88	79	286	371	440	420	301
Annual Maintenance ($M)	$63,556,808.0	$68,449,670.0	$68,355,340.0	$68,333,865.0	$68,897,639.0	$69,382,832.0	$70,142,582.0
Annual Ownership ($M)	$42,612,009.0	$40,395,899.0	$44,675,870.0	$49,020,184.0	$53,002,610.0	$56,684,198.0	$59,791,338.0
Total ($M)	$106,168,817.0	$108,845,569.0	$113,031,210.0	$117,354,049.0	$121,900,249.0	$126,067,030.0	$129,933,920.0
Ave Age	8.66	9.31	9.22	8.90	8.40	7.96	7.94

Figure 3: On-Road Proposed Funding Projection for 2026-2032 from Utilimarc's Hydro One Fleet Lifecycle Study[12]

Other Proposed Funding	2026	2027	2028	2029	2030	2031	2032
Annual Capital ($M)	$18,739,745.0	$21,720,131.0	$21,717,673.0	$23,307,017.0	$26,483,107.0	$27,638,559.0	$28,015,584.0
Units Replaced	180	191	197	187	212	216	215
Annual Maintenance ($M)	$26,695,989.0	$27,532,536.0	$28,460,572.0	$29,430,258.0	$30,366,064.0	$31,328,498.0	$32,344,766.0
Annual Ownership ($M)	$11,780,504.0	$13,200,065.0	$14,404,609.0	$15,657,810.0	$17,181,731.0	$18,651,023.0	$19,961,737.0
Total ($M)	$38,476,493.0	$40,732,601.0	$42,865,181.0	$45,088,068.0	$47,547,795.0	$49,979,521.0	$52,306,503.0
Ave Age	13.60	13.44	13.33	13.30	13.17	13.02	12.88

Figure 4: Other Proposed Funding Projections for 2026-2032 from Utilimarc's Hydro One Fleet Lifecycle Study[13]

As noted above, fleet replacements are based on the overall condition of TWE assets. This condition is assessed relative to a range of factors, including: ESL, age, mileage and/or engine hours, mechanical condition and maintenance history (see GSP Sections 4.2.2.2 and 4.10.2.1). ESL is based on manufacturers' recommendations and is further supported by industry benchmarking detailed in Utilimarc Hydro One Fleet Lifecycle Study in GSP Section 4.3, Attachment 2, page 20 to 45.

The proposed breakdown of spending over the planning period is summarized in Table 1 below. Fleet Services performs an on-going assessment of equipment needs. As a result, the costs indicated per equipment type may change based on these updated replacement priorities.

[12] Utilimarc, Hydro One Fleet Lifecycle Study – GSP Section 4.3 Attachment 2, p. 14, *On-Road Proposed Funding*
[13] Utilimarc, Hydro One Fleet Lifecycle Study – GSP Section 4.3 Attachment 2, p. 15, *Other Proposed Funding*

Table 1 - Forecast of Replacement Program Acquisitions for 2028 to 2032 ($M)[14]

Equipment Type	2028	2029	2030	2031	2032
Light & Heavy Non-PTO[1]	17.3	23.6	33.6	32.9	20.7
Heavy PTO[2]	57.9	53.8	44.0	47.9	63.9
Off-Road[3]	11.9	12.2	15.3	14.8	17.5
Miscellaneous[4]	9.9	11.1	11.6	12.8	10.5
Small Off-Road[5]	8.0	8.2	8.4	8.7	9.0
Service Equipment[6]	9.2	9.4	8.9	9.2	9.3
Total[7]	**114.2**	**118.3**	**121.8**	**126.3**	**130.9**

[1]Light & Heavy Non-PTO – cars, SUVs, pickups, vans, highway tractors.
[2]Heavy PTO – service trucks, radial boom derricks (RDB), bucket trucks.
[3]Off Roads – rubber tire, tracked equipment.
[4]Miscellaneous – boats, chippers, tensioners, manlifts, forklifts.
[5]Small Off-Road– snowmobiles, ATVs, UTVs.
[6]Service Equipment – Minor Fixed Assets – Generators, compressors, etc.
[7]Total investment costs are based on average unit costs and relate to approximately 500 units annually.

3.2 PLANNED GROWTH PROGRAM

Through the proposed 2028-2032 TWE Planned Growth Program, Hydro One will purchase the TWE assets to be aligned with the headcount increase against the current fleet equipment mix for each line of business, that will be required to support the growing work program. The proposed breakdown of spending over the planning period is summarized in Table 2 below.

Table 2 - Forecast of Planned Growth Program Acquisitions for 2028 to 2032 ($M)[15]

Equipment Type	2028	2029	2030	2031	2032
Light & Heavy Non-PTO	33.1	4.6	10.4	2.2	0.1
Heavy PTO	77.4	25.0	20.4	4.9	0.0
Off-Road	35.2	0.0	16.2	0.0	0.0
Miscellaneous	0.0	0.0	0.0	0.0	0.0
Small Off-Road	6.2	0.8	1.9	0.2	0.0
Service Equipment	0.0	0.0	0.0	0.0	0.0
Total[8]	**151.9**	**30.5**	**48.8**	**7.3**	**0.1**

[8]Total investment costs are based on average unit costs and relate to 700 vehicles in 2028 to 1 in 2032

[14] Figures presented in the tables may not sum to the totals shown due to rounding.
[15] Figures presented in the tables may not sum to the totals shown due to rounding.

4.0 OUTCOMES

The outcome of the TWE Replacement Program will help control fleet average age and ensure equipment availability and uptime to meet work program demands and associated TWE requirements. The TWE Growth Program will help support the Distribution and Transmission Work programs with additional acquisitions. The investments account for current and projected work program demands and will be evaluated against the business plan on an annual basis (as explained in GSP Sections 4.2.2.3 and 4.7.2.2.2).

It is important to note that a reduction in capital investments for TWE will result in a year-over-year increase in end of life equipment that will have a negative impact on operating costs, ultimately resulting in increased equipment downtime and decrease in equipment reliability and safety impacting the work programs and customers.

4.1 OEB RRF OUTCOMES

Table 3 presents anticipated benefits as a result of the proposed investment in accordance with the Ontario Energy Board's (OEB) Renewed Regulatory Framework (RRF).

Table 3 - Outcome Summary

Customer Focus	• Mitigate potential fleet-related delays in response time to unplanned customer incidents, such as trouble calls, customer connections, storm response and increased work program demand.
Operational Effectiveness	• Fleet vehicles and other specialized equipment at optimal levels of availability reduce human effort and minimize risk of injury. • Optimal investment levels allow employees to have the appropriate equipment to do their job safely, increase employee engagement levels, and increase work satisfaction.
Public Policy Responsiveness	• Optimal fleet investment levels help to maximize equipment efficiencies and minimize Hydro One's fleet-related environmental impact. • Support Hydro One's overall direction to manage our environmental footprint with GHG reductions. • Vehicles will be maintained to ensure public and employee safety and to meet Ministry of Transportation standards.
Financial Performance	• Ensure savings from operational effectiveness are sustainable. • Achieve operational cost savings from the fleet renewal program. • Control maintenance costs (external repair, parts and internal labour), potential rental costs and maintain stability in standard fleet rates.

5.0 EXPENDITURE PLAN

This investment is needed to maintain the company's operational continuity and avoid adverse impacts on work program delivery and customer reliability. Hydro One has planned the investment in a way that strives to deliver a balanced approach in optimizing the TWE replacement program, mitigating fleet maintenance costs, maintaining stability in standard fleet equipment rate while preparing for the growing work program.

Table 4 below summarizes Hydro One's forecast net capital expenditures for the 2028-2032 rate period.

Table 4 - Hydro One - Investment Expenditures[16]

($M)	2028	2029	2030	2031	2032	Total 28-32
Gross Capital Expenditures	266.1	148.7	170.6	133.6	131.0	850.1
Less Removals	0.0	0.0	0.0	0.0	0.0	0.0
Less Capital Contributions	0.0	0.0	0.0	0.0	0.0	0.0
Net Capital Expenditures	**266.1**	**148.7**	**170.6**	**133.6**	**131.0**	**850.1**

Table 5 below summarizes Hydro One's net capital expenditures, including planned and forecast expenditures for the 2023-2027 rate period and planned expenditures for the 2028-2032 rate period. These expenditures are presented according to the investments described in Section 3.0 Investment Description.

Table 5 - Hydro One - Expenditures Continuity Over Rate Period ($M)

Description	Plan[17] 23-27	Act/Fcst[18] 23-27	Total 28-32
Replacement Program (TWE)	322.8	331.1	611.5
Growth Investment Program (TWE)	0.0	0.0	238.6
Total	**322.8**	**331.1**	**850.1**

[16] Figures presented in the tables may not sum to the totals shown due to rounding.
[17] "Plan" refers to Hydro One's revised capital expenditure and ISA forecast to implement the OEB-approved Settlement Proposal in EB-2021-0110.
[18] "Act/Fcst" refers to actual (2023-2025) and forecast (2026-2027) expenditures.

Table 56 and 7 below summarizes Hydro One's units, including planned and forecast units for the 2023-2027 rate period and planned units for the 2028-2032 rate period.

Table 6 - Hydro One - Units Continuity Over Rate Period (Replacement Program)

Zone	Component (Unit)	Plan[19] 23-27	Act/Fcst[20] 23-27	Total 28-32
Hydro One	Light & Heavy Non-PTO	1,214	1,599	1,370
	Heavy PTO	343	220	450
	Off-Road	59	51	128
	Miscellaneous	202	265	661
	Small Off-Road	210	249	236
	Service Equipment	N/A	N/A	N/A

Table 7 - Hydro One - Units Continuity Over Rate Period (Growth Program)

Zone	Component (Unit)	Plan[21] 23-27	Act/Fcst[22] 23-27	Total 28-32
Hydro One	Light & Heavy Non-PTO	0	0	562
	Heavy PTO	0	0	229
	Off-Road	0	0	107
	Miscellaneous	0	0	0
	Small Off-Road	0	0	243
	Service Equipment	N/A	N/A	N/A

2023-2027 UNITS AND EXPENDITURES

Forecast expenditures for the 2023-2027 period are $8.3M higher than plan, primarily due to an increase in expenditures for Service Equipment ($9.0M) due to a higher rate of replacement of equipment and tools such as generators. The unit variance for the Replacement Program was due to more light-duty vehicles (and less heavy-duty vehicles) being replaced than planned. More light-duty vehicles were replaced because heavy-duty vehicles experienced volume restrictions that were imposed by the chassis manufacturer. The unit variance in equipment mix is due to supply chain delays with the production of

[19] "Plan" refers to Hydro One's revised capital expenditure and ISA forecast, and the associated units to implement the OEB-approved Settlement Proposal in EB-2021-0110.
[20] "Act/Fcst" refers to actual (2023-2025) and forecast (2026-2027) expenditures, and the associated units.
[21] "Plan" refers to Hydro One's revised capital expenditure and ISA forecast, and the associated units to implement the OEB-approved Settlement Proposal in EB-2021-0110.
[22] "Act/Fcst" refers to actual (2023-2025) and forecast (2026-2027) expenditures, and the associated units.

Heavy PTO equipment. Hydro One had to reprioritize the purchase of Light and Heavy Non-PTO to avoid age concentration where a large number of assets would reach end of life simultaneously and create significant future replacement pressures.

2028-2032 UNITS AND EXPENDITURES

Over the 2028-2032 rate period, expenditures for this investment are higher than the planned and forecast expenditures for the 2023-2027 period.

The internal factor influencing the cost of the investment is the additional headcount required to manage the 2028-2032 growth in the work program as discussed in Section 3.0 above. Hydro One's proposed Investment Plan for the coming rate period includes a significant increase in capital work as compared to the prior rate period, which will require additional headcount (as further discussed in Exhibit E-06-02 Section 4.0) and TWE to execute. In addition, as explained in Section 2.0 above, the age and condition of Hydro One's fleet requires additional capital investment in the coming rate period to reduce total lifecycle costs.

External factors influencing the cost of this investment as detailed in GSP Section 4.7.2.2.3, include the pricing and availability of vehicles in the market. These cost pressures are mitigated through contractual arrangements with many original equipment manufacturers, as discussed in Section 7.0 below.

6.0 ALTERNATIVES TO PROPOSAL

Hydro One considered the following alternatives before selecting the preferred investment proposal for the Replacement Program only (as described above in Section 3.0). The Growth Program is tied to headcount increases. Due to the size of the headcount growth rentals are not a viable alternative due to availability and costs.

Figure 5 demonstrates the impact of the three investment level scenarios on expected average unit age. Figure 6 demonstrates the impact of the three investment levels on maintenance costs. Figure 7 demonstrates the impact of the three investment levels over the planning period.

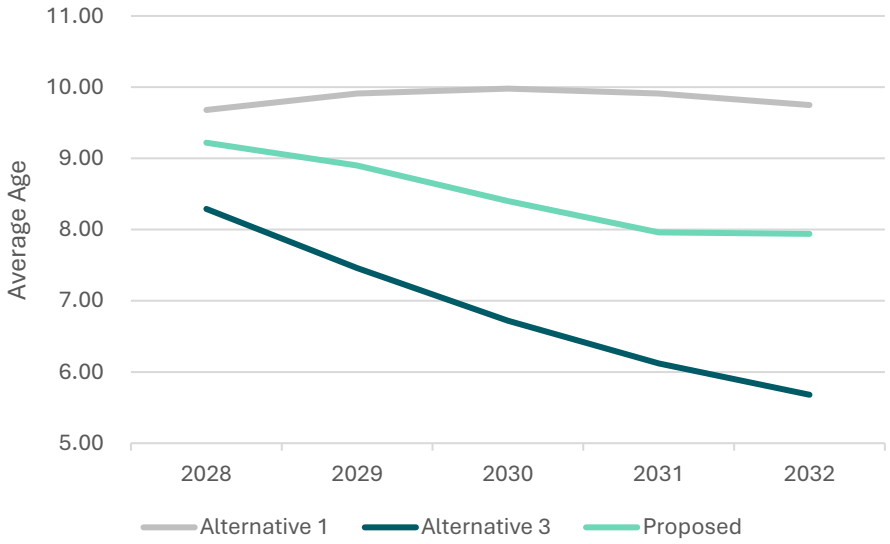

Figure 5: On-Road Funding Levels Impacts on Average Age[23]

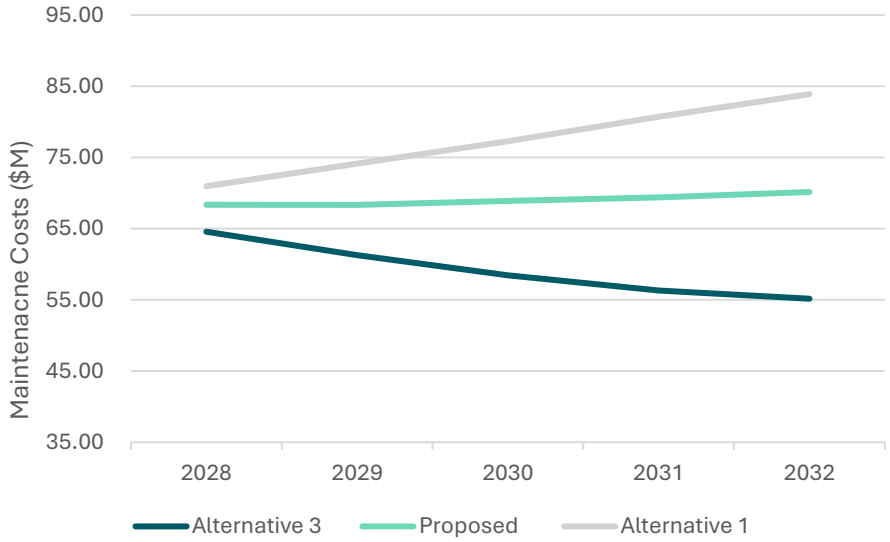

Figure 6: On-road Funding Levels Impacts on Maintenance Costs [24]

[23] Data Sources: Alternative 1 - Utilimarc, Hydro One Fleet Lifecycle Study – GSP Section 4.3 Attachment 2, p. 14, *Sustained Funding* | Alternative 2 - Utilimarc, Hydro One Fleet Lifecycle Study – GSP Section 4.3 Attachment 2, p. 14, *Full Funding* | Proposed - Utilimarc, Hydro One Fleet Lifecycle Study – GSP Section 4.3 Attachment 2, p. 14, *Proposed Funding*

[24] Data Sources: Alternative 1 - Utilimarc, Hydro One Fleet Lifecycle Study – GSP Section 4.3 Attachment 2, p. 14, *Sustained Funding – Annual Capital* | Alternative 2 - Utilimarc, Hydro One Fleet Lifecycle Study – GSP Section 4.3 Attachment 2, p. 14, *Full Funding – Annual Capital* | Proposed - Utilimarc, Hydro One Fleet Lifecycle Study – GSP Section 4.3 Attachment 2, p. 14, *Proposed Funding – Annual Capital*.

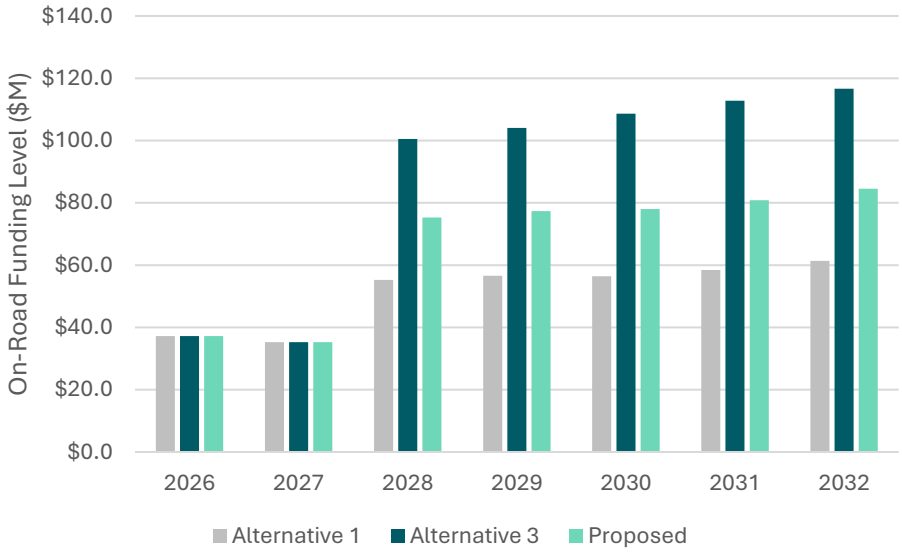

Figure 7: On-road Funding Levels Over the Planning Period[25]

ALTERNATIVE 1: SUSTAINED FUNDING REPLACEMENT PROGRAM

Under this alternative, Fleet Services would maintain its historical investment levels on TWE. This alternative focuses on minimal capital spending on TWE in favour of increased operating costs, increased use of rental equipment (if available), and extended retention and maintenance of existing equipment to satisfy work program and staffing requirements.

Increased maintenance and repair costs will be incurred on the retained vehicles. Older vehicles will have more breakdowns requiring more maintenance, resulting in more technician hours to maintain the aging fleet. This will in turn lead to increased equipment downtime and decreased equipment availability to execute the work program. As illustrated in Figure 8, under this alternative, maintenance costs (outsource and internal labour and parts) will increase from $70.9M a year in 2028 to $83.9M a year in 2032. Fleet

[25] Data Sources: Alternative 1 - Utilimarc, Hydro One Fleet Lifecycle Study (January 22, 2026) – GSP Section 4.3 Attachment 2, p. 14, *Sustained Funding – Annual Capital* | Alternative 2 - Utilimarc, Hydro One Fleet Lifecycle Study (January 22, 2026) – GSP Section 4.3 Attachment 2, p. 14, *Full Funding – Annual Capital* | Proposed - Utilimarc, Hydro One Fleet Lifecycle Study (January 22, 2026) – GSP Section 4.3 Attachment 2, p. 14, *Proposed Funding – Annual Capital*.

Services may also be required to not only increase internal labour but also increase external technician hours by 2% in 2028 to 13% in 2032.[26]

On-Road Sustained Funding	2026	2027	2028	2029	2030	2031	2032
Annual Capital ($M)	$37,232,620.0	$35,264,637.0	$55,276,809.0	$56,591,597.0	$56,440,076.0	$58,425,095.0	$61,350,121.0
Units Replaced	88	79	153	199	246	287	308
Annual Maintenance ($M)	$63,556,808.0	$68,449,670.0	$70,957,603.0	$74,122,793.0	$77,279,348.0	$80,712,464.0	$83,885,070.0
Annual Ownership ($M)	$42,612,009.0	$40,395,899.0	$41,549,457.0	$42,984,836.0	$44,445,604.0	$46,114,109.0	$48,081,525.0
Total ($M)	$106,168,817.0	$108,845,569.0	$112,507,060.0	$117,107,629.0	$121,724,952.0	$126,826,573.0	$131,966,595.0
Ave Age	8.66	9.31	9.68	9.91	9.98	9.91	9.75

Other Sustained Funding	2026	2027	2028	2029	2030	2031	2032
Annual Capital ($M)	$18,739,745.0	$21,720,131.0	$21,717,673.0	$23,307,017.0	$26,483,107.0	$27,638,559.0	$28,015,584.0
Units Replaced	180	191	197	187	212	216	215
Annual Maintenance ($M)	$26,695,989.0	$27,532,536.0	$28,460,572.0	$29,430,258.0	$30,366,064.0	$31,328,498.0	$32,344,766.0
Annual Ownership ($M)	$11,780,504.0	$13,200,065.0	$14,404,609.0	$15,657,810.0	$17,181,731.0	$18,651,023.0	$19,961,737.0
Total ($M)	$38,476,493.0	$40,732,601.0	$42,865,181.0	$45,088,068.0	$47,547,795.0	$49,979,521.0	$52,306,503.0
Ave Age	13.6	13.44	13.33	13.3	13.17	13.02	12.88

Figure 8: On-Road and Other Sustained Funding Scenario Projections for 2028-2032 from Utilimarc's Hydro One Fleet Lifecycle Study[27]

Under this investment scenario, in order to meet work demands for 2028-2032, Hydro One will have to rely on rentals and retention of older equipment. Relying on rentals would be challenging due to the specialized equipment that needs to be specifically outfitted to Hydro One safety specifications. Hydro One operates in remote areas and challenging weather. This will result in the rental equipment experiencing greater wear and tear, necessitating additional maintenance and repair costs that Hydro One would have to pay. Moreover, historical cost experience indicates that rental costs are approximately 63% higher than owned equipment rates. Lastly, this alternative would reduce the availability of reliable vehicles required to support work program execution, potentially leading to delays in power restoration, slow customer connections, or missed outages as a result of more frequent unplanned breakdowns.

[26] Utilimarc, Hydro One Fleet Lifecycle Study – GSP Section 4.3 Attachment 2, p. 16, *Labour Hour Increase (Sustained Funding Vs. Proposed)*
[27] Utilimarc, Hydro One Fleet Lifecycle Study – GSP Section 4.3 Attachment 2, p. 14-15, *Sustained Funding.*

ALTERNATIVE 2: UTILIMARC PROPOSAL

This alternative represents the fully funded capital requirement derived by Utilimarc based on the recommended lifecycle policy (see GSP Section 4.3 Attachment 2, page 11). Under this alternative, investment levels for on-road funding would see an increase of 16% from $100.5M in 2028 to $116.7M in 2032. Maintenance costs of On-road funding (parts, outsourced and internal labour) are expected to decrease by 15% (from $64.6M in 2028 to $55.2M in 2032), as shown in Figure 9 below.

Full Funding - On-Road	2026	2027	2028	2029	2030	2031	2032
Annual Capital	$37,232,620	$35,264,637	$100,533,352	$104,069,070	$108,648,482	$112,777,124	$116,657,201
Units Replaced	88	79	586	581	587	587	586
Annual Maintenance	$63,556,808	$68,449,670	$64,564,567	$61,272,863	$58,438,145	$56,304,679	$55,156,460
Annual Ownership	$42,612,009	$40,395,899	$49,212,833	$56,932,034	$63,909,181	$70,134,708	$75,614,418
Total	$106,168,817	$108,845,569	$113,777,400	$118,204,897	$122,347,326	$126,439,387	$130,770,878
Avg Age	8.66	9.31	8.29	7.46	6.72	6.12	5.68
EV %	2%	2%	3%	5%	6%	8%	10%
Hybrid %	3%	3%	4%	5%	6%	7%	7%
CO2 Emissions (kg)	48,895,911	48,809,937	48,119,340	47,365,259	46,457,905	45,524,822	44,509,692
CO2 Offset (kg)	2,502,163	2,588,137	3,278,734	4,032,815	4,940,169	5,873,252	6,888,382

Full Funding - Other Eq.	2026	2027	2028	2029	2030	2031	2032
Annual Capital	$18,739,745	$21,720,131	$21,717,673	$23,307,017	$26,483,107	$27,638,559	$28,015,584
Units Replaced	180	191	194	187	212	216	215
Annual Maintenance	$26,695,989	$27,532,536	$28,460,572	$29,430,258	$30,366,064	$31,328,498	$32,344,766
Annual Ownership	$11,780,504	$13,200,065	$14,404,609	$15,657,810	$17,181,731	$18,651,023	$19,961,737
Total	$38,476,493	$40,732,602	$42,865,181	$45,088,068	$47,547,795	$49,979,520	$52,306,503
Avg Age	13.6	13.44	13.33	13.3	13.17	13.02	12.88
EV %	1%	1%	1%	1%	1%	1%	1%
Hybrid %	0%	0%	0%	0%	0%	0%	0%
CO2 Emissions (kg)	2,434,217	2,424,988	2,415,914	2,405,065	2,386,511	2,369,713	2,350,945
CO2 Offset (kg)	48,963,857	48,973,086	48,982,160	48,993,009	49,011,563	49,028,361	49,047,129

Figure 9: Full Funding Scenario Projections for 2028-2032 from Utilimarc's Hydro One Fleet Lifecycle Study [28]

While this approach would move all assets to within Utilimarc's recommended lifecycles, it requires significantly higher capital investment over 2028-2032.

ALTERNATIVE 3: REPLACEMENT PROGRAM (RECOMMENDED)

This alternative is the recommended proposal from Hydro One as indicated in Section 3.0 above. This proposal allows Hydro One to replace approximately 60% more on-road units

[28] Utilimarc, Hydro One Fleet Lifecycle Study – GSP Section 4.3 Attachment 2, p. 14-15, *Full Funding.*

over the planning period than Alternative 1. This investment level is expected to minimize escalations in maintenance costs (labour and parts) year-over-year and lead to increased equipment availability due to reduced breakdowns and maintenance requirements overall.

Proposed Funding - On-Road	2026	2027	2028	2029	2030	2031	2032
Annual Capital	$37,232,620	$35,264,637	$75,282,229	$77,360,431	$78,018,559	$80,817,503	$84,551,768
Units Replaced	88	79	286	371	440	420	301
Annual Maintenance	$63,556,808	$68,449,670	$68,355,340	$68,333,865	$68,897,639	$69,382,832	$70,142,582
Annual Ownership	$42,612,009	$40,395,899	$44,675,870	$49,020,184	$53,002,610	$56,684,198	$59,791,338
Total	$106,168,817	$108,845,569	$113,031,210	$117,354,049	$121,900,249	$126,067,030	$129,933,920
Avg Age	8.66	9.31	9.22	8.9	8.4	7.96	7.94
EV %	2%	2%	3%	3%	4%	6%	6%
Hybrid %	3%	3%	4%	5%	6%	6%	7%
CO2 Emissions (kg)	48,895,911	48,809,937	48,402,050	47,959,967	47,367,306	46,739,942	46,159,794
CO2 Offset (kg)	2,502,163	2,588,137	2,996,024	3,438,107	4,030,768	4,658,132	5,238,280

Proposed Funding - Other Eq.	2026	2027	2028	2029	2030	2031	2032
Annual Capital	$18,739,745	$21,720,131	$21,717,673	$23,307,017	$26,483,107	$27,638,559	$28,015,584
Units Replaced	180	191	194	187	212	216	215
Annual Maintenance	$26,695,989	$27,532,536	$28,460,572	$29,430,258	$30,366,064	$31,328,498	$32,344,766
Annual Ownership	$11,780,504	$13,200,065	$14,404,609	$15,657,810	$17,181,731	$18,651,023	$19,961,737
Total	$38,476,493	$40,732,602	$42,865,181	$45,088,068	$47,547,795	$49,979,520	$52,306,503
Avg Age	13.6	13.44	13.33	13.3	13.17	13.02	12.88
EV %	1%	1%	1%	1%	1%	1%	1%
Hybrid %	0%	0%	0%	0%	0%	0%	0%
CO2 Emissions (kg)	2,434,217	2,424,988	2,415,914	2,405,065	2,386,511	2,369,713	2,350,945
CO2 Offset (kg)	48,963,857	48,973,086	48,982,160	48,993,009	49,011,563	49,028,361	49,047,129

Figure 10: On-Road and Other Proposed Funding Projections for 2028-2032 from Utilimarc's Hydro One Fleet Lifecycle Study[29]

Hydro One has analyzed all three investment levels and considered the proposed investment level as the most stable approach achieving a balance between capital expenditure while minimizing total cost of ownership, including operational downtime.

A balanced investment will ensure that immediate and future equipment replacement requirements are optimized. It also ensures that Fleet Services can provide the appropriate equipment forecast and manufacturers are able to deliver on time. Finally, a balanced investment approach will mitigate fleet maintenance costs and maintain stability in the standard fleet equipment rates.

[29] Utilimarc, Hydro One Fleet Lifecycle Study (January 22, 2026) – GSP Section 4.3 Attachment 2, p. 14-15, *Proposed Funding* (Figure 9 provides the same data set provided in Figure 3. This data is repeated here for reference.)

7.0 EXECUTION RISK AND MITIGATION

The TWE Replacement Program is contingent on the manufacturer's delivery and production schedule and may be impacted by market dynamics leading to limited availability. Manufacturing delays may result in delayed delivery of the assets in a budget year as planned. This risk is partly mitigated through contractual arrangements with vendors. For example, contract pricing would cover upfitting as well as the acquisition costs of the chassis, and potential penalties would be included for late delivery, failure of delivery, and deficiencies on arrival.

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G-GP-02	HELICOPTER RENEWAL
Primary Trigger:	Business Support Sustainment
OEB RRF Outcomes:	Customer Focus, Operational Effectiveness, Financial Performance

Net Capital Expenditures:

($M)	2028	2029	2030	2031	2032	Total
Hydro One	19.8	9.4	20.1	2.7	1.9	**53.8**

Summary:

This investment involves the replacement of three of Hydro One's older single-engine helicopters. One of these helicopters will be replaced in 2029 with a like-for-like single-engine helicopter. The other two helicopters will be replaced with two twin-engine helicopters in 2028 and 2030 to meet the evolving work program needs of the Transmission and Distribution lines of business. These larger helicopters will provide essential enhancements to the safety of flight operations as well as higher performance margins and load carrying capacity. Aviation Services anticipates equipping the twin-engine aircraft with hoists and dual hooks so that these aircraft can safely provide access to difficult terrain, towers and conduct mid-span repairs. This investment also includes capital for parts needed for federally regulated refurbishments of aircraft systems based on flight hours and age of the unit, for more details please see GSP Section 4.2.3.2.

1.0 OVERVIEW

Helicopters are currently used by Hydro One for a range of work activities, including pole setting, insulator replacements and line patrols/inspections. They are also crucial for enabling timely storm or trouble response across a vast service territory that includes remote and hard-to-reach areas. Hydro One is not proposing to increase the overall size of its helicopter fleet during the 2028-2032 rate period but will change to a mixed-fleet business model to better serve our customers. This change is referred to as the Helicopter Fleet Enhancement Program.

The Helicopter Fleet Enhancement Program involves the replacement of three of Hydro One's older helicopters. One will be replaced with a helicopter of the same type in 2029, that is, a model AS350B3. The other two will be replaced with larger, twin-engine helicopters in 2028 and 2030. These larger helicopters are required to meet the evolving needs of the Transmission and Distribution lines of business, including essential enhancements to the safety of flight operations as well as higher performance margins and load carrying capacity.

Aviation Services anticipates equipping the twin-engine aircraft with hoists to provide worker access to towers and conduct mid-span repairs using a work access method known as "Class D" or "Human External Cargo" (HEC). This proven work method is currently in use with several other utilities, including BC Hydro, Manitoba Hydro, Nova Scotia Power, PG&E and Duke Energy. It provides additional safety margins for pilots and on-board personnel as well as improved safety for climbing linemen. Both aspects of this fleet enhancement, heavier lift and HEC, will more effectively serve the execution needs of Hydro One's growing work program.

This investment also includes capital for major components needed for federally regulated refurbishments of the hydraulic servos, main gearbox, tail gearbox engine modules and fuel controls are also completed based on the flight hours or age of the unit, for more details please see GSP Section 4.2.3.2.

2.0 INVESTMENT NEED

2.1 HELICOPTER FLEET ENHANCEMENT PROGRAM

The current helicopter fleet is used for line patrols, material delivery to both Distribution and Transmission right of way, pole setting in both urban and rural areas, transporting workers into hard to access work zones, and timely response to storms and unplanned incidents. More specifically:

- As part of the forestry program, helicopters transport workers along the right of way and deliver materials and equipment in support of the vegetation management activities.
- Helicopters are used in construction services to support line construction and repair, poles and cross arm installations, and material delivery. Currently, external service providers must be contracted to provide heavier lift capabilities when pole weights exceed the maximum lift limits of the existing helicopter fleet (generally, anything over 3,000 pounds).
- The Transmission Lines business relies on helicopters for asset inspections, including regular patrols of the lines and detailed helicopter inspections (DHI) to collect detailed data regarding bolts, cross arms, towers, conductors and insulators. In addition, helicopters help perform certain specialty work in maintaining the transmission lines infrastructure, including the insulator change programs and tower access. A patrol program using a specialized forward looking infrared (FLIR) camera is also used to support asset management. Line decommissioning is supported by using helicopters to remove old towers and material without the need for building new roads and without increasing the overall environmental footprint.
- The Distribution Lines business uses helicopters in a similar way to the Transmission Lines business. An example of Distribution Lines work is the use of a helicopter to set new poles at the edge of an urban neighbourhood, to avoid substantial impact to private/residential properties. In addition, the helicopter fleet provides high value, critical support for storm and outage response activities, allowing power line crews to respond in a timely manner and thus minimizing downtime for customers following storm damage. For example, the response to the ice storm in March 2025 was extensively supported by Aviation Services with over 250 hours of flying across different regions over an eleven-day period (as

depicted by the aircraft tracking map in Figure 1 below). This response involved 7 helicopters, 250 separate flights and 23,786 km flown, an extensive effort covering a vast geographic area that would not have been possible without a capable and safe helicopter fleet.

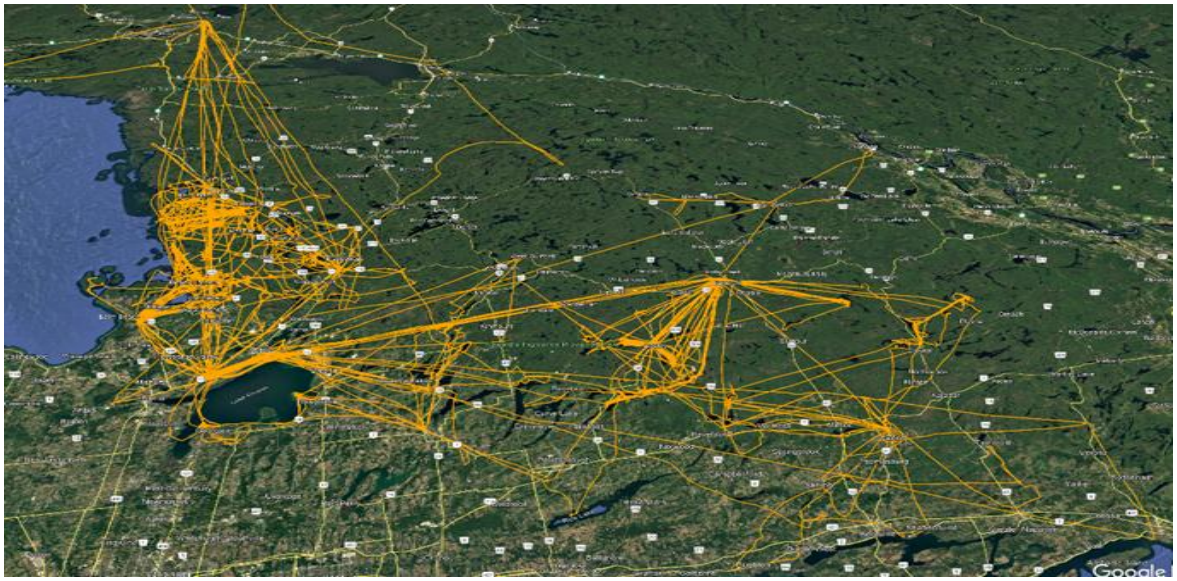

Figure 1: Helicopter Flight Tracking Map from March 2025 Storm Response

Hydro One's current helicopter fleet is comprised of three older variants of the AS350 Airbus Helicopters (AS350B3) that the company procured between 2007 and 2009, and seven single-engine AS350B3e Airbus helicopters (H125) purchased between 2019 and 2024.

The Helicopter Fleet's demographics are illustrated in Figure 2 below. The average age in 2028 of the AS350B3 helicopters will be 20 years, whereas the average age of the newer H125 helicopters in 2028 will be 6 years.

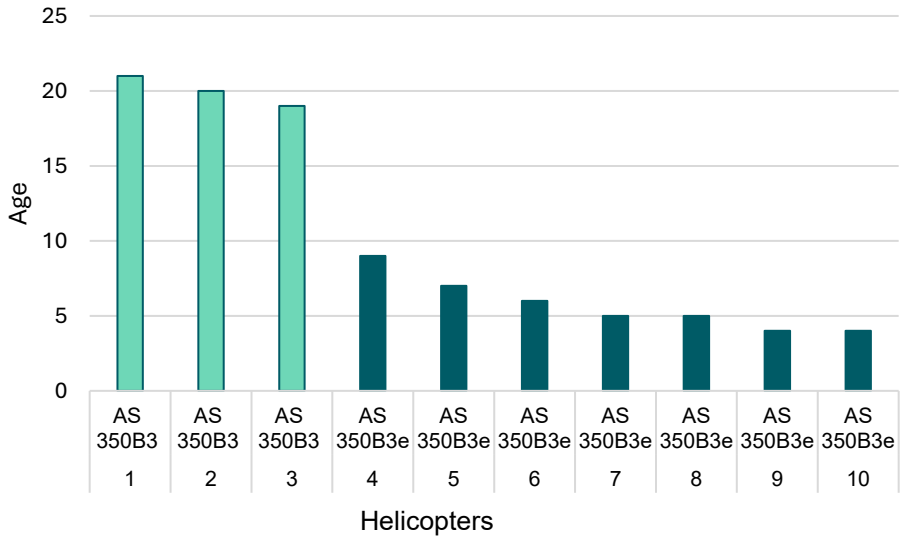

Figure 2: Current Helicopter Fleet Demographics
(Age in 2028 and Quantity by Variant)

As stated in Utilimarc's Hydro One Fleet Investment Strategy Report GSP Section 4.3 Attachment 4, "Lifecycle analysis recommends optimal helicopter replacement cycles of 14-20 years depending on annual flight hour utilization." That lifecycle provides the minimum total cost of ownership, inclusive of maintenance costs. Based on a consideration of the age of the AS350B3 assets (20 years), as well as risks of equipment failure, emergency response time, work program repair time and costs, and environmental impacts, Hydro One determined it was prudent to replace the three older helicopters between 2028-2032.[1]

Hydro One plans to replace the three older AS350B3 helicopters with one new H125 single-engine helicopter and two twin-engine helicopters. The proposed investment of the new H125 will allow equipment features and capabilities to be standardized across the single-engine fleet. Standardization will lead to further safety benefits (i.e. minimizing the risk of pilot error associated with frequent change of aircraft during a work week) and allow full motion simulators to be used for advanced emergency scenario exposure. The

[1] Helicopter asset information and lifecycle strategy are detailed in GSP Section 4.2.3, and the asset management and investment planning process (as applied to General Plant) is discussed in GSP Section 4.7.

proposed investment for the twin-engine fleet will also bring needed improvements in equipment capability and safety margins when operating in the low-level flight environment or over urban centres and reducing the reliance on third-party aircraft operators. All newer aircraft have essential safety enhancements, including flight data recorders, dual hydraulic flight control systems and crash resistant fuel tanks, all of which provide additional safety margins for pilots and on-board personnel.

Benefits of H125 Aircraft:

Consistent with Hydro One's corporate strategy and values, safety is a paramount consideration in the completion of work, including the procurement of tools/equipment in support of safe execution. As part of the AS350 helicopter class, the H125 is a modern, single engine variant that offers enhancements in performance and fuel management, a longer cycle between engine overhauls, and a redesigned tail-rotor for increased control and stability at low speeds or high hovers. These enhancements reduce pilot workload, contributing to less pilot fatigue and safer and more efficient pilot performance.

H125 aircraft also include a factory installed crash resistant fuel tank and dual hydraulic flight control systems. In the event of an accident or hard landing, the crash resistant fuel tank minimizes the risk of a fuel spill or post-incident fire, thereby improving survivability for personnel and reducing environmental risk. The dual hydraulic flight control system mitigates the consequence of a hydraulic failure by providing the pilot with a fully redundant system as a strong safety enhancement. None of these features can easily or economically be retrofitted onto the existing Hydro One fleet.

H125 aircraft can also lift heavier external loads and offers increased power margins for most flying activities. In this regard, standardizing Hydro One's helicopter fleet will lead to significantly improved safety margins, because it will avoid the risk of a pilot potentially operating a helicopter beyond its capabilities when switching between different variants of the same aircraft during a work week. In addition, full motion flight simulators are not available for the AS350 B3 variants that are currently in use by Hydro One. Full motion simulators are available for the H125 variant, which means pilots can be exposed to advanced emergency training scenarios in a risk-free environment. This will increase their skill levels, mitigating the risk of serious injury in the event of a major malfunction.

While it is possible to maintain older aircraft, it will require significant and costly maintenance activities and rebuilds to maintain airworthiness.[2] This includes the 12-year inspection (costing about $400,000 to complete) for an asset with diminished operating capabilities. In comparison, newer aircraft such as the H125 variant have an increased mean time between overhauls (MTBO), which will help reduce the costs of maintenance parts for a 4 to 6 year period after the replacement comes into service (i.e., when a unit is within its warranty period). This amounts to a reduction in total helicopter fleet parts costs.

Benefits of Twin-Engine Helicopters:

Hydro One's current helicopter fleet consists of single engine types only. Single engine aircraft are not appropriate, or legal, to provide work methods utilizing Human External Cargo (HEC). This investment involves replacing the two older AS350B3's currently in use by Hydro One with two new twin-engine helicopters to meet the growing work program demand from the lines of business.

HEC permits personnel to safely transfer to/from terrain or topography that is difficult to access in a vehicle or on foot. Helicopters that perform HEC operations to transport lineman to/from transmission towers and utility poles save the time that it would normally take for the lineman to climb up and down the tower or pole then move on the ground to the next pole or tower. With the use of HEC, Aviation Services can fly them from point to point in the safest, most expeditious way possible.

In addition to saving time, HEC allows linemen to perform their job in a safer manner. HEC eliminates the need for the linemen to physically hike to and climb the structures. This can be especially taxing during hot or inclement weather. HEC allows helicopters to pick up the worker and deliver them to hard-to-reach places. This results in time and cost savings for Hydro One.

When a HEC load extends below the aircraft skids, it is deemed to be a Class D external load. For safety reasons, and to be legally compliant with the regulations, the helicopter

[2] Utilimarc Helicopter Lifecycle Analysis Report is provided as an attachment under GSP Section 4.3 Attachment 3, p. 3

being used for such work must be twin-engine and capable of hovering on one engine in the event of an engine failure, for a prescribed period of time.

Aviation Services' primary method of Class D will be by hoist (see Figure 3, below). This method maintains the greatest distance between the rotors (main and tail) and the wires or structure. This method is risk-averse and provides forgiveness in the event of a disturbance that causes the helicopter to lose altitude. Such disturbances can be caused simply by a gust of wind and from this perspective, hoist-access methods are superior to the others. In addition, this is a proven work method that is currently in use with several other utilities, including BC Hydro, Manitoba Hydro, Nova Scotia Power, PG&E and Duke Energy and it has the benefits of being able to deliver the lineman to the work position regardless of the wind direction.

Figure 3: Twin-engine helicopter conducting hoist operations

Helicopter Major Components

This investment also includes capital for major components needed for federally regulated refurbishments of aircraft systems such as the hydraulic servos, main gearbox, tail gearbox engine modules and fuel controls are also completed based on the flight hours or age of the unit, for more details please see GSP Section 4.2.3.2.

3.0 INVESTMENT DESCRIPTION

The Helicopter Fleet Enhancement Program involves the replacement of aging helicopter assets, through the 2023-2027 period. The proposed replacement will result in a fleet of single- and twin-engine helicopters by the end of 2030. The investment includes costs to replace one helicopter unit in 2028, 2029 and 2030 and approximately an annual average of $1.3M for the replacement of major components and tools. Hydro One is not planning to expand the size of its aviation fleet.

Under this program, Hydro One plans to purchase a H125 variant and two twin-engine helicopters with appropriate capabilities for tower access and heavier lift.

Over the planning period, the proposed replacements will result in improved safety features and operational capabilities, as well as increased helicopter availability (because of less required maintenance and extended maintenance cycles of new H125 variant).

4.0 OUTCOMES

This investment will ensure that capable and safe helicopters are available to support Hydro One's work programs. Aviation Services assesses and accounts for current and projected work program demands against operational requirements on an annual basis, as explained in GSP Section 4.2.3.2.

As replacement H125 and the twin-engine helicopters are brought into service, the investment will also help avoid increases in aircraft maintenance requirements and costs (which would otherwise be required to maintain the airworthiness of an aging fleet) as well as an associated decrease in aircraft availability due to maintenance activities. There will be a reduction of reliance on third party vendors as a result of the new twin-engine aircraft and their capabilities.

4.1 OEB RRF OUTCOMES

Table 1 presents anticipated benefits as a result of the proposed investment in accordance with the Ontario Energy Board's (OEB) Renewed Regulatory Framework (RRF).

Table 1 - Outcome Summary

Customer Focus	• Mitigate delays in response time and impact on customers during storm or trouble response by supporting Hydro One's ability to execute Transmission and Distribution work activities that rely on helicopters
Operational Effectiveness	• Achieve improvements in helicopter operations safety that are needed to better protect pilots and personnel. • Standardization of the single-engine aircraft in Hydro One's helicopter fleet. Standardization will lead to further safety benefits, by minimizing the risk of pilot error associated with frequent change of aircraft during a work week. • Hoisting with Twin-engine helicopters makes access to towers safer and more efficient.
Financial Performance	• Newer, more capable helicopters will help control OM&A expenditures and helicopter downtime associated with increased maintenance of aging aircraft.

5.0 EXPENDITURE PLAN

This investment is needed to meet the evolving work program needs of the Transmission and Distribution lines of business, providing essential enhancements to the safety of flight operations, delivering higher performance margins and load carrying capacity. Hydro One has planned the Investment in a way that optimizes the helicopter lifecycle and mitigates maintenance costs.The forecast includes costs to replace three helicopters that will be over 20 years of age and beyond the optimal lifecycle, one helicopter in 2028, 2029, and 2030 respectively, plus an annual average of $1.3M for the replacement of major components and tools. These costs are based on current market rates and historic spending on major component replacement.

Table 2 below summarizes Hydro One's forecast net capital expenditures for the 2028-2032 period. The forecast includes costs to replace three helicopters that will be over 20 years of age and beyond the optimal lifecycle[3], one helicopter in 2028, 2029, and 2030

[3] Utilimarc Helicopter Lifecycle Analysis Report is provided as an attachment under GSP Section 4.3 Attachment 3, p. 3

respectively, plus an annual average of $1.3M for the replacement of major components and tools. These costs are based on current market rates and historic spending on major component replacement.

Table 2 - Hydro One - Investment Expenditures ($M)[4]

($M)	2028	2029	2030	2031	2032	Total 28-32
Gross Capital Expenditures	19.8	9.4	20.1	2.7	1.9	53.8
Less Removals	0.0	0.0	0.0	0.0	0.0	0.0
Less Capital Contributions	0.0	0.0	0.0	0.0	0.0	0.0
Net Capital Expenditures	**19.8**	**9.4**	**20.1**	**2.7**	**1.9**	**53.8**

Table 3 below summarizes Hydro One's net capital expenditures, including planned and forecast expenditures for the 2023-2027 rate period and planned expenditures for the 2028-2032 rate period. These expenditures are presented according to the investments described in Section 3.0 Investment Description.

Table 3 - Hydro One - Expenditures Continuity Over Rate Periods ($M)[5]

Description	Plan[6] 23-27	Act/Fcst[7] 23-27	Total 28-32
Helicopter Fleet Enhancement Program	26.9	23.9	47.5
Helicopter Major Components & Tools	2.6	4.7	6.3
Total	**29.5**	**28.5**	**53.8**

2023-2027 EXPENDITURES

During the 2023-2027 period, forecast expenditures for the total Investment are in line with the Plan, with some reprioritization in 2025 and 2026 that shifted funds from the Helicopter Fleet Enhancement Program to the Major Components program. However, in the historical period, the number of helicopter purchases was lower due to higher purchase price than what had been forecasted.

[4] Figures presented in the tables may not sum to the totals shown due to rounding.
[5] Figures presented in the tables may not sum to the totals shown due to rounding.
[6] "Plan" refers to Hydro One's revised capital expenditure and ISA forecast to implement the OEB-approved Settlement Proposal in EB-2021-0110.
[7] "Act/Fcst" refers to actual (2023-2025) and forecast (2026-2027) expenditures.

2028-2032 EXPENDITURES

Over the 2028-2032 period, expenditures for this investment are higher than the 2023-2027 period. The factors influencing the cost of the investment include:

- For 2028 and 2030 there is an increase in the capital expenditure due to the cost of a twin-engine aircraft. These aircraft are significantly higher unit costs than that of a single engine aircraft.
- The costs of single engine aircraft has increased over time, causing Hydro One to reprioritize the purchase of the 5th aircraft in 2026 and reallocate the capital to purchase of Major Components. The increase in price has informed the budget for the replacement of its single engine aircraft in the 2028-2032 period.
- Limited supplier availability also increases costs, as Airbus Helicopters is the only company making the H125 line of aircraft.

Table 4 below summarizes Hydro One's units, including planned and forecast units for the 2023-2027 rate period and planned units for the 2028-2032 rate period.

Table 4 - Hydro One - Unit Continuity Over Rate Periods

Zone	Component (Unit)	Plan[8] 23-27	Act/Fcst[9] 23-27	Total 28-32
Hydro One	Helicopters	5	4	3

2023-2027 UNITS

In the prior rate period, Hydro One planned to purchase 5 helicopters, but is forecast to only have purchased 4 helicopters. As stated above, the unit variance from the 2023-2027 Plan over Forecast is because the cost of a single engine aircraft had increased by $1.5M since 2023, causing Hydro One to reprioritize the purchase of the 5th aircraft in 2026 and reallocate the capital to purchase Major Components.

[8] "Plan" refers to Hydro One's revised capital expenditure and ISA forecast, and the associated units to implement the OEB-approved Settlement Proposal in EB-2021-0110.
[9] "Act/Fcst" refers to actual (2023-2025) and forecast (2026-2027) expenditures, and the associated units.

2028-2032 UNITS

The 2028-2032 Helicopter Fleet Enhancement Program involves the replacement of 3 units, which is the number of aircraft that will have reached the optimal replacement age in the rate period (as explained in Section 2.1 above).

6.0 ALTERNATIVES

Hydro One considered the following alternatives before selecting the preferred investment plan.

ALTERNATIVE 1: STATUS QUO

Under the status quo alternative, Aviation Services would continue renewing Hydro One's single-engine helicopter fleet (without increasing the overall fleet size) with the H125 variant. While this alternative would avoid capital investments in the short term, it would not provide the operational benefits offered by the twin-engine aircraft, including the ability to utilize the HEC operations for worker access or the additional heavier lifting capabilities. Hydro One would have to engage other more costly methods for worker access and or external contractors to perform these functions. Maintaining the status quo was therefore not a viable or prudent alternative.

ALTERNATIVE 2: UPGRADE HELICOPTER FLEET TO ALL TWIN-ENGINE HELICOPTERS

Consideration was given to upgrading the entire helicopter operation to twin-engine aircraft. Capital acquisition costs for this option would be significantly higher, with a concurrent increase in OM&A expenditures as twin-engine aircraft are slightly more expensive to operate. Furthermore, this option would also result in a higher helicopter fleet rate being recovered from Hydro One's lines of business that rely on the helicopter fleet for essential activities, which could result in a reduction in helicopter usage due to cost considerations.

ALTERNATIVE 3: RENEW HELICOPTER FLEET WITH H125 VARIANT AND TWIN-ENGINE HELICOPTERS (RECOMMENDED)

As described above under Section 3.0, *Investment Description*, the proposed alternative aims to continue renewing Hydro One's single-engine helicopter fleet (without increasing

the overall fleet size) through a mix of the H125 variant and procuring two twin-engine helicopters with advanced performance capabilities to provide worker access to towers using HEC, with an added benefit of lifting heavier poles and reducing the dependence on third parties for this capability. The investment includes costs to replace one helicopter unit in 2028 with a twin-engine helicopter, 2029 with another H125 and 2030 with a twin-engine helicopter, as well as an annual average of $1.3M for the replacement of major components and tools. The proposed replacements will result in improved safety features, enhanced operational capabilities, and increased helicopter availability. The replacement of the three, 20 year old helicopter will offset the maintenance costs if kept beyond the optimal lifecycle. [10]

7.0 EXECUTION RISK AND MITIGATION

The Helicopter Fleet Enhancement Program is dependent on the manufacturer's delivery and production schedule. This may result in delayed delivery of the asset in a budget year. The supplier's delivery schedule may also be impacted by global economic dynamics, with the risk of a potential reduction in worldwide supply of aircraft and further delays in the acquisition of replacement helicopters. In the event Hydro One has to change aircraft types, this would mean changing suppliers to another sole-provider of that replacement aircraft and would drive additional costs for new tooling, inventory, spare parts, pilot and mechanic training, etc. To avoid such delays and cost impacts, Aviation Services mitigates program execution risks through close coordination and communications with the vendor, allowing sufficient lead time for planning and procurement, and staying current with latest industry trends and market intelligence related to procurement to inform and validate its investment plan.

[10] Utilimarc Helicopter Lifecycle Analysis Report is provided as an attachment under GSP Section 4.3 Attachment 3, p. 3.

G-GP-03	FACILITIES AND ACCOMMODATIONS
Primary Trigger:	Business Support Sustainment
OEB RRF Outcomes:	Customer Focus, Operational Effectiveness, Public Policy Responsiveness, Financial Performance

Net Capital Expenditures:

($M)	2028	2029	2030	2031	2032	Total
Hydro One	89.8	181.9	175.9	170.1	105.5	723.2

Summary:

Hydro One's Facilities and Accommodations investments are designed to maintain critical facilities, support growing work programs, and meet evolving code and legislative requirements. This investment portfolio focuses on Facilities & Real Estate (FRE) Operational Centre and Administrative (OC Admin) facilities and includes three main segments: Sustainment, New Builds and Major Renovations, and Compliance & Governance. Sustainment investments replace and refurbish the highest-criticality building components to prevent further deterioration and mitigate the risk of building failure. New Builds and Major Renovations replace or rebuild facilities that have reached end of useful life status and/or can no longer accommodate Hydro One’s growing operational needs. Compliance & Governance investments deliver climate resilient sustainable inclusive facilities capable of meeting the needs of diverse employee groups and customers, and address applicable code and legislative requirements.

1.0 OVERVIEW

Facilities and Accommodations investments are critical to maintaining the operational and administrative facilities that enable Hydro One to safely and reliably deliver electricity across Ontario. These investments support the sustainment, growth, and compliance objectives of essential building assets and structures used to provide transmission and distribution services. The facilities addressed through this program serve operational and administrative purposes and are known as the OC Admin portfolio, including operation centres (OCs), grid control centres, training and development campuses, fleet maintenance/repair garages, warehouses, helicopter hangars, and other distributed office spaces. These facilities enable day-to-day business operations, outage and customer response, workforce deployment and training, and administrative functions necessary to support Hydro One's transmission and distribution systems. As a result, they are essential to providing Hydro One personnel with a safe and productive environment from which to deliver reliable service to customers across the Province.

Hydro One has reached an inflection point in the condition of its OC Admin portfolio. The portfolio's 0-year Facility Condition Index (FCI)[1] is 13.9%, which is already considered poor. Without additional investment, the portfolio is projected to deteriorate significantly to a 5-year FCI of 47% (by 2030). This means that Hydro One forecasts approximately 47% of the portfolio's asset replacement value will be past its condition adjusted useful life and will need refurbishment or replacement by 2030, without intervention. This continued deterioration would increase the risk of building component failures, asset write-offs, and disruptions to the facilities that support Hydro One's transmission and distribution operations.

[1] Facility Condition Index (FCI) is an industry-recognized asset management metric used to quantify high-level building condition and investment need based on validated condition assessment information; including currently identified deficiencies (0-Year FCI) and deficiencies expected to emerge within the next five years based on observed asset condition and assessor forecasts (5-Year FCI). FCI produces a percentage score, with higher values indicating a greater proportion of deficiencies and poorer overall condition, and is categorized as Excellent, Good, Fair, or Poor based on established thresholds. Hydro One interprets FCI alongside risk, criticality, and other asset management considerations. Additional details regarding the methodology, thresholds, and application of FCI are provided in GSP Section 4.2.4.2, *Condition*.

The proposed investment level is intended to mitigate this risk by targeting the highest facility-related risks to the OC Admin portfolio to support the safe, secure, and reliable operation of the distribution and transmission systems. To this end, approximately 50% of the proposed sustainment investments are directed toward building components classified as "high-risk", in accordance with the Hydro One's risk-based asset management approach discussed in GSP Section 4.7.2.3.2. This is expected to reduce high-risk capital deficiencies by approximately 86% (from $71M to $10M) by 2032, compared to a 75% increase in high-risk deficiencies that would materialize with status quo funding levels. In addition, through strategic and targeted investments with the proposed investment levels, the number of high-criticality OC Admin buildings in poor overall condition is expected to decline from the current amount of 23 (approximately 41% of high-criticality OC Admin buildings) to at least[2] one (approximately 2% of the high-criticality OC Admin buildings). By contrast, with current funding levels, the number of poor condition high criticality OC Admin buildings would increase to at least 35 (approximately 63% of the high-criticality buildings in the OC Admin portfolio).

The planned capital investment level over 2028-2032 is $723.2M, with 38% ($272.4M) focused on Sustainment investments, 44% ($321.0M) focused on New Builds and Major Renovations, and 18% ($129.8M) focused on Compliance & Governance, as shown in Table 1.

Table 1 - Capital Expenditures by Segment for 2028-2032 ($M)

	2028	2029	2030	2031	2032	Total
Sustainment: Building Improvements and Component Replacements	32.9	83.3	42.3	65.0	48.9	272.4 (38%)
New Builds and Major Renovations	38.3	70.1	105.6	74.8	32.2	321.0 (44%)
Compliance & Governance	18.6	28.5	28.0	30.3	24.4	129.8 (18%)
Total Net Investments	**89.8**	**181.9**	**175.9**	**170.1**	**105.5**	**723.2**

[2] In light of limitations associated with forecasting building condition data more than five years beyond a BCA, this figure uses the number of buildings projected to be in poor condition in 2030 as its starting point and incorporates the effects of refurbishment work planned through 2032. Accordingly, it does not reflect any additional building deterioration that would occur throughout 2031 and 2032.

Sustainment capital investments (i.e., building renewal and asset replacements) mitigate building integrity and safety risks associated with deteriorating and/or failing building components at existing buildings. The failure of a building presents a major risk to the provision of transmission and distribution services and business continuity. As discussed in GSP Section 4.2.4, FRE does not operate redundant facilities, which reinforces the need to ensure that its existing facilities are fit for their intended purposes. For example, the loss of an OC will result in significant inhibition or total loss of service (outage response, work program execution, emergency calls) to customers within the operations area.

Sustainment investments are crucial in asset management to maintain assets in a state of good repair, minimizing break-fix and operational costs, and addressing the widespread deterioration currently observed across the OC Admin portfolio. As over 61% of buildings in the OC Admin portfolio would be expected to be in poor condition by 2030 without intervention (based on a 5-year FCI poor condition threshold of 35%), the most critical elements of the building (including building envelope, roofing, and HVAC systems) will be prioritized in accordance with the risk-based asset management approach discussed in GSP Section 4.7.2.3.2. Consistent with this risk-based approach, the proposed sustainment investment is targeted at the highest-priority facility needs. As described in Section 3.1 (Investment Description) below, the program addresses 52% of the deficiencies identified through building condition assessments (BCAs), focusing on the most critical building components rather than the full extent of known deficiencies. These investments are required before asset failures occur and adversely impact outage restoration and response, business continuity or the health and safety of Hydro One personnel. The planned investments will also mitigate the risk of increasing maintenance costs associated with poor condition sites, and reduce the need for more costly future interventions through timely refurbishment and replacement of critical building components.

New Builds and Major Renovation investments support business continuity and accommodate growing distribution and transmission operations. This is accomplished by performing major renovations and constructing replacement facilities for locations where conditions have deteriorated so severely that continued component repair or replacement is not economically justified. Table 2 provides the projects included in this segment.

Table 2 - New Builds and Major Renovations Capital Expenditures for 2028-2032 ($M)

Facility	2028	2029	2030	2031	2032	Total
Dryden OC and Fleet Garage	5.4	18.8	17.8	0.0	0.0	42.0
Brockville OC	2.2	3.7	13.3	10.4	0.0	29.6
Rockford OC	1.6	7.5	7.5	0.0	0.0	16.6
Peterborough OC	14.5	14.5	0.0	0.0	0.0	29.0
Kingston OC	4.7	7.8	18.5	15.5	15.5	62.0
Dryden Heliport	1.9	4.1	3.2	0.0	0.0	9.2
Hanmer Fleet Garage	3.1	3.1	12.4	12.4	10.4	41.4
Timmins OC	1.6	4.8	9.6	9.6	6.4	32.0
Huntsville Fleet Garage	1.9	3.2	11.4	8.9	0.0	25.4
Winchester Fleet Garage	1.3	2.6	11.9	10.5	0.0	26.3
Muskoka OC Land	0.0	0.0	0.0	7.5	0.0	7.5
Total New Builds and Major Renovations	**38.3**	**70.1**	**105.6**	**74.8**	**32.2**	**321.0**

These investments address facilities that either require major renovation or replacement due to advanced deterioration and no longer accommodate Hydro One's growing operational needs. By updating and expanding critical facilities, the program supports more reliable and efficient operations, reinforcing Hydro One's ability to safely and reliably serve customers across the Province. The investment drivers for each of the planned New Builds and Major Renovations are described in detail in Section 3.2 below.

Compliance & Governance investments facilitate Hydro One's compliance with legal and regulatory requirements and policy objectives in respect of portions of its OC Admin portfolio, such as worker accessibility and environmental objectives.

The 158 OC Admin sites act as the homebase reporting locations for more than 7,000 employees who require a safe and productive work environment at Hydro One. These facilities require washrooms, changing rooms, meeting and breakout spaces, to comply with occupational workplace standards and regulatory requirements. Approximately 60% of Hydro One's OC Admin buildings were built before 2000, prior to significant advancements in accessibility standards, inclusivity initiatives, sustainability objectives, and requirements relating to climate resilience.

Investments in Compliance & Governance will deliver targeted improvements in these areas. By retrofitting and upgrading select facilities, Hydro One will address compliance, inclusivity and accessibility needs. The investments will also support Hydro One's commitments to emissions reduction, sustainability, climate resilience, safety, and decarbonization, while supporting improved customer response. [3]

2.0 INVESTMENT NEED

Investment in the OC Admin portfolio is required to address the deteriorating condition of aging infrastructure, accommodate the growth in operational and administrative space needs necessary to support Hydro One's work programs, and maintain compliance with applicable legal, regulatory, and policy requirements. Portfolio investment at current levels is not sufficient to achieve these critical objectives. Without incremental investment as proposed in this ISD, Hydro One would face increasing facility deterioration, a growing backlog of capital deficiencies, and an elevated risk of asset write-offs, particularly at facilities that are critical to operational and business function.[4]

2.1 OC ADMIN FACILITY PORTFOLIO DEMOGRAPHICS

As outlined in GSP Section 4.2.4, the OC Admin portfolio consists of 158 sites and 389 buildings with an average building age of approximately 36 years. Hydro One manages this portfolio with a view to optimizing the portfolio's total lifecycle costs, using an industry-recognized asset management metric—the Facility Condition Index (FCI)—to quantify the current and expected overall condition of the portfolio based on asset replacement value (ARV) [5] of the deficiencies identified through comprehensive Building Condition Assessments (BCAs) and routine inspections.

[3] Hydro One Limited, Hydro One 2025 Sustainability Report, (May 7, 2026), p. 12 (https://www.hydroone.com/Sustainability/Documents/CSR_2025/2025-Sustainability-Report.pdf).
[4] Asset write-offs occur when the cost of addressing accumulated capital deficiencies approaches or exceeds the asset replacement value of the facility. In such circumstances, continued component-level refurbishment may no longer represent the most prudent long-term solution, requiring a demolition and rebuild of the facility at a significantly higher cost.
[5] For an explanation of ARV, refer to GSP Section 4.2.4.2.

Table 3 below shows that the portfolio's current FCI score as of 2025 and the expected FCI score by 2030 without investment. Currently, approximately 13.9% of the portfolio's total ARV corresponds to assets that require refurbishment or replacement based on observed deficiencies identified through BCAs. Without intervention, approximately 47% of the portfolio is expected to require refurbishment or replacement by 2030.[6] This outcome is not acceptable because it would result in a substantial increase in deteriorated facility assets, increasing the likelihood of asset failures, operational disruptions, health and safety risks. Hydro One's proposed investments are intended to mitigate these risks by addressing the highest priority deficiencies before failures occur.

Table 3 - Facility Condition Index (FCI) of OC Admin Portfolio

Scenario	Asset Replacement Value (ARV) % of Total Portfolio	Overall Portfolio Condition
Current State (i.e. 0-year FCI)	13.9% of the portfolio requires replacement or refurbishment	Poor[7]
Future State 2030 without investment (i.e. 5-year FCI)	47.0% of the portfolio requires replacement or refurbishment	Poor[8]

In addition to using FCI to assess the overall condition of the OC Admin facility portfolio, Hydro One also applies this metric to assess the overall condition of its buildings. Table 4 indicates the number of buildings within the OC Admin portfolio that are currently in poor condition, and that are expected to be in poor condition by 2032. Table 5 provides the same information for high criticality buildings. In the OC Admin facility portfolio, high criticality buildings support essential operational functions, including system operations, outage response, field workforce deployment, fleet maintenance, customer operations, and other activities necessary for the safe and reliable operation of Hydro One's transmission and distribution systems. Failure or prolonged unavailability of these facilities

[6] In accordance with widely adopted methodology, Hydro One employs a five-year outlook to building component deterioration, using condition data as of 2025.
[7] In accordance with industry established thresholds, a 0-year FCI that is greater than 10% reflects a portfolio that is in poor condition.
[8] In accordance with industry established thresholds, a 5-year FCI that is greater than 35% reflects a portfolio that is in poor condition.

can significantly impair business continuity, operational effectiveness, customer response, and the safety of Hydro One employees.

Table 4 - Number of OC Admin Buildings in Poor Condition

Scenario	Buildings in Poor Condition
Current State (i.e. 0-year FCI)	143 (approx. 37% of portfolio)
Future State 2030 without investment	239 (approx. 61% of portfolio)
Future State 2032 with current investment levels (i.e. status quo)	At least[9] 221 (approx. 57% of portfolio)
Future State 2032 with proposed investment plan	At least[10] 77 (approx. 20% of portfolio)

Table 5 - Number of High Criticality OC Admin Buildings in Poor Condition

Scenario	High Criticality Buildings in Poor Condition
Current State (i.e. 0-year FCI)	23 (approx. 41% of total high criticality OC Admin buildings)
Future State 2030 without investment	41 (approx. 73% of total high criticality OC Admin buildings)
Future State 2032 with current investment levels (i.e. status quo)	At least[11] 35 (approx. 63% of total high criticality OC Admin buildings)
Future State 2032 with proposed investment plan	At least[12] 1 (approx. 2% of total high criticality OC Admin buildings)

As shown in the tables above, a significant number of OC Admin facilities are projected to deteriorate during the upcoming planning period. The quantity of poor condition buildings expected in 2032 (including high criticality buildings) was estimated using a conservative methodology - actual figures may be greater. Specifically, as noted above, these figures use the 2030 projected state as a baseline, and for the years 2031 and 2032, account only for incremental improvements without incremental deterioration, to ensure the forecast

[9] In light of the limitations associated with forecasting building condition data more than five years beyond a BCA, as discussed in the preceding footnote, this figure uses the number of buildings projected to be in poor condition in 2030 as its starting point and incorporates the effects of refurbishment work planned through 2032. Accordingly, it does not reflect any additional building deterioration that would occur throughout 2031 and 2032.
[10] *Ibid*.
[11] *Ibid*.
[12] *Ibid*.

remains within the five-year industry standard and is supported by BCA and other inspection data. Given the serious consequences that a high criticality building failure can have on business operations and distribution and transmission service, the proposed investment levels are necessary to reduce the current number of high-criticality poor condition buildings. By contrast, maintaining current investment levels would increase this number, heightening the risk of building failures and resulting service interruptions.

As such, the proposed investments are needed to address this deterioration and mitigate the safety, reliability, compliance, and operational effectiveness risks associated with operating facility assets in deteriorated condition. These risks are further discussed in Section 2.3 below. Further details on the condition of the various building components and how the proposed investment addresses them are provided in Section 3.1 below.

2.2 BUILDING CONDITION ASSESSMENTS (BCA)

Hydro One's investment needs for the OC Admin portfolio are informed by a comprehensive data collection process centered on BCAs. This process also includes supporting engineering analyses and inspections that evaluate facility components such as exterior walls, roofing, heating, ventilation and air conditioning systems, interior finishes, electrical systems, plumbing, fire protection systems, and siteworks. In total, Hydro One has completed 123 BCAs in the OC Admin portfolio, representing 96% of the OC Admin portfolio's serviceable sites, with an average assessment age of 3.3 years. These assessments provide the foundation for identifying asset deficiencies, evaluating risk, and prioritizing investment needs across the portfolio, and the methodology used to perform these assessments has been independently verified by a third-party expert, Jones Lang LaSalle (JLL) as described in GSP Section 4.3.5 and in Attachment 5 of that section.

2.3 FAILURE RISK

A key driver of the proposed investment is mitigating the risk of building component failure across the OC Admin portfolio. These facilities play a critical role in supporting the reliable operation of the distribution and transmission systems, including housing personnel and equipment that operate and maintain the system, and that respond to emergencies.

Failure of core building systems can affect the reliability and operational continuity of the distribution and transmission systems. As building components deteriorate, they can

contribute to structural deterioration, water intrusion, and mould growth, creating health and safety concerns for Hydro One employees and increasing the risk of facility unavailability. Building envelope deficiencies, roof failures, HVAC failures, and water ingress can also damage vehicles, equipment, inventory, and sensitive electrical or electronic systems housed within facilities. In certain locations, these failures may compromise communications, control, or other operationally significant equipment, potentially resulting in equipment faults, protection system malfunctions, service disruptions, or other impacts to the electricity system. As a result, failures at OC Admin facilities can create consequences that extend beyond the affected building itself. Maintaining the condition and reliability of these facilities is therefore essential to protect the integrity of the distribution and transmission equipment and vehicles that are stored in these buildings, and to ensure that essential Hydro One personnel have a safe and productive workplace. This reduces risks to the distribution and transmission systems, and supports the safe and reliable delivery of electricity to customers.

The failure of building components is not merely hypothetical: it has occurred during the current rate period and has resulted in real challenges for Hydro One. In January 2025, a modular building constructed around 1990 at an OC in Ontario's snow belt suffered a structural compromise during a severe winter storm, resulting in the total loss of the building. The facility had originally been constructed as a temporary solution and remained in service well beyond its intended purpose due to the need to continually prioritize limited investment funding across a broad portfolio of competing asset needs. Over time, the combination of an aging building configuration, exposure to increasingly severe climatic conditions, and the practical realities of investment prioritization increased the facility's vulnerability to failure. Following the storm event and subsequent structural damage, Hydro One determined that the building was unsafe to occupy and it was subsequently vacated and demolished. This is further outlined in Figure 1 and Figure 2 below.

Figure 1: Failed base building components at OC prior to full demolition (March 2025)

Figure 2: Failed base building components at OC prior to full demolition (March 2025)

Following this event, power restoration activities were inhibited by the lack of a storm response room, a backup power generator for core IT technology functions, and a reporting location for several administrative personnel and field crews. Storm restoration crews were overwhelmed by the limited remaining on-site capacity. The loss of the building left the remaining washrooms, lunchrooms, office spaces, touchdown spaces, and meeting rooms unable to support on-site personnel, given that Hydro One does not operate redundant facilities that can absorb the loss of a building. This impaired operational effectiveness and outage restoration activities during the March 2025 ice storm. An interim solution was deployed on an emergency basis to restore this critical response capacity. However, it was not as operationally effective as the typical configuration, and therefore impaired storm response capabilities. Implementing the interim solution to mitigate the operational challenges from the building failure also resulted in unplanned implementation costs.

This incident demonstrates the consequences of operating facilities beyond their intended design parameters and highlights the importance of proactively addressing facility risks before they result in significant operational disruption. As the number of portfolio deficiencies continues to accumulate, Hydro One expects the likelihood of building-related failures to increase, particularly where deteriorating base building systems and components are not addressed through timely sustainment, renewal, or replacement investments.

To address the deficiencies that pose the greatest risk to the organization and its customers, Hydro One prioritizes its investments using a risk-based framework. As described in GSP Section 4.7.2.3.2, the framework evaluates both the probability of failure, based primarily on condition assessments, and the impact of failure (i.e., criticality of buildings and components). High-risk deficiencies are associated with assets that exhibit both a high probability of failure and significant impact of failure.

The outcome of this risk-based prioritization is illustrated in Figure 3 and Figure 4 below which compares the projected value of capital deficiencies within the OC Admin portfolio by risk category under the status quo funding scenario and the proposed investment plan. While the value of total capital deficiencies is projected to increase under both scenarios,

albeit to a significantly lesser extent with the proposed investment levels, the proposed plan prioritizes investment in the highest-risk assets and building components to mitigate the safety, reliability, and operational impacts associated with their failure.

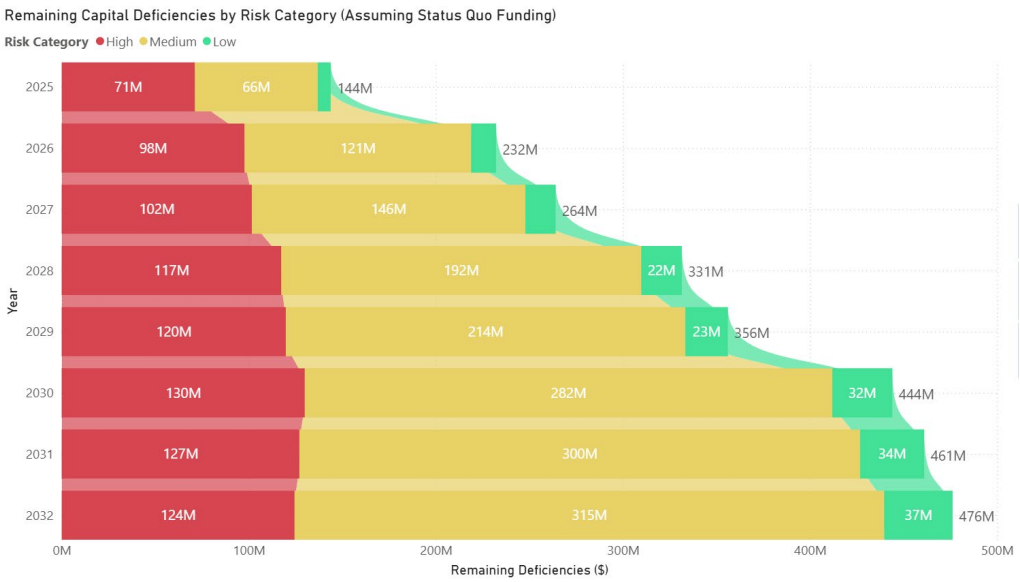

Figure 3: Forecasted $ Value of OC Admin Building Deficiencies by Risk with Status Quo Investment Levels

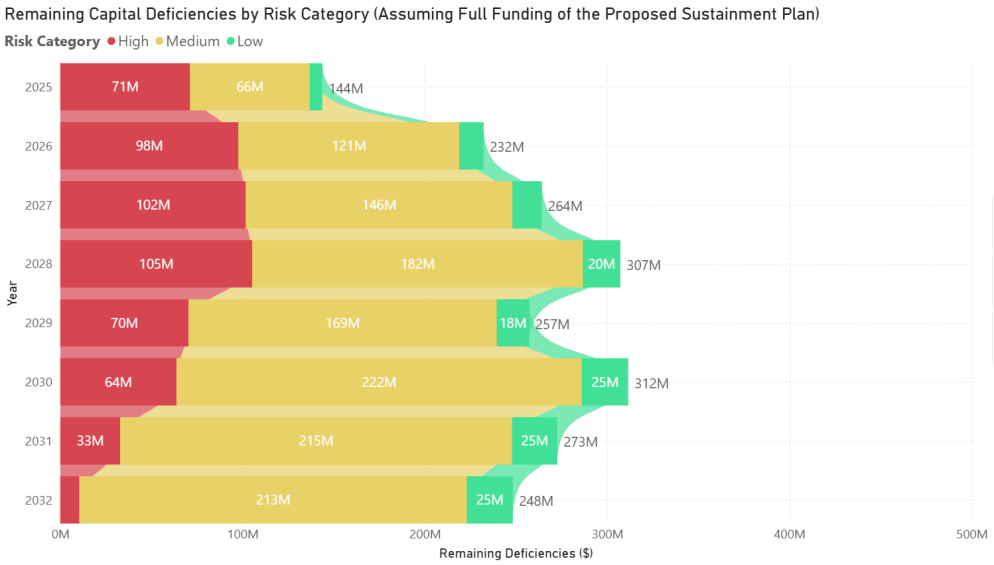

Figure 4: Forecasted $ Value of OC Admin Building Deficiencies by Risk with Proposed Investment Levels

A key driver of the proposed investment is mitigating the risk of building component failure across the OC Admin portfolio. Hydro One classifies building components as high, medium, or low criticality based on the expected impact of a component failure on the business, including impacts to safety, operations, asset performance, and continuity of service.

- 50% of the proposed sustainment investments described in Section 3.1 below are directed toward high-risk building components. As a result, high-risk capital deficiencies are projected to decline from $71M in 2025 to $10M by 2032 under the proposed plan, representing a reduction of approximately 86%. By contrast, under status quo funding levels, high-risk capital deficiencies are projected to increase from $71M in 2025 to $124M by 2032, representing an increase of approximately 75%.
- Approximately 45% of the proposed sustainment investments described in Section 3.1 below are directed toward medium-risk building components. Medium-risk capital deficiencies are projected to increase from $66M in 2025 to $213M by 2032 under the proposed plan, representing an increase of approximately 222%. By contrast, under status quo funding levels, medium-risk capital deficiencies are projected to increase from $66M in 2025 to $315M by 2032, representing an increase of approximately 377%.
- Approximately 5% of the proposed sustainment investments described in Section 3.1 below are directed toward low-risk assets. While these assets are lower priority under Hydro One's risk-based framework, their replacement or refurbishment remains necessary in certain circumstances where deterioration creates employee safety concerns or affects the functionality of occupied facilities.

Examples of high-risk deficiencies include poor condition building envelope components (e.g., walls, windows, doors, and roofs), HVAC systems and fire and life safety components. The majority of high-risk deficiencies pertain to building components with high criticality because of the elevated impact of failure for these components. Failure of these components can have significant consequences for responding to customers and

outages, business continuity, and the safety of Hydro One personnel. Figures 5 to 9 below depict examples of deteriorated high-risk assets within the OC Admin portfolio.

Figure 5: Deterioration of building envelope resulting in water intrusion of a main building office at an OC (October 2025). This causes ceiling finish failures, and compromised insulation.

Figure 6: Deterioration of roof system causing water penetration and roof membrane failures at OC (October 2025). Deteriorated roofing membranes result in elevated likelihood of leaks and strain on structural components.

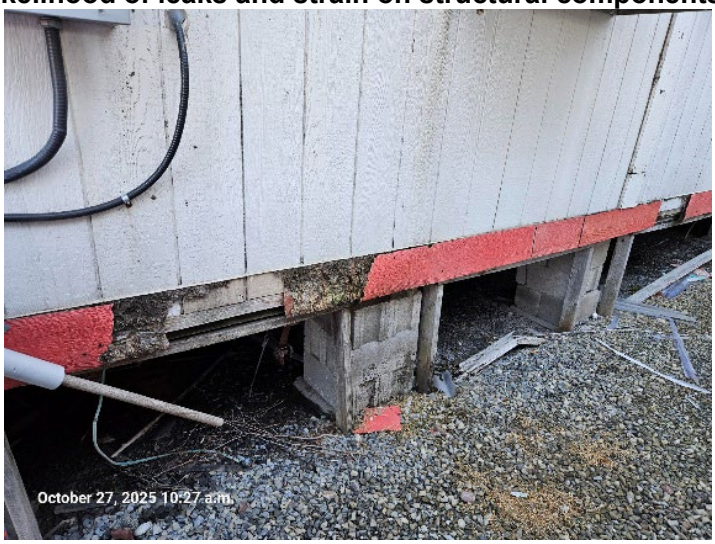

Figure 7: Deteriorating building envelope and footprint at a modular building OC (October 2025). Hydro One is mitigating immediate risks using temporary stabilization measures.

Figure 8: Deteriorated building envelope and footprint at a modular building OC (October 2025). Hydro One is mitigating immediate risks using temporary stabilization measures.

Figure 9: Deteriorated building envelope of main building at OC (October 2025). Poor condition building envelope elevates the likelihood of leaks and can impact the integrity or longevity of superstructure components they protect.

Examples of medium-risk deficiencies include gravel and paved yards, and drainage systems. While the consequences of failure are generally less severe than for high-risk assets, deterioration of these components can result in flooding, washouts, security vulnerabilities, and health and safety concerns for Hydro One employees. These impacts can affect access to equipment and materials, impair facility operations, and disrupt business continuity.[13] Figures 10 to 12 below depict examples of deteriorated medium-risk assets within the OC Admin Facility portfolio.

[13] Medium-risk deficiencies can include “high-criticality” building components when their probability of failure is high, but the components are part of a building with low criticality (i.e., because of the lower impact of failure to business operations or health and safety). For example, a poor condition foundation or roof on a storage facility can be considered medium-risk. This is considered a low criticality building because, if it fails, it is less likely to result in an impact on grid reliability, personnel safety, or cause a major business disruption. For a full description of Hydro One’s risk scoring methodology, see GSP Section 4.7.2.3.2, *Investment Prioritization*.

The photos below depict examples of deteriorated medium-criticality assets within the OC Admin portfolio.

Figure 10: Poor drainage and siteworks resulting in poor operating conditions and unavailable equipment in yard at OC (October 2025)

Figure 11: Poor condition drainage and siteworks resulting in large potholes in yard at OC (October 2025). Deterioration of siteworks can cause excessive wear and damage to fleet, equipment and impact the integrity of drainage systems.

Figure 12: Damaged window of main building at OC (October 2025)

Examples of low-risk deficiencies include interior finishes such as floors and ceiling finishes failing at staffed station buildings. While these assets generally have a lower impact on reliability and operations, replacement or refurbishment may still be required where deterioration creates health and safety concerns or affects the functionality of occupied facilities. For example, where a roof leak has caused excessive moisture, replacement of affected flooring or carpets may be required to address mould growth and mitigate associated health and safety risks. Figure 13 below depict examples of deteriorated low-risk assets within the OC Admin portfolio.

Figure 13: Poor condition interior finishes at OC (April 2026)

2.4 WORKFORCE AND CAPITAL PLAN GROWTH

Hydro One requires additional facilities capacity and infrastructure to support the unprecedented growth associated with expanding administrative, operational, and maintenance activities. Specific drivers for this additional capacity include:

- additional full-time employees (FTEs) as described in Exhibit E-06-02, Section 4.0;
- additional vehicles as detailed in the Fleet Services Planned Growth Program in GSP Section 4.11, G-GP-01, Section 3.2; and
- significant amounts of equipment and distribution and transmission system components needed to deliver the Distribution System Plan, Transmission System Plan, and the growing operational and maintenance program.

While portions of the existing OC Admin portfolio have historically provided sufficient capacity, many facilities were not designed to accommodate current and forecast operational requirements. As Hydro One's capital and maintenance programs continue to expand, several facilities have reached, or are approaching, their practical capacity limits. Without additional facilities capacity, Hydro One's ability to efficiently execute planned administrative, construction, operation, and maintenance activities is expected to be increasingly constrained. Section 3.2 below describes the specific projects included in the New Builds and Major Renovations segment that will address this need. Figure 14 illustrates an example of facilities within the portfolio that lack necessary capacity:

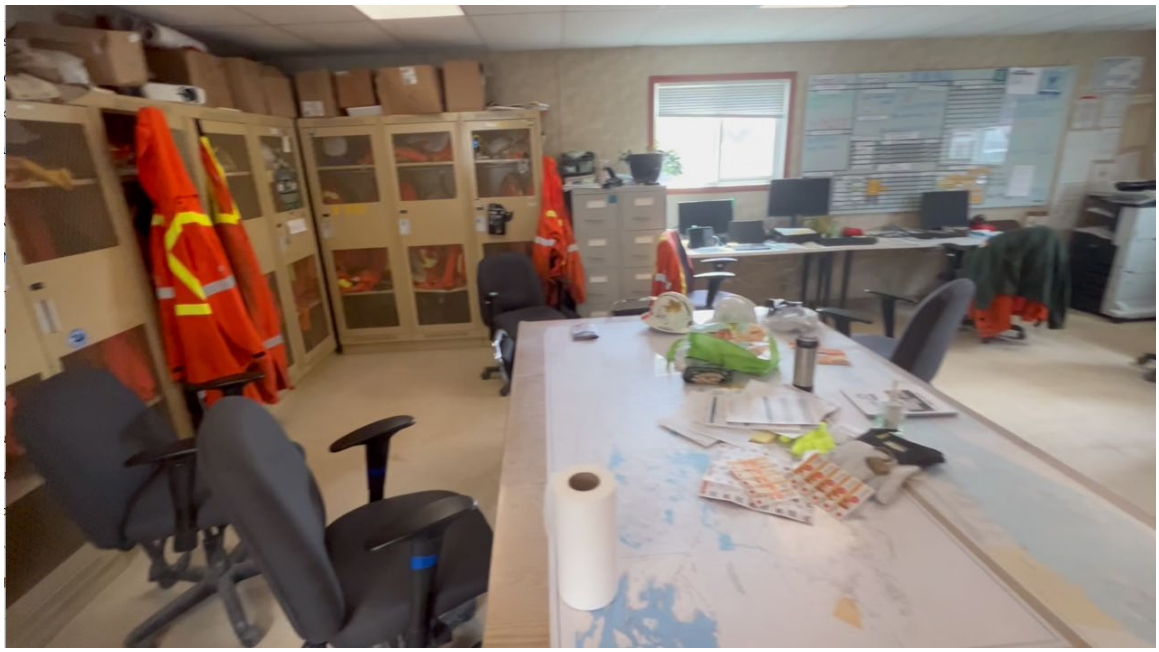

Figure 14: Capacity constraints resulting in a small trailer acting as change room, meeting room, and common office at OC (June 2025)

2.5 FACILITY UPDATES TO PROMOTE COMPLIANCE AND POLICY ALIGNMENT

Several legal, regulatory, and policy factors underpin the need for Compliance & Governance investments in the portfolio. The 158 OC Admin sites serve as staffed homebase reporting locations for more than 7,000 Hydro One employees. These staffed OC Admin facilities must comply with occupational workplace standards and regulatory requirements. Approximately 60% of the portfolio was built before the year 2000, and accessibility, inclusivity, and environmental requirements have evolved significantly since then. Many of these facilities have received minimal renovation and do not meet contemporary standards for accessibility, inclusivity, and environmental performance, even where they remain structurally serviceable. Continued investment is necessary to ensure Hydro One provides a safe, accessible, and inclusive workplace for its employees, consistent with the standards expected of a modern electric utility.

Hydro One's investments are informed by the following legislative and regulatory requirements:

- Provincial and Federal Building Codes – Changes to construction and occupancy standards affect future facility improvements and work planning needed to meet

occupancy objectives. Code changes can also broaden the scope of renovations or upgrades undertaken for other reasons, affecting connected or complementary systems (e.g., air quality systems).

- Accessibility – Pursuant to the *Accessibility for Ontarians with Disabilities Act, 2005, S.O. 2005, c. 11,* Hydro One is required to upgrade certain buildings or site components (including parking spaces, ramp access, door widening, and wayfinding and tactile cues) when existing facilities undergo new construction, redevelopment, or major renovations.
- Environmental Regulations (e.g., *O. Reg. 490/09: Designated Substances, under the Occupational Health and Safety Act, 1990*) – Various environmental regulations affect the development or redevelopment of facilities, including the identification and management of designated substances (e.g., asbestos), which are common given the age of FRE assets.Deferring these investments carries risk that facilities will no longer be fit for purpose or aligned with applicable workplace, accessibility, and environmental requirements. For example, if a building lacks necessary accommodations for women (e.g., washroom or changing room) or is not accessible, employees may be unable to perform their work safely, effectively, or equitably.

3.0 INVESTMENT DESCRIPTION

The proposed investment program for 2028-2032 includes the following categories of work:

- Sustainment – Building Improvements and Component Replacements address the following work programs:
    - Base Building & Fire/Life Safety
    - Services and HVAC
    - Mechanical and Siteworks
    - Interiors and Upgrades
- New Builds and Major Renovations/Upgrades:
    - Major renovations of existing facilities and construction of new facilities to address business growth, and/or facilities which have reached end of life

condition and/or no longer adequately suit the operational requirements for the Line(s) of Business.

- Compliance & Governance:
  - Investments in retrofitting and upgrading select facilities for compliant, inclusive and accessible facilities at existing facilities that do not meet modern code and accessibility requirements.
  - Further investments will seek to deliver on commitments in emissions reductions, sustainability, and climate resiliency – initiatives that deliver on improved customer response, and commitments to safety and decarbonization.

Further details on each category of work are provided below.

3.1 SUSTAINMENT: BUILDING IMPROVEMENTS AND COMPONENT REPLACEMENTS

Investments in ongoing sustainment, such as building improvements and component replacements, are necessary to ensure operational facilities are kept in acceptable condition to minimize asset failure risk, meet line of business requirements, ensure business continuity and minimize health and safety risks.

The proposed sustainment investments are based on estimated work to be performed over the planning period. The specific work to be executed from year to year will be scoped and finalized based on the specific circumstances of each project. The objective is to pursue the most cost-effective strategy that addresses operational requirements and mitigates risks in accordance with the risk-based framework described in GSP Section 4.7.2.3.2.

Table 6 - Sustainment Investments - Net Expenditures for 2028-2032 ($M)

Program	2028	2029	2030	2031	2032	Total
Base Building & Fire/Life Safety	23.9	49.7	17.5	16.5	16.5	124.1
Services and HVAC	5.2	23.7	18.5	8.8	8.5	64.7
Mechanical and Siteworks	2.8	8.9	5.3	35.8	17.9	70.7
Interiors and Upgrades	1.0	1.0	1.0	3.9	6.0	12.9
Total Sustainment	**32.9**	**83.3**	**42.3**	**65.0**	**48.9**	**272.4**

Sustainment investments will be bundled into the work programs described in Table 6 above to create efficiencies in work done on complementary building systems (e.g. replacing windows and doors at the same time as exterior building envelope can be more cost-effective than executing these projects individually), or to leverage efficiencies of labour mobilized at a certain site to execute work across several buildings (where applicable).

Table 7 describes the extent to which the proposed investment in the Sustainment segment will address the known and expected deficiencies within the OC Admin portfolio based on condition assessments and inspections. These figures underscore both the scale of investment required to maintain the portfolio and the fact that proposed funding levels address only a targeted portion of the identified capital deficiencies. The table demonstrates that the proposed investment under the Sustainment segment is targeted to address 52% of needed work with a focus on building components with higher criticality.

Table 7 - Asset Replacement Value (ARV) of Building Components in Condition-Adjusted End of life

Program	Component Criticality	ARV[14] of Known Deficiencies ($)	ARV of Forecasted Deficiencies ($)[15]	Allocated Amounts In Plan ($)	% of Forecasted Deficiencies Addressed in Plan
Base Building & Fire/Life Safety		**49.3**	**214.2**	**124.1**	**58%**
Structural	H/M	3.4	10.4		
Exterior Enclosure	M	28.3	137.6		
Roofing	H	16.0	60.3		
Fire Protection	H	0.5	1.2		
Conveying and Stairs	H	1.1	4.7		
Services and HVAC		**29.5**	**95.5**	**64.7**	**68%**
HVAC	H	11.3	28.7		
Building Plumbing	H/M	1.8	6.4		
Building Electrical	H/M	16.4	60.4		
Mechanical and Siteworks		**51.9**	**157.8**	**70.7**	**45%**

[14] For a discussion on asset replacement value with the FRE portfolio, refer to GSP Section 4.2.4.
[15] The forecasted value of deficiencies includes all needs up to 2032. However, deficiencies that are planned to be addressed in 2026 and 2027 have been subtracted from this figure.

Civil/Mechanical Utilities	H/M	6.5	15.9		
Electrical Utilities	H/M	1.2	6.0		
Siteworks and Drainage	M	44.2	135.9		
Interiors and Upgrades		**12.8**	**51.8**	**12.9**	**25%**
Interior Construction	M/L	1.1	8.7		
Interior Finishes	L	11.2	40.9		
Interior Equipment	L	0.5	2.2		
Total Sustainment		**143.5**	**519.3**	**272.4**	**52%**

Base Building and Fire/Life Safety

This program includes building components that Hydro One has determined to have the highest risk (i.e., high impact and probability of failure). Investments will primarily address high-criticality components in the following building systems and site elements:

- Foundations
- Basement
- Superstructure
- Exterior enclosure (walls, windows, and doors)
- Roofing
- Stairs and conveyancing
- Fire Protection

Due to the high criticality of these building components, the failure of any of these systems can result in a building out of service and lead to significant operational challenges. Because of the high costs and impracticability typically associated with replacing these types of building components (e.g., foundation, walls, superstructure), deficiencies in these building systems are often addressed through targeted refurbishment rather than wholesale component replacement. This work program is paced to complete a higher volume of work in 2028 and 2029, to prioritize the high-risk building components addressed by this program earlier in the future rate period

Figures 15 to 18 depict examples of the types of building deficiencies that Hydro One proposes to address as part of this work program:

Figure 15: Structural pillar in poor to failed condition in an accessory building at OC (October 2025). Structural deficiencies can compromise a building's integrity.

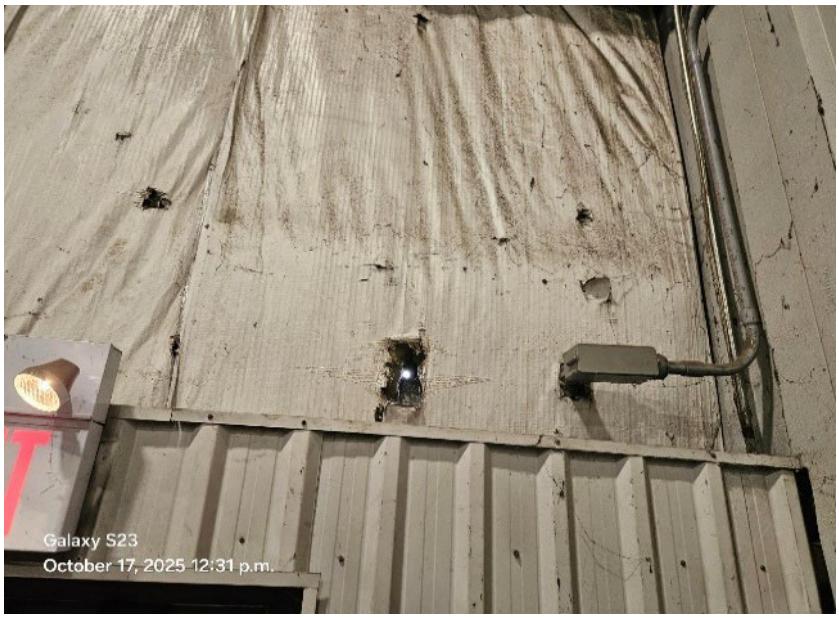

Figure 16: Deteriorated building envelope of main building shop at OC (October 2025). Poor condition building envelope elevates the likelihood of leaks and can impact the integrity or longevity of superstructure components they protect.

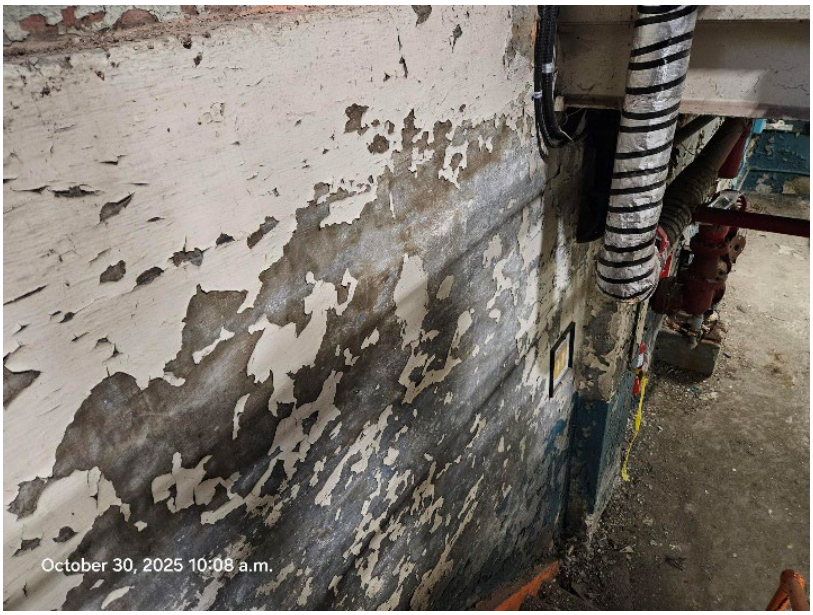

Figure 17: Deteriorated building envelope resulting in water intrusion and paint peeling in main building at OC (October 2025)

Figure 18: Deteriorated building envelope in main building at OC (October 2025)

Services and HVAC

This program primarily addresses high and medium-risk assets in need of replacement or refurbishment. Investments primarily include high-criticality components in the following building systems:

- Building plumbing
- Building electrical
- HVAC

These systems are necessary for the building to serve as a safe and productive workplace, and the failure of any of these systems would typically prevent the building from serving its operational purpose.

This work program is paced to complete most of the work in 2029 and 2030, consistent with timelines required for design, engineering and managing work disruptions from typically complex services and HVAC projects.

Mechanical and Siteworks

This program addresses high and medium-risk assets in need of replacement or refurbishment. This includes high and medium-criticality components in the following building systems (and outlined examples found in Figures 19 to 21):

- Civil and mechanical utilities
- Electrical utilities
- Siteworks
- Drainage

These components are necessary for the building to serve as a safe and productive workplace, and the failure of any of these systems would typically prevent the building from serving its operational purpose. For example, over the current rate period, there have been instances in the OC Admin portfolio where deteriorated civil and mechanical utility systems have resulted in interruptions to availability of potable water or septic systems.

This work program is paced to complete work in two stages: the first, in 2029, is intended to address high-risk failed services, and the second wave in 2031 and 2032 to address high-risk long-lead projects and capital-intensive but medium-risk siteworks, drainage and grading projects.

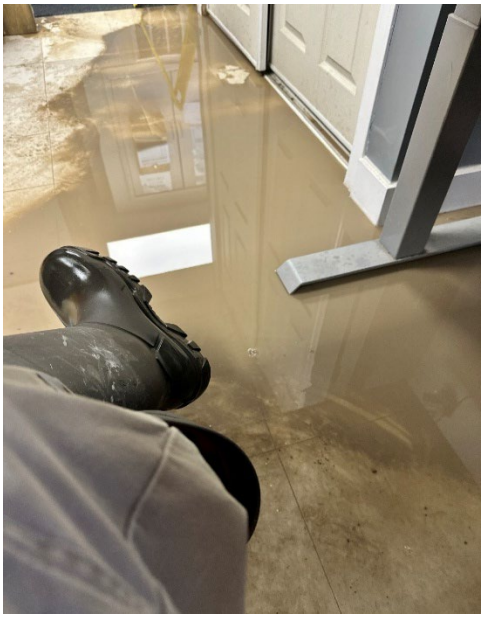

Figure 19: Poor drainage resulting in main building flooding at OC (March 2025)

Figure 20: Poor drainage and siteworks resulting in large potholes and deterioration of yard at OC (October 2025)

Figure 21: Poor drainage resulting in erosion and failure of fence and compromised security of the yard at OC (October 2025)

Interiors and Upgrades

This program addresses medium and low-risk category of components in poor condition. They include components in the following building systems (and outlined example found in Figure 22):

- Interior construction
- Interior finishes
- Equipment such as health and safety devices and kitchen appliances.

Because these building systems typically have lower criticality than the components in other work programs, as part of Hydro One's risk-based framework, it will be addressing a minor portion (i.e., approximately 25%) of these components in poor condition.

This work program is paced to be completed in 2031 and 2032 to allow Hydro One to prioritize higher-risk deficiencies earlier in the rate period.

Figure 22: Poor condition interior finishes at OC (June 2026)

3.2 NEW BUILDS AND MAJOR RENOVATIONS

Investments in New Builds and Major Renovations account for $321.0M (approximately 44%) of the program costs from 2028-2032. These are comprised of the 11 projects listed in Table 8.

Table 8 - New Builds and Major Renovations Capital Expenditures for 2028-2032 ($M)

Facility	2028	2029	2030	2031	2032	Total
Dryden OC and Fleet Garage	5.4	18.8	17.8	0.0	0.0	42.0
Brockville OC	2.2	3.7	13.3	10.4	0.0	29.6
Rockford OC	1.6	7.5	7.5	0.0	0.0	16.6
Peterborough OC	14.5	14.5	0.0	0.0	0.0	29.0
Kingston OC	4.7	7.8	18.5	15.5	15.5	62.0
Dryden Heliport	1.9	4.1	3.2	0.0	0.0	9.2
Hanmer Fleet Garage	3.1	3.1	12.4	12.4	10.4	41.4
Timmins OC	1.6	4.8	9.6	9.6	6.4	32.0
Huntsville Fleet Garage	1.9	3.2	11.4	8.9	0.0	25.4
Winchester Fleet Garage	1.3	2.6	11.9	10.5	0.0	26.3
Muskoka OC Land	0.0	0.0	0.0	7.5	0.0	7.5
Total New Builds and Major Renovations	**38.3**	**70.1**	**105.6**	**74.8**	**32.2**	**321.0**

Investments in this segment are necessary to address a combination of poor condition facilities, business growth, and enhance operational effectiveness through facility consolidation. Through 2028-2032, the New Builds and Major Renovations segment targets facility investments required to meet operational needs and mitigate reliability, safety, and compliance risks. Full replacement projects are pursued only when a combination of key drivers demonstrates that targeted sustainment is inadequate and replacement provides the lowest risk, most cost-effective outcome.

The following are the key drivers that underpin the need for projects under the New Build and Major Renovations segment:

- **Poor Condition Existing Facilities:** Facility deterioration confirmed through BCAs and supplemental evaluations or inspections. Sites with condition ratings well beyond the poor threshold (indicating significant capital deficiencies) are

rebuilt to address escalating operational disruptions and safety risks. The alternative of applying costly patchwork repairs can ultimately exceed the replacement value of the sustained asset over time while not addressing other factors. Figure 23 and Figure 24 are examples found in OC buildings.

Figure 23: Deterioration of building envelope resulting in water leaking, poor condition ceiling finishes and insulation failure in main building office at OC (October 2025)

Figure 24: Deteriorated building envelope in main building at OC (October 2025)

- **Operational Growth and/or Changing Business Needs:** Expansion of work programs and distribution and transmission systems, workforce increases, changing equipment and vehicle needs and new operational requirements where existing sites have limited capacity to accommodate growth needs and cannot support Hydro One's business objectives without additional or expanded facilities.
- **Consolidation:** Investments are pursued where the consolidation of multiple buildings and/or sites delivers efficiencies and enhance operational effectiveness.
- **Risk to Long-Term Viability:** Unique site specific considerations threaten the business continuity at certain facilities, including risk associated with leases and challenges associated with existing facility location.

Hydro One employs an evidence-based prioritization of new builds by considering BCAs, space adequacy, security and safety concerns, and operational requirements. Prospective new builds undergo rigorous review of alternatives, including renovation, purchase, or re-development options. Investments are selected only when the alternatives considered demonstrate that a new build or major renovation is the most economical strategy capable of addressing the identified project drivers.

The remainder of this section discusses each of the projects listed in Table 8.

3.2.1 DRYDEN OC AND FLEET GARAGE ($42.0M)

Summary

The Dryden OC & Fleet Garage New Build will replace two deficient operational facilities in Dryden, Ontario with a consolidated hub on an 8.0-acre site. At a total project cost of approximately $42.0M, design is planned for 2028 with construction beginning in 2029 and completion targeted for 2030.

The main drivers for the new build in Dryden are 1) poor condition existing facilities, 2) addressing sites no longer meeting business needs, and 3) enhancing operational effectiveness through facility consolidation.

The existing Dryden OC and Dryden Fleet Garage have material building deficiencies, with the Fleet Garage in poor condition and the OC approaching the poor-condition threshold, and require replacement rather than repair due to extensive structural and system failures. Critical base building components, including structural, and building shell components have been assessed to be in poor or failed condition and present a health and safety risk to Hydro One personnel. Site septic and well systems have been recently compromised at the OC, and potable water is being transported on site as an interim measure. Washroom facilities have completely failed in winter months, and resolution of underlying causes is a major capital expenditure due to servicing complexities on site.

The new build will consolidate these sites on land purchased in 2020 which is fully serviced, development-ready and ideally located in Dryden's business district, allowing for expanded capacity for future growth, as referenced in Figure 25. All alternatives, including continued patchwork repairs, major renovation, or relocating operations, are less beneficial or more costly in the near to medium term.

The project will modernize critical infrastructure and safeguard service reliability for ~22,400 customers in the largely remote and rural Dryden operating area, aligning with expectations of prudent asset management and long-term planning.

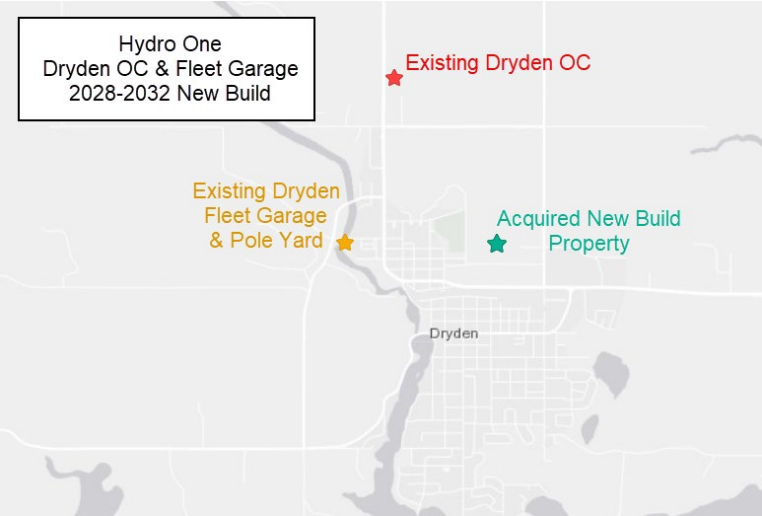

Figure 25: Map of the existing Dryden OC, existing Dryden Fleet Garage and Pole Yard, including the location of the acquired new build property

Analysis (Investment Need)

Poor Condition Existing Facilities – BCAs confirm that there is building component deterioration within the Dryden OC and Fleet Garage, and that they are expected to further deteriorate into poor condition over the future rate period according to their 5-Year FCI. The Fleet Garage's 69% 5-Year FCI denotes poor condition well beyond the poor threshold of 35%. This means that, without intervention, expected deficiencies within the next five years will equal about 69% of the building's replacement value. The 2025 BCA for the Fleet Garage reported deficiencies that include following:

- Cracking throughout the slab foundation
- Localized deformities on the exterior enclosure
- Exterior lights in poor condition
- Roof of garage extension requiring lifecycle replacement in short term
- Deterioration of the concrete ramp
- Ponding and grading issues on dirt only siteworks
- Various interior finishes worn and in poor condition

The main Dryden OC has a 5-Year FCI of 34%, indicating material deficiencies near condition-adjusted end of life that approach the poor condition threshold of 35%. This means that, without intervention, expected deficiencies within the next five years will equal about 34% of the building's replacement value. The 2025 BCA for the OC reported deficiencies that include the following:

- Minor to moderate general deterioration of the foundation at all elevations, including erosion of soil surrounding the foundation, exacerbating the issue at the main building
- Hairline cracking and erosion of the slab on grade at all ancillary buildings
- Air handling unit and cooling split have reached end-of-expected-life
- Worn and cracked asphalt paved roadway
- Worn and cracked asphalt paved parking lot
- Worn concrete pad at the west entrance

- Deteriorated concrete curbs with faded painted demarcations
- Misaligned and worn stone unit pavers
- Painted interior surfaces worn and in poor condition

Given degradation over decades of service (original construction dates 1988 and 2000), further patchwork repairs are expected to exceed the asset replacement value of the buildings and is therefore not cost-effective. When combined with other factors, a consolidated new build is a more cost-effective option.

Constrained Capacity & Inability to Meet Business Needs – Both of the existing Dryden OC and Dryden Fleet Garage lack the space to be able to accommodate the operational requirements of local Distribution Lines, Fleet, and Forestry teams. The new integrated complex (~29,400 sq.ft.) will be right-sized to meet current needs and projected growth, with a capacity of approximately 50 staff and the ability to scale up to 90 or more personnel in contingency scenarios.

The Dryden OC (10,280 sq. ft.) is in the bottom quartile of Hydro One OCs for usable space per field employee. This constrains the facility's ability to support modern equipment, accommodate staff during storm response, meet washroom and common space requirements, respond to variations in program volumes and workforce expansion.

The Dryden Fleet Garage is undersized for heavy vehicles which have increased in length and size since the facility was constructed. These vehicles are needed to transport and set poles, and to maintain equipment and restore power to approximately 22,400 local customers in the region. The garage is approximately 50 ft. deep, while the heavy vehicles serviced at this location often exceed 50 ft. in length (referenced in Figure 26 below). As a result, mechanics frequently work outside in unpaved yard conditions, including during winter. Tool and parts storage is located on a mezzanine, posing safety risks. The site is heavily sloped toward the adjacent river, limiting expansion potential and environmental mitigation options. The nearest alternative fleet garage is approximately 3.5 hours away, meaning that transporting vehicles elsewhere directly impacts operational readiness and fleet downtime.

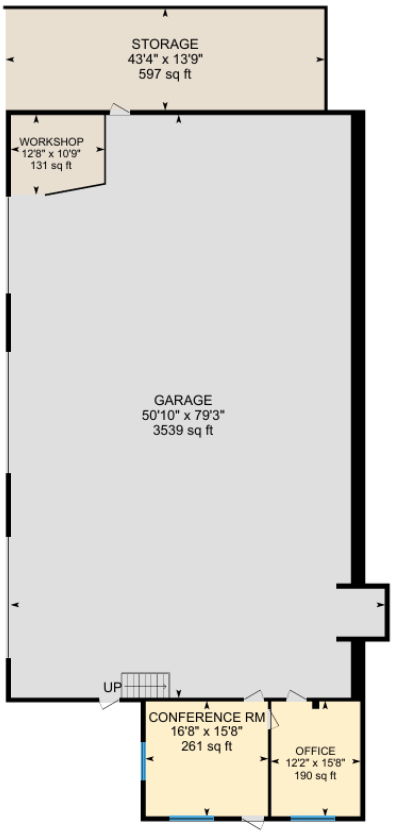

Figure 26: Layout of Dryden Fleet Garage

Consolidation & Efficiency – The Dryden project will consolidate two separate sites (7 buildings) into one facility on pre-existing land (8.7 acres) purchased in 2020. Co-locating Distribution Lines and Fleet Operations will reduce inter-site travel and improve coordination. Alternative options were evaluated and rejected: leasing is not viable in this remote area; partial renovations would trigger costly code compliance work without addressing operational needs; and no adjacent OC can absorb Dryden's geographic catchment area, with the nearest centres over 65 minutes away. Asset replacement through consolidated new build is the only viable long-term solution.

3.2.2 BROCKVILLE OC ($29.6M)

Summary

The Brockville OC New Build will replace a poor condition, end of life facility with an 18,350 sq. ft. facility on an 8.0-acre site. At a total project cost of approximately $29.6M, the

project will be executed from 2028 with completion targeted for Q4 2030. The project will support local distribution line maintenance and forestry operations in the region.

The main factors advancing a new build in Brockville are 1) poor condition existing facilities, and 2) addressing sites no longer meeting business needs, as outlined in Figure 27 below.

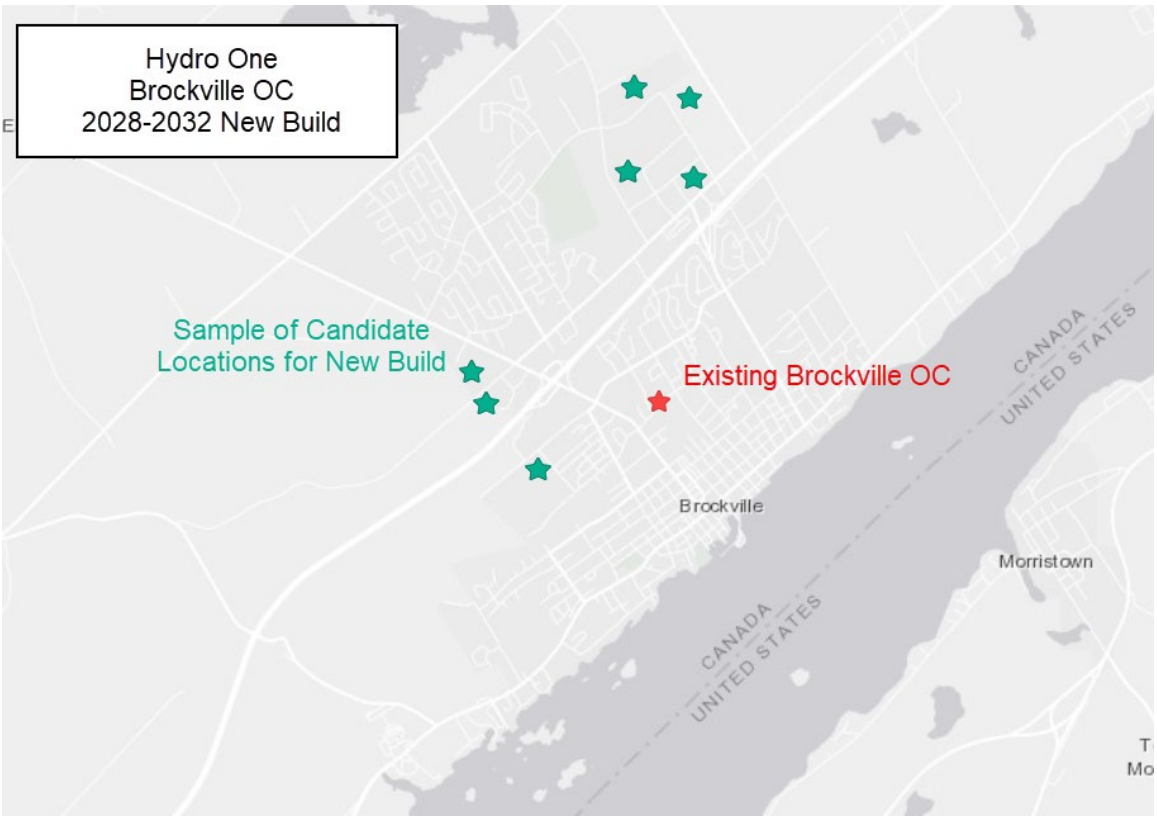

Figure 27: Map of the existing Brockville OC, including a sample of new build candidate locations

Analysis (Investment Need)

Poor Condition Existing Facilities – BCAs confirm significant deterioration at the existing Brockville OC, with a 5-Year FCI of 60% (well beyond the 35% poor condition threshold). This means that, without intervention, expected deficiencies within the next five years will equal about 60% of the building's replacement value. Identified deficiencies include structural issues, exterior cladding and roofing degradation, HVAC system failures, and

interior deterioration. The 2025 BCA for Brockville OC reported deficiencies that include the following:

- Surface water accumulation at the southeast corner of the double trailers has caused the wooden structure to fail
- The overall condition of the exterior metal siding wall panels, windows, metal doors, sliding doors, and loading dock structure at the Lines and Forestry Office is fair to poor condition
- The cement panels covering the concrete block exterior walls of the main office building are deteriorating, stained, and chipped
- The main office's modified bitumen roof exhibits significant vegetation debris, water ponding, and deteriorating seams, increasing the risk of leakage
- The HVAC equipment in the main office and Lines and Forestry office is generally in fair to poor condition
- The main disconnect switches, and the majority of electrical disconnects in the buildings, are estimated to be 35 to 45 years old, surpassing their 40 year expected lifespans
- Surface water is seeping under the loading dock, flooding the Lines Shop floor subgrade area.
- Alligator and longitudinal cracks are present in most of the driveways and parking lots on site.
- The poured concrete curbs are damaged, chipped and missing
- The site lacks an adequate stormwater management system, causing surface water accumulation on the gravel-covered land to exceed the current drainage capacity resulting in significant ponding and drainage issues
- Gravel cover is missing on most of the driveway and parking lots.

Constrained Capacity & Inability to Meet Business Needs – The current 2.7-acre site lacks the space to meet operational needs that are required for this facility. For example, the site cannot accommodate poles longer than 40 feet, nor the infrastructure to store heavier transformers. The site also does not have space for parking and does not allow larger vehicles to safely maneuver when operating on the site. Winter snow storage exacerbates these space constraints and results in incremental costs for snow tipping.

Figure 28: Site of Brockville OC

The new 8.0-acre site will be purpose-built in an industrial area properly zoned for utility operations, and will provide appropriate yard and building space for safe and efficient operations. By consolidating all operational functions currently spread across 6 aging structures into one main building, the project will improve coordination, operational effectiveness, and service reliability for approximately 65,000 customers in the region. The existing Brockville site is currently located in a residential and commercial enclave near downtown Brockville, which is not optimal for light industrial use, provides no possibility for expansion or industrial redevelopment, and limits its long-term viability.

3.2.3 ROCKFORD OC ($16.6M)

Summary

The Rockford OC major renovation investment will consolidate poor condition, end of life facilities serving the Owen Sound/Rockford service area into an approximately 13,850 sq. ft. operations facility (as mapped in Figure 29). At a total project cost of approximately $16.6M, early works activities will commence in 2028, with construction through 2028-2029 and the facility in service by Q4 2029. The project will support Distribution lines, Distribution Operations, and Forestry functions while consolidating the existing Owen

Sound OC into the reconstructed and expanded Rockford OC site (referenced in Figure 30).

The main factors advancing the new build in Rockford are 1) poor condition of existing facilities, and 2) enhancing operational effectiveness through facility consolidation.

The Rockford OC was developed in the mid-1980s as a partial replacement for the end of life Owen Sound OC (constructed in 1946), but the full plan was not completed due to funding constraints. Both facilities consist of pre-engineered and modular structures that are inadequate for permanent use. This has resulted in the need for considerable ongoing investments to address operational gaps, including the introduction of trailers to offset crowded conditions from the significant operational growth following the Owen Sound and Meaford utility acquisition in 2001. The BCA results indicate significant deterioration at both facilities.

The need for the Rockford OC project was identified as part of the pre-filed 2023-2027 rate application. However, the project was reassessed and reprioritized when Hydro One revised its capital expenditure and ISA forecast on a multi-year envelope and OEB-category basis to implement the OEB-approved Settlement Proposal in December 2022. More importantly, the land has already been acquired and conceptual designs have been developed, and preparatory work is complete. The need to execute the project is urgent: the Owen Sound OC's deterioration, combined with constrained functionality and aging building systems, increases the risk of health and safety non-compliance, reduces operational readiness, and inhibits effective response to outages and customer needs.

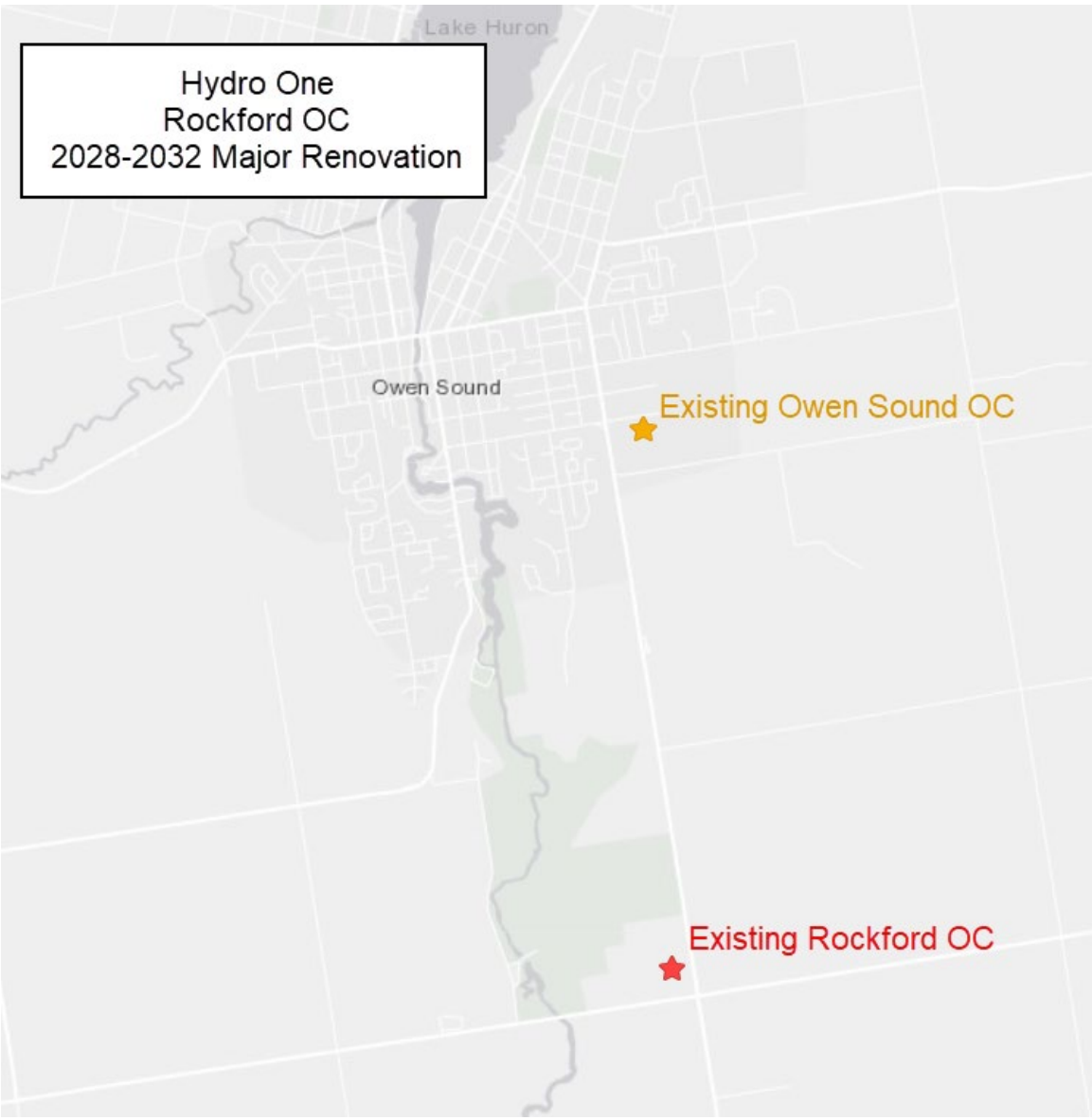

Figure 29: Map of the existing Rockford OC and existing Owen Sound OC

Figure 30: Aerial image of Rockford OC (yellow boundary), the buildings proposed for major renovation (blue) and the other buildings on site (green)

Analysis (Investment Need)

Poor Condition Existing Facilities – BCAs confirm significant deterioration at both the Owen Sound OC and Rockford OC, including structural degradation, roof and cladding failures, HVAC system issues, and site accessibility concerns.

The Owen Sound OC's 79% 5-Year FCI denotes poor condition well beyond the poor threshold of 35%. This means that, without intervention, expected deficiencies within the next five years will equal about 79% of the building's replacement value. The 2025 BCA for the Owen Sound OC reported deficiencies that include the following:

- Cracked structural parging was observed at the northwest corner of the main building
- Corrosion at the base of some support beams and shoring posts at the forestry building
- Cracking present in CMU blocks and mortar joints at all elevation, step cracks observed on the north, east, and west elevations, along with a moderate vertical crack on the north elevation
- Plumbing fixtures are aged and replacement is anticipated
- Exhaust fans and heating units exceeded expected useful life with corrosion on casing and damage to internal components
- Uneven gravel distribution and pothole formation
- Various interior finishes worn and in poor condition

The Rockford OC has a 5-Year FCI of 51%, significantly beyond the threshold that flags a site as poor condition of 35%. This means that, without intervention, expected deficiencies within the next five years will equal about 51% of the building's replacement value. The 2025 BCA for the OC reported the following deficiencies:

- Wear along structural control joints, areas of surface deterioration, staining, corrosion at the base of some vertical support beams adjacent to the garage doors in the cold storage building.
- Wear along structural control joints, areas of surface deterioration, staining, and spalling around the metal drainage gates on the concrete slab of the fleet garage building.

- Exterior enclosure components in all buildings are generally in fair to poor condition. Multiple person doors, overhead doors, exterior windows and sealants in poor condition.
- Various HVAC split AC cooling units exceeded expected useful life with replacement imminent
- Various interior finishes worn and in poor condition

By replacing these end of life facilities rather than extending them through costly interim repairs, the investment was determined to represent the most cost-effective solution.

Consolidation & Efficiency – The proposed Rockford new build will consolidate the Owen Sound OC into the existing Rockford parcel, approximately a 7-minute drive away, creating a single operations base for Distribution lines, Distribution Operations, and Forestry. Consolidation into a single site enhances crew readiness and operational effectiveness through improved shop, storage, and support spaces, and eliminates reliance on an aging and fragmented facility configuration in a purpose-built environment. The project leverages prior investments in land and design, reducing execution risk and supporting cost certainty. The investment supports sustained reliability for approximately 144,000 customers in the Owen Sound service area by enhancing Hydro One's ability to respond to outages, storm events, and emergency conditions.

3.2.4 PETERBOROUGH OC ($29.0M)

Summary

The Peterborough OC new build will consolidate Hydro One operations into a purpose-built 28,000 sq.ft operations centre to support distribution lines, distribution operations, and forestry operations serving the Peterborough region (as mapped in Figure 31). The investment is a direct outcome of Hydro One's 2020 acquisition of Peterborough Distribution Inc. (PDI), which expanded Hydro One's operational footprint within the region. As part of the acquisition process, Hydro One committed to maintain a local operational presence and invest in supporting infrastructure. This project is honoring that commitment.

Concurrent with the acquisition, Hydro One acquired approximately 9.3 acres of industrial land at 1801 Fisher Drive through a Site Development Agreement with the City of Peterborough to support future operational requirements. The project follows a phased approach. Early site development works and supporting storage infrastructure are scheduled to be in-service by 2027, and the main OC building will require investment of $29.0M through 2028 and 2029 for construction and commissioning. Once complete, the facility will consolidate operations currently carried out from the existing Peterborough OC and a leased office facility into a single, fit-for-purpose OC designed for approximately 80 employees.

The main factors advancing a new build in Peterborough are 1) accommodating operational growth (resulting from the PDI acquisition), 2) enhancing operational effectiveness through facility consolidation, and 3) mitigating risks to long-term facility viability.

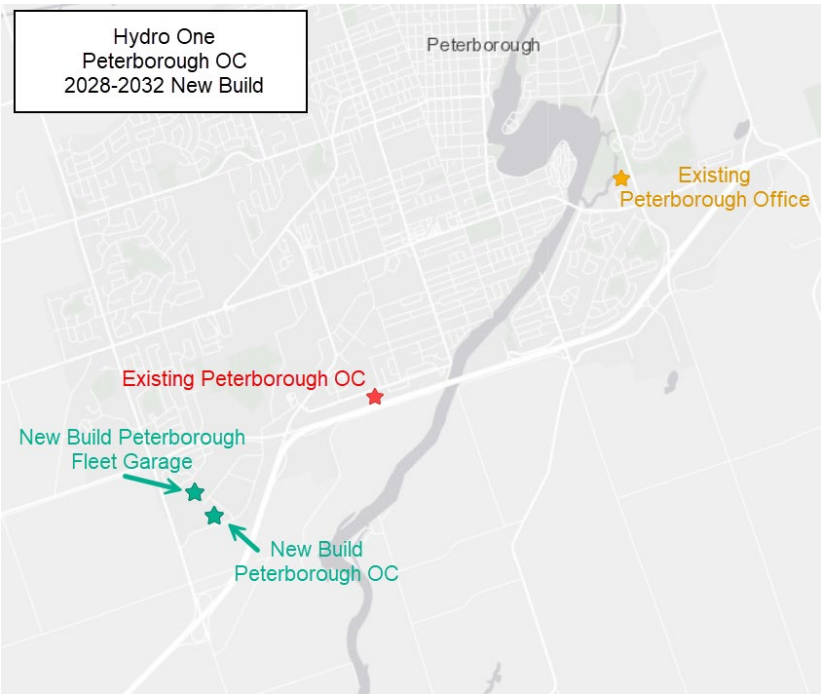

Figure 31: Map of the existing Peterborough OC, leased Peterborough Office, and the sites of the new build Peterborough OC and in-construction Peterborough Fleet Garage

Figure 32: Conceptual Render of the Peterborough OC

Analysis (Investment Need)

The proposed Peterborough OC directly addresses these constraints through the development of a purpose-built operations centre with sufficient office, meeting, training, storage, and operational support space to meet current requirements while providing capacity for future growth. The facility will establish a long-term operational hub capable of supporting Hydro One's expanding presence in the Peterborough region and enabling efficient service delivery to customers.

Operational Growth & Constrained Capacity – Hydro One's acquisition of PDI expanded electricity distribution operations within the Peterborough region and increased demand for operational space, equipment storage, vehicle staging, and employee accommodations. Existing facilities supporting Peterborough operations were not designed to accommodate this growth and have become increasingly constrained as operational requirements have expanded. The current Peterborough OC is in the bottom quartile of Hydro One OCs for usable space per field employee. Workforce growth, combined with increasing operational demands associated with maintaining and operating

an enlarged service territory, has resulted in capacity limitations across both building and yard areas.

The proposed Peterborough OC directly addresses these constraints through the development of a purpose-built operations centre with sufficient office, meeting, training, storage, and operational support space to meet current requirements while providing capacity for future growth. The facility will establish a long-term operational hub capable of supporting Hydro One's expanding presence in the Peterborough region and enabling efficient service delivery to customers.

Consolidation & Efficiency – Hydro One currently operates from two facilities within the Peterborough area, including the existing OC and a leased office absorbed through the PDI acquisition. Maintaining operations across separate sites creates inefficiencies associated with multiple facilities, fragmented equipment and material storage, dispersed staff, and increased travel between locations. This operating model limits coordination between workgroups and reduces the efficiency of day-to-day field operations.

The new Peterborough OC will consolidate these functions onto the Fisher Drive site, creating a centralized operations centre that improves workforce collaboration, resource coordination, materials management, and operational planning. The site is also located adjacent to the proposed Peterborough Fleet Maintenance Garage, scheduled to be placed in-service in 2027. This proximity will enhance coordination between Fleet and field operations, and operational readiness and storm response capabilities.

Mitigating Risks to Long-Term Facility Viability – Deferring completion of the Peterborough OC would expose Hydro One to ongoing strategic and operational risks. Continued reliance on the leased office facility creates uncertainty associated with long-term occupancy and limits Hydro One's ability to make permanent investments in necessary facilities – including the investments that Hydro One has committed to make leading up to its acquisition of PDI.

3.2.5 KINGSTON OC ($62.0M)

Summary

The Kingston OC new build will replace an end of life, poor condition facility with an approximately 37,150 sq. ft. purpose-built operations centre on a 16.5-acre site to support Hydro One's Construction, Distribution Lines, Distribution Operations, Forestry, and Fleet functions. At a total project cost of approximately $62.0M, the project will be executed from 2028 until in-service in 2032. The existing Kingston OC (originally constructed in 1969) comprises 7 buildings with a combined area of only 20,980 sq. ft. The facility is significantly undersized and in poor condition, providing the lowest usable space per employee in Hydro One's OC portfolio (approximately 80 sq. ft. per person). Identified deficiencies include structural deterioration, exterior building envelope failures, interior systems reaching end of life, and site drainage issues. Hydro One has determined that incremental repairs or minor expansions would be insufficient; a full replacement is the most cost-effective long-term solution when considered alongside all growth and viability factors.

The main factors advancing a new build in Kingston are 1) poor condition existing facilities, 2) accommodating operational growth, and 3) mitigating risks to the facility's long-term viability.

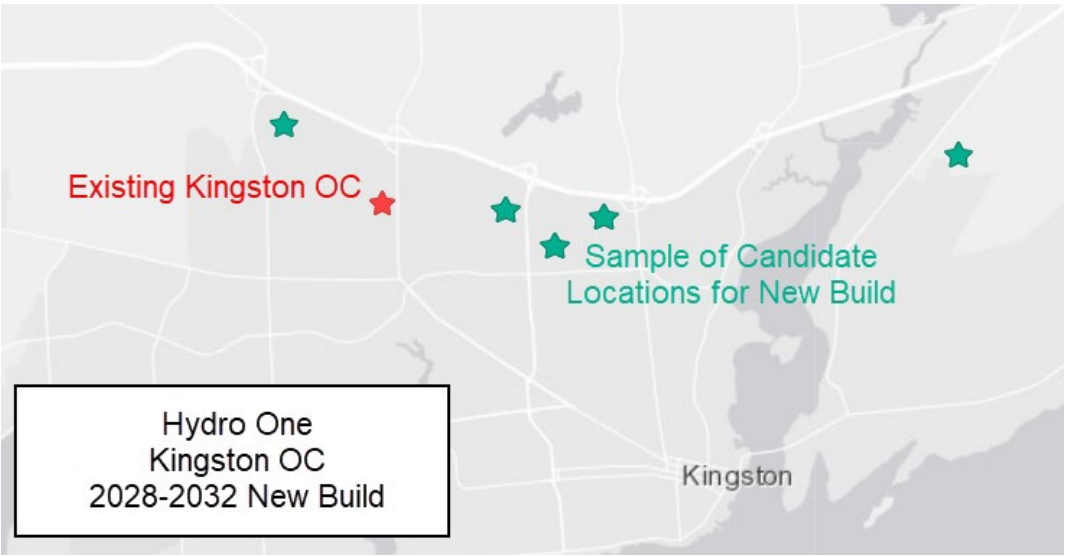

Figure 33: Map of the existing Kingston OC, including a sample of new build candidate locations

Analysis (Investment Need)

Poor Condition Existing Facilities – The 2024 BCA confirms significant deterioration at the Kingston OC. The Kingston OC's 55% 5-Year FCI denotes poor condition well beyond the poor threshold of 35%. This means that, without intervention, expected deficiencies within the next five years will equal about 55% of the building's replacement value. The 2025 BCA reported deficiencies that include the following:

- Sump system, water heaters and other plumbing components excessively worn and only partially functional;
- Furnace and air handling units in poor condition and beyond useful life;
- Poured concrete stairs and siteworks with major cracking and spalling;
- Displaced and missing gravel at many areas in the site. The lands show signs of surface slips sliding;
- A failed septic and stormwater management system requiring complete reinstallation; and
- Various interior finishes in poor condition.

By replacing an end of life facility rather than extending it through costly interim repairs, the investment represents the most cost-effective solution.

Operational Growth & Constrained Capacity – The existing Kingston OC lacks the capacity to support current and projected operational demands. The Kingston OC currently supports approximately 263 employees (mainly across Construction, Lines, Distribution, Forestry, and Fleet), the largest reporting workforce at an OC facility in Hydro One's portfolio. The existing 20,980 sq. ft. facility has become severely overcrowded and functionally undersized, providing under approximately 80 sq. ft. per person, which is the lowest in Hydro One's OC portfolio. The workforce spans over 7 lines of business, driving demand for yard space, vehicle bays, and storage capacity which the current 9.5-acre site can no longer accommodate. The crowded yard and multiple small outbuildings limit equipment staging and hinder efficient workflows, impacting service readiness. No further workforce or program expansions are possible at the present location due to these constraints, jeopardizing future reliability and customer service as regional demand grows.

The proposed new build directly addresses these constraints and will restore efficient operations, enabling Hydro One to meet growing service needs in the Kingston area. The proposed 16.5-acre site will provide expanded yard and storage capacity for materials and vehicles (including with 4 bays and outdoor covered storage). This will avoid overcrowding and off-site overflow, and will enhance employee safety and operational effectiveness, bolstering Hydro One's storm response preparedness and daily operational throughput. The right-sized facility will be designed for approximately 300 staff with built-in flexibility to accommodate future growth.

Mitigating Risks to Long-Term Facility Viability – Deferring the Kingston OC replacement would present risk to business continuity and employee safety. The facility's degraded condition increases the likelihood of critical system failures that could disrupt field operations, and the site's location adjacent to a residential neighbourhood presents external constraints (including land-use incompatibility, noise and traffic concerns) that threaten long-term viability and limit growth potential. The current 9.5-acre property is surrounded by residential development in Kingston, which creates conflicts with community members and challenges for Hydro One to intensify site operations to respond to program growth. The new build mitigates these risks by relocating Kingston's operations to an appropriately sized, properly zoned industrial area closer to major service routes.

3.2.6 DRYDEN HELIPORT ($9.2M)

Summary

The Dryden Heliport new build will replace the existing leased heliport facility with a purpose-built facility. The Dryden Heliport is a critical aviation hub supporting Hydro One's northern operating territories with helicopter patrols, maintenance, and emergency response. The current Dryden Heliport is a leased facility built in 2005, comprising approximately 5,000 sq. ft. of hangar space on a constrained 0.25-acre site. At a total project cost of approximately $9.2M, the project will commence in 2028, with construction through 2029–2030 and the facility in service by Q4 2030. The new Heliport will support helicopter operations for transmission line patrols, maintenance, storm response, and emergency repair activities across the region. Customers in these remote areas will benefit from improved resiliency and reliability of service, as the new facility reinforces Hydro One's ability to respond rapidly to weather events and infrastructure repairs.

The project entails constructing a 6,800 sq. ft. purpose-built aviation facility on an approximate 1.0-acre site to replace the existing leased helicopter hangar at Dryden Regional Airport. No suitable alternative helicopter-grade facilities are available in the region, and safety, fuel storage, and aviation siting requirements preclude incorporating the heliport into the Dryden OC and Fleet Garage new build.

The main factors advancing a new build in Dryden are 1) poor condition of existing facilities, and 2) mitigating long-term viability concerns associated with the leased facility.

[redacted]

Analysis (Investment Need)

Poor Condition Existing Facilities – The BCA confirms significant deterioration at the existing Dryden Heliport, with a 5-Year FCI of 92% (well beyond the 35% poor condition threshold). This means that, without intervention, expected deficiencies within the next five years will equal about 92% of the building's replacement value. The 2025 BCA Identified deficiencies that include:

- structural damage to the hangar doors,

- wall panels and roofing deterioration,
- inoperable washroom facilities, and
- floor slab damage from fuel system maintenance.

Long-Term Facility Viability – The current Dryden Heliport is a leased facility built in 2005, comprising approximately 5,000 sq. ft. of hangar space on a constrained 0.25-acre site. The private landlord has not committed to extending the lease, where options to extend expire in 2032. The lease is subject to financial and business continuity risks, as the landlord of the Dryden hangar can raise base rents by any amount at the end of the term or decline to renew altogether. Without a local heliport, continuity of helicopter operations in Northern Ontario would be jeopardized. Hydro One has determined that no suitable alternative helicopter-grade facilities are available for lease or purchase in the region. The new build will mitigate these risks by establishing a permanent, Hydro One operated facility at the Dryden airport, ensuring business continuity and a secure, long-term base for critical aerial operations in the Dryden area. Additionally, the new site will accommodate two helicopter bays and support infrastructure to meet Hydro One's unique aviation needs.

3.2.7 HANMER FLEET GARAGE ($41.4M)

Summary

The Hanmer Fleet Garage new build will consist of an approximately 31,250 sq. ft. purpose-built fleet maintenance facility with 12 service bays to consolidate and replace two existing garages at the Hanmer Work Centre and Sudbury OC. At a total project cost of approximately $41.4M, the project will proceed from 2028 through 2032, with an in-service date in 2032. The new facility will support fleet maintenance and repair operations for both Transmission and Distribution lines of business in the Greater Sudbury area. Customers across the region will benefit from improved outage response capability and service reliability, as the consolidated facility enhances fleet availability and operational readiness for emergency response and routine maintenance.

The main factors advancing a new fleet garage build in Sudbury are 1) poor condition existing facilities, 2) operational growth (including increased equipment size), and 3) enhancing operational effectiveness through facility consolidation.

The need for a new Hanmer fleet facility was identified as part of the 2023-2027 rate application but the project was reprioritized for reasons discussed in the GSP Section 4.9.2.2. To this end, Hydro One would have been required to demolish the garage building to accommodate an impending expansion of the adjacent Hanmer Transmission Station. As such, Hydro One deferred the rebuild of the Hanmer Garage to 2028 to accommodate the increased scope of securing new lands for the build. Because of the impending Hanmer TS expansion, the Hanmer Fleet Garage project is required to be located on a new site, and Hydro One is using this opportunity to consolidate that facility with the Garage Building at the Sudbury OC. This deferral has intensified the urgency: conditions at both existing garages continue to degrade, and the risk of major failures grows annually. During the current rate period, Hydro One executed a roof replacement and building shell repairs to the existing Hanmer garage to ensure functional integrity until the new build is completed. Further deferral is not viable without compromising operational readiness.

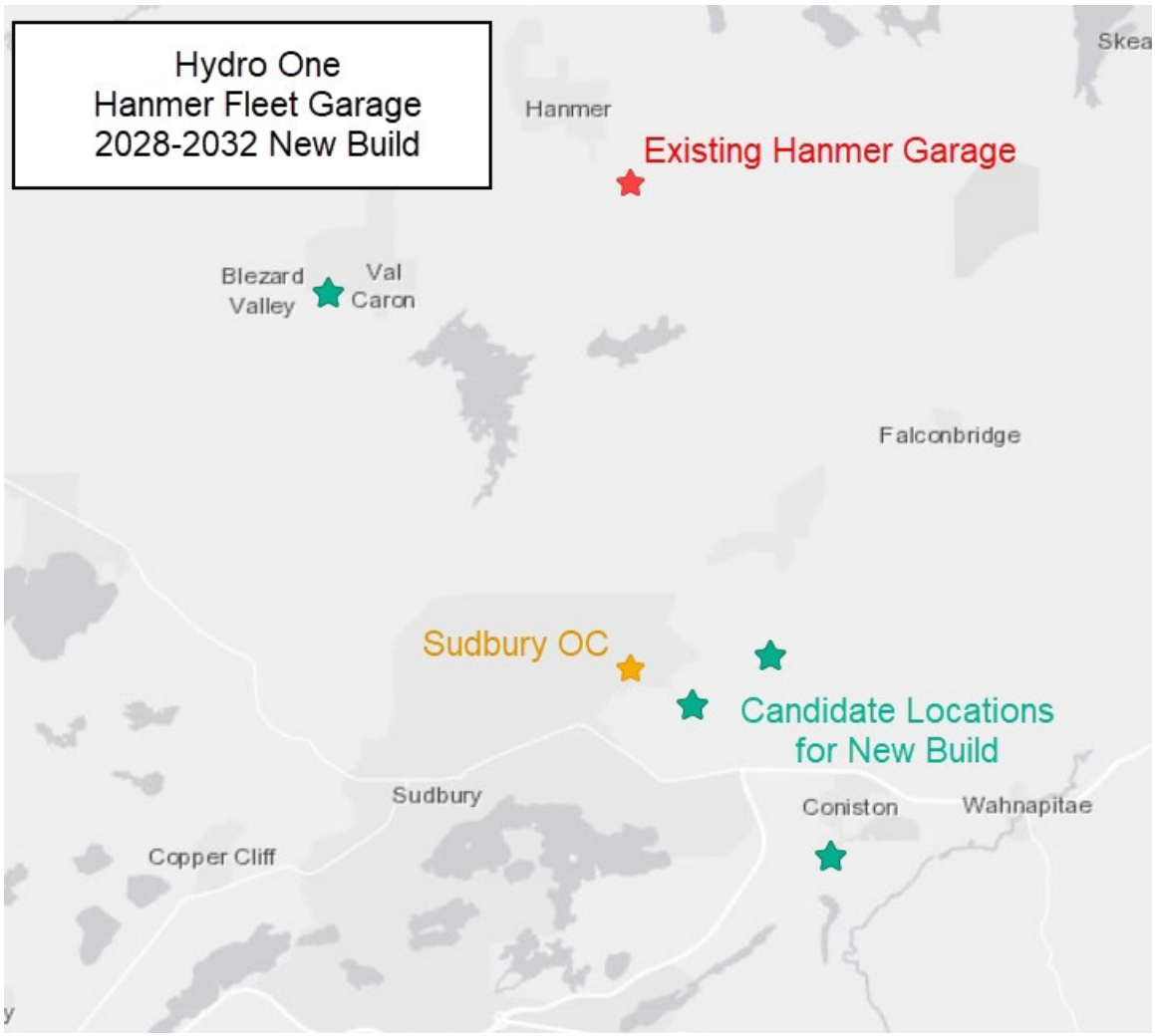

Figure 35: Map of the Existing Hanmer Garage, Sudbury OC and New Build Candidate Locations

Analysis (Investment Need)

Poor Condition Existing Facilities – BCAs confirm significant deterioration at both the Hanmer Fleet Garage and the Garage Building at the Sudbury OC. The Hanmer Garage's 5-Year FCI of 61% and the Sudbury Garage's 5-Year FCI of 49% both exceed the 35% poor condition threshold. This means that, without intervention, expected deficiencies within the next five years will equal 61% and 49%, respectively, of each building's replacement value.

The Hanmer Garage's 61% 5-Year FCI, and the Sudbury Garage's 49% 5-Year FCI denotes poor condition well beyond the poor threshold. The 2020 BCA for the Hanmer Garage Building reported deficiencies that include the following:

- Cracks throughout the slab-on-grade concrete floors
- Water ponding along unpaved/gravel areas within the site that leads to surface ice formation during the cold weather season
- Partially corroded structural steel column
- Poor condition of the exterior metal siding walls
- Metal cladding beyond repair and replacement is recommended
- Moderate impact damage on the building
- Enclosure surface corrosion and open and corroded fasteners
- No proper storm water collection system around the east and west sides of the metal roof system
- Roof penetrations are open or deteriorated
- Exterior windows, service doors, and sliding metal doors are severely deteriorated beyond repair, with corrosion, inoperative hardware, and impact damage
- Cracked concrete walkout pads require replacement
- The electrical hot water tank in the garage is 21 years old (which typically has a 15 years useful life)
- Two suspended wall mounted heaters not in working condition
- No air conditioning service in the garage and all ventilation fans are not in working condition and require replacement
- No proper ventilation in the garage building
- Most of the electrical fan unit heaters and suspended unit heaters in garage are not in working condition
- Various interior finishes in poor condition

In the current rate period, Hydro One executed a roof replacement and building shell repairs to the existing Hanmer garage to ensure its functional integrity until the new build is completed. No other capital investments have been made to address other noted capital deficiencies in light of Hydro One's plan to rebuild this facility at another site in the 2028-2032 planning period.

The 2025 BCA for the Sudbury OC Garage Building reported deficiencies that include the following:

- Exterior metal siding in poor condition, with impact damage, denting, panel separation, and staining across all elevations.
- Metal exterior doors in poor condition, with surface rust, wear, broken weather stripping, and corrosion at door frames
- Packaged wall mounted AC unit in the garage office in poor condition
- Steam boiler in poor condition
- Concrete paved surface around the building in poor condition, including large cracks on about 60% of the paved surface.

Operational Growth & Constrained Capacity – Both the Hanmer OC Garage Building and Sudbury OC Garage Building are space-constrained and cannot accommodate the evolving operational requirements of local Fleet teams. The Hanmer Garage has the lowest space per employee of all permanently staffed dedicated fleet facilities in the Hydro One portfolio. This limits the ability for Fleet mechanics to support modern equipment and tools, accommodate work volume fluctuations, store parts, and work safely. The Sudbury OC Garage is similarly undersized relative to the increasing length and size of heavy vehicles, with an 'L' shaped layout and support columns that limit usable space (see Figure 36). Repairs are frequently conducted outside in all weather conditions. Facility constraints, including undersized garages and deteriorating infrastructure, can directly impact the operational readiness of the fleet by limiting the ability to efficiently maintain heavy-duty trucks essential for field operations and emergency response. The new facility is right-sized at 31,250 sq. ft. with 12 full-size service bays, designed to accommodate 30% more technicians with appropriate support spaces and meet current design standards for fleet garages servicing large vehicles.

Figure 36: Layout of Sudbury OC Garage Building

Consolidation & Efficiency – The project consolidates Hanmer and Sudbury fleet garages into a single owned hub, eliminating duplicate common spaces and enhancing operational effectiveness. Consolidation will yield efficiencies through shared equipment and staff, streamlined workflows without inter-site travel for fleet servicing, and improved economies of scale. The existing Sudbury OC Garage (approximately 5,300 sq. ft.) can be repurposed for low-criticality storage, avoiding costly rehabilitation that would otherwise be required. For example, HVAC, plumbing and building envelope replacements can now be released, since buildings used for storage do not require these components.

A unified, purpose-built fleet hub will significantly improve maintenance throughput and efficiency. With more than double the combined space and bays of the legacy garages (12 bays vs. limited capacity today), the new facility can handle simultaneous servicing of a larger fleet, reducing turnaround times for vehicle repairs. This means greater fleet availability to support field crews in both routine operations and emergency response. The design also integrates safety and operational efficiency features (e.g. proper ventilation, overhead cranes, wash bays), which enhances worker safety and reduces downtime due to facility-related constraints. These improvements directly bolster Hydro One's ability to provide service in Northern Ontario by ensuring vehicles and equipment are ready when needed.

3.2.8 TIMMINS OC ($32.0M)

Summary

The Timmins OC new build will consist of an approximately 31,600 sq. ft. purpose-built facility to replace and consolidate deteriorating, capacity-constrained facilities across multiple leased sites in the Timmins area. At a total project cost of approximately $32.0M, the project will proceed from 2028 through 2032, with an in-service date in 2032. The new facility will co-locate Distribution Lines, Forestry, and Transmission Lines crews on a single campus, consolidating three sites into one owned 31,600 sq. ft. facility. Approximately 55,000 customers served by this operations area will benefit from improved outage response times and service reliability, as the consolidated facility enhances operational readiness and eliminates business continuity risks associated with leased premises.

At present, core functions are split between three leased locations in the City of Timmins, including a dedicated fleet garage and OC on separate sites. This arrangement stems from a legacy demerger in the late 1990s, when Hydro One was compelled to relinquish its former Timmins OC to Ontario Power Generation, forcing a relocation of Distribution Lines and Forestry crews into temporary facilities, with the intent that this would be an interim solution. As a result, the Timmins OC and Transmission Lines Work Centre (which will also have newly built elements, detailed in GSP Section 4.11, G-GP-04, Subsection 3.2.1) have shared facilities with Transmission Lines and Stations crews at two sites which presents space and operational challenges.

The main factors driving the need for the new build in Timmins are 1) poor condition existing facilities, 2) addressing sites no longer meeting business needs, 3) enhancing operational effectiveness through facility consolidation, and 4) mitigating risks to the facility's long-term viability as a leased premises.

Given these drivers, Hydro One determined that incremental sustainment or partial fixes are insufficient and not justifiable given the magnitude of the deterioration and the leasehold tenure. The plan is to acquire a suitable new 25-acre site (expanding the existing footprint from 17.5 acres). It gradually consolidates all Timmins operations facilities which are depicted in Figure 37 below, beginning with constructing the new Timmins OC facility (Distribution Lines and Forestry operations) in the 2028-2032 planning period. The separate Transmission Lines Work Centre at Timmins, including the transmission yard, will be integrated at a later phase under a separate proposal outlined fully in GSP Section 4.11, G-GP-04, Subsection 3.2.1.

Figure 37: Map of the existing Timmins OC, Timmins Fleet Garage, and Timmins storage site

The need for Timmins OC project was identified as part of the 2023-2027 rate application. However, the project was reassessed and reprioritized, as Hydro One revised the capital expenditure and ISA forecast on a multi-year envelope and OEB-category basis to implement the OEB-approved Settlement Proposal in December 2022. This deferral has intensified the urgency: conditions have continued to deteriorate, space shortages have become more acute, and economic developments in Northern Ontario have exacerbated capacity constraints. Reintroducing the Timmins OC project in the 2028-2032 plan is essential to address these persistent needs.

Analysis (Investment Need)

Poor Condition Existing Facilities – BCAs confirm that there is building component deterioration within the Timmins OC and Timmins Fleet Garage, and that they are expected to further deteriorate into poor condition within the future rate period according to their 5-Year FCI. The Timmins OC has a 5-Year FCI of 57%, and the Timmins Garage has a 5-Year FCI 38%, which both denote poor condition. The 2020 BCA for the Timmins OC reported deficiencies that include the following:

- Damage and cracks in block walls
- Water damage from broken roof drain that needs repair
- Windows and sealants in poor to failed condition and require replacement with date codes as old as 1971
- Recommendation to replace air cooled heat pump in poor condition with a corroded casing
- Recommendation to replace gas fired HVAC units in poor condition and past end of useful life
- Various interior finishes in poor condition

The 2021 BCA for the Timmins Fleet Garage reported deficiencies that include the following:

- Exterior wall panels have dents and impact damage, and surface corrosion.
- Many windows at end of life and in poor condition, including windows with broken seals and evidence of water infiltration.

- Concrete paved surface in front of garage is in poor condition, including instances of multiple cracks and lifting concrete.
- Recommendation to regrade the site to address potholes and uneven surfaces located throughout the yard.
- Various interior finishes in poor condition

As the tenant, Hydro One is not directly responsible for addressing the base building elements identified by the BCAs. However, the replacement of base building components is often factored into rental rates when leases are renewed.

Consolidation and Efficiency – The new build offers opportunities for enhanced operational effectiveness by consolidating multiple leased sites into a single owned facility. Currently, Timmins's core operations are scattered across two main sites plus storage areas, which are all leased. Co-locating Distribution Lines, Forestry, and Transmission crews under one roof—integrated with the Transmission Work Centre—will create operational synergies and economies of scale. The facility will have sufficient space to accommodate these needs, as it will include eight indoor vehicle bays sized to house line trucks and specialized equipment (e.g. mobile substations) properly, eliminating reliance on outdoor storage in harsh weather.

Mitigating Risks to Long-Term Facility Viability – As leased buildings, the OC and Fleet Garage are subject to financial risk from increasing rents and business continuity risk from uncertain tenure. The OC lease is set to expire in 2029 and the Fleet Garage lease at the end of 2031, exposing Hydro One to the risk of non-renewal or untenable rent increases. In addition, Hydro One understands the site is of interest to mining operators seeking commercial premises in the area. Building a permanent, owned OC mitigates these uncertainties and prevents service interruptions or costs due to third-party lease issues.

3.2.9 HUNTSVILLE FLEET GARAGE ($25.4M)

Summary

The Huntsville Fleet Garage new build will consist of an approximately 18,150 sq. ft. purpose-built fleet maintenance facility with 8 heavy-duty service bays to support Fleet Operations and heavy equipment servicing in the Huntsville area. At a total project cost of

approximately $25.4M, the project will proceed from site acquisition in 2028, planning and design in 2029, through construction in 2030–2031, with an in-service date in Q4 2031. Operations Centres across the Huntsville, Bracebridge, Minden, Penetanguishene and Parry Sound regions will benefit from improved outage response capability and service reliability, as the new facility enhances fleet readiness and enables timely response to outages and system repairs.

The main factors advancing a new fleet garage build in Huntsville are 1) accommodating operational growth, and 2) mitigating risks to long-term facility viability and business continuity.

Analysis (Investment Need)

Operational Growth – The Huntsville area currently lacks any heavy-equipment-capable fleet facility, which constrains Hydro One's ability to maintain large trucks and specialized equipment needed for growing work programs. Existing regional operations rely on small, undersized sites that cannot accommodate heavy vehicle repairs. This forces mechanics to transfer equipment to distant facilities or attempt makeshift repairs, leading to inefficiencies and extended downtime.

The new Huntsville Fleet Garage directly addresses this gap by providing 8 properly sized heavy-duty maintenance bays with capacity for 10 fleet mechanics, right-sizing local maintenance resources to meet present and future fleet service demand. This purpose-built facility ensures that the increased volume and complexity of fleet operations in the Huntsville/Muskoka region can be supported. By providing adequate workspace, equipment, and storage for heavy fleet maintenance, the project enables efficient throughput of vehicle repairs and preventive maintenance, ensuring fleet availability can scale with future program expansions.

Long Term Viability and Business Continuity – The investment supports business continuity in the region as there is currently no existing facility in the Huntsville area suitable for heavy fleet maintenance. The nearest Hydro One dedicated, permanently staffed fleet garage is in Oro-Medonte, approximately a 3-hour round trip from the facilities the Huntsville fleet mechanics service. No local third-party garage can fully support Hydro

One's repair and service requirements for specialized trucks and heavy equipment. This gap poses a tangible risk to operational continuity, as fleet vehicles critical for construction, maintenance, and emergency outage response must currently travel long distances or face delays for servicing. The Huntsville Fleet Garage mitigates this risk by providing a permanent, centralized heavy maintenance hub in the region. In doing so, it eliminates reliance on patchwork solutions or distant facilities that can hamper response times and increase fleet downtime. The new facility's design—including overhead cranes, high-clearance bays, and appropriate safety systems—ensures that heavy vehicles can be serviced locally. The site is proposed on approximately 4.5 acres to allow secure equipment storage, further strengthening business continuity for Fleet Operations in Huntsville.

3.2.10 WINCHESTER FLEET GARAGE ($26.3M)

Summary

The Winchester Fleet Garage new build will consist of an approximately 18,150 sq. ft. purpose-built fleet maintenance facility with 8 heavy-duty service bays to address critical fleet infrastructure deficiencies in the Winchester area. At a total project cost of approximately $26.3M, the project will proceed from land acquisition in 2028, planning and design in 2029, through construction in 2030-2031, with an in-service date in Q4 2031. The new facility will support heavy equipment servicing and Fleet Operations in the Eastern Ontario region. Operations Centres across the Winchester, Vankleek Hill, Orleans and Arnprior regions will benefit from improved outage response capability and service reliability, as the new facility enhances fleet readiness and promotes timely response to outages and system repairs.

The main factors advancing a new fleet garage build in Winchester are 1) addressing sites that no longer meet business needs, and 2) mitigating risks to long-term facility viability and business continuity.

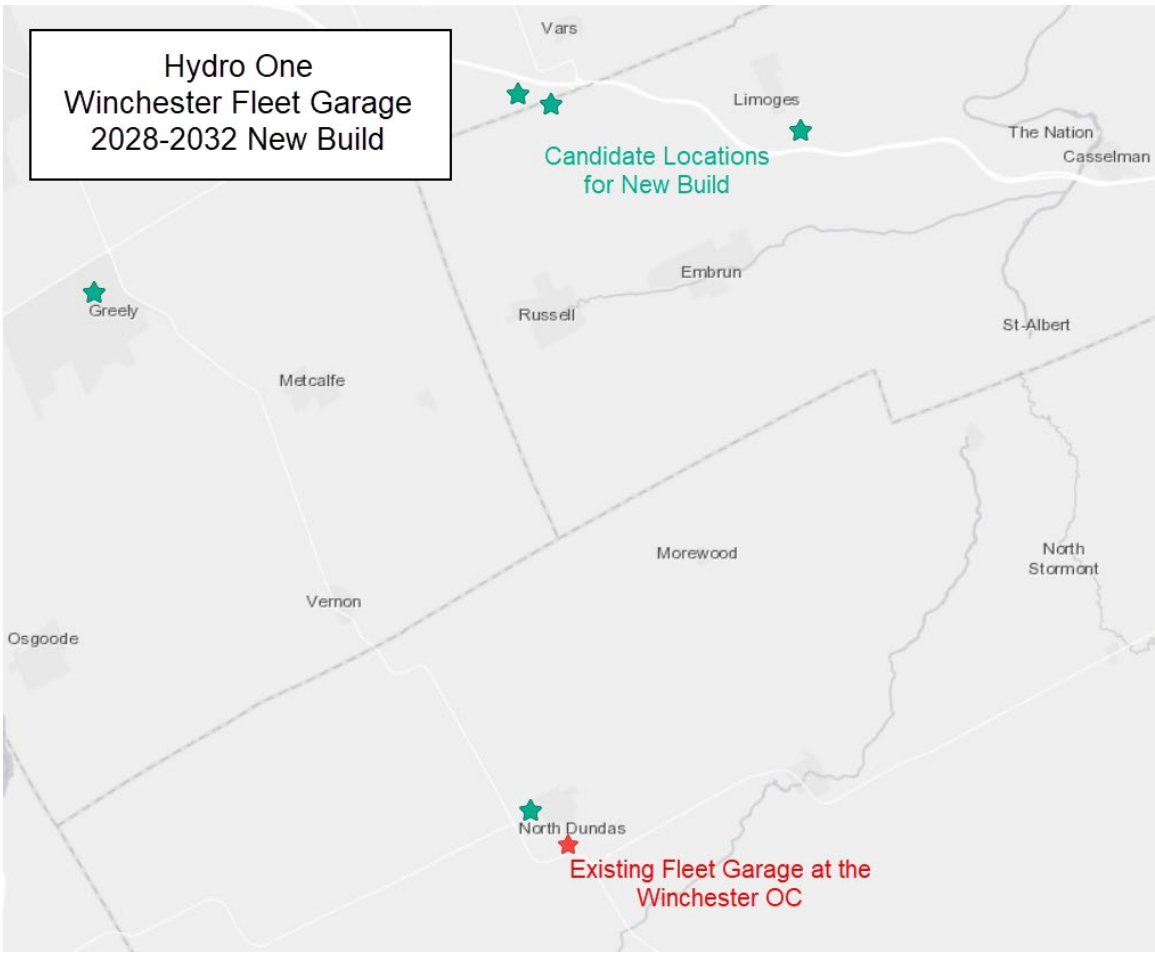

Figure 38: Map of the existing Fleet Garage at Winchester OC, including a sample of new build candidate locations

Analysis (Investment Need)

Operational Growth & Constrained Capacity – The existing fleet support facility in Eastern Ontario is a small two-bay garage within the leased Winchester Operations Centre that lacks modern maintenance capabilities and cannot accommodate Hydro One's largest fleet equipment. Existing regional operations rely on undersized sites that cannot accommodate heavy vehicle repairs, forcing mechanics to transfer equipment to distant facilities, attempt makeshift repairs, or perform work outdoors even in winter, resulting in safety hazards, inefficiencies, and extended downtime. Fleet accommodation at Winchester is the most constrained in Hydro One's portfolio, with 10 mechanics assigned to the site and limited workspace forcing work to be performed from service vehicles and the yard, increasing safety risks and decreasing operational readiness.

The new Winchester Fleet Garage addresses this capacity pressure by providing 8 properly sized heavy-duty maintenance bays (approximately 12,800 sq. ft. of shop/garage area within a total 18,150 sq. ft. facility), with capacity for 10 fleet mechanics. This purpose-built facility ensures efficient maintenance of heavy vehicles and equipment, with adequate indoor workspace, vehicle lifts, parts storage, and a dedicated wash bay. Proper maintenance capacity will enhance fleet availability and productivity, enabling timely and effective support for field operations across the Winchester area.

Mitigating Risks to Long-Term Facility Viability – The current fleet garage is in a leased facility, which presents ongoing operational risks. Reliance on a third-party site for core fleet operations leaves Hydro One vulnerable to lease non-renewal or unfavorable terms, and constrains the ability to make necessary long-term investments or upgrades. The new facility will provide a permanent, owned maintenance hub, reducing dependency on third-party premises and supporting uninterrupted fleet operations.

3.2.11 MUSKOKA OC LAND PURCHASE ($7.5M)

Hydro One is proposing to acquire land in the Bracebridge/Muskoka area in 2031 to support a new Muskoka OC, a future new build that will be constructed in 2033-2037 to address critical infrastructure deficiencies in the Bracebridge operations area (as mapped in Figure 39). Acquiring these lands is a necessary first step in planning, designing and constructing major capital new builds.

Hydro One is deferring the construction of this project because, with modest sustainment investment, the existing Muskoka OC has an expected remaining useful life of 10 years (as of 2025). To allow for the deferral, Hydro One has extended the lease for the existing facilities through the 2028-2032 planning period, during the initial project planning and development period.

The proposed new build will include a consolidation of at least two leased facilities in the Muskoka area, including the main operations centre and a satellite forestry work centre.

The main factors driving the need for the new build in Muskoka are 1) poor condition existing facilities, 2) addressing sites no longer meeting business needs, 3) enhancing

operational effectiveness through facility consolidation, and 4) mitigating risks to the facility's long-term viability as leased premises.

Figure 39: Map of the existing Muskoka OC and Bracebridge Forestry Work Centre

Analysis (Investment Need)

Poor Condition Existing Facilities – BCAs confirm that there is building component deterioration within the Muskoka OC, and that it is expected to further deteriorate into poor condition within the planning period according to its 5-Year FCI. The Muskoka OC has a 5-Year FCI of 60%, which denotes poor condition. The 2021 BCA for the Muskoka OC reported deficiencies that include the following:

- Windows approaching end of useful life and requiring replacement
- Poor condition, corroded exterior doors requiring replacement
- Emergency diesel generator in poor condition and not fully functional

- Wall mounted and split air conditioning units in poor condition and not fully functional
- Exterior lighting and fixtures in poor condition
- Various interior finishes in poor condition

Under the land lease, Hydro One is responsible for capital repair and maintenance expenditures related to leasehold improvements including base building components.

Constrained Capacity & Inability to Meet Business Needs – The Muskoka OC buildings have suffered major failures of critical building systems over the 2023-2027 rate period, including structural and building envelope failures, backup generator failures, plumbing failures, constraining capacity on site.

Following major building system failures in 2025, Hydro One implemented several modular structures on site, including mobile trailer and washroom facilities intended to serve the site for a useful life of 10 years. At present, only approximately 8,200 usable square feet exists on site, resulting in a per employee floor area third last in the Hydro One OC portfolio. No further workforce or program expansions are possible at the present location due to these constraints, jeopardizing future reliability and customer service as regional demand grows.

The crowded yard and multiple small outbuildings limit equipment staging and hinder efficient workflows, impacting service readiness. The current 3.4-acre site lacks the space to meet operational needs that are required for this facility. For example, the site cannot accommodate additional pole storage infrastructure, nor the siteworks required to store heavier transformers. The site also does not have space for employee or fleet parking and does not allow larger vehicles to safely maneuver when operating on the site. Winter snow storage exacerbates these space constraints and results in incremental costs for snow tipping.

Figure 40: Site of Muskoka OC

The new site will be purpose-built in an industrial area properly zoned for utility operations, and will provide appropriate yard and building space for safe and efficient operations. By consolidating all operational functions between two sites into one facility, the project will improve coordination, operational effectiveness, and service reliability for approximately 140,000 customers in the region, among the largest of Hydro One's distribution service territories.

Consolidation and Efficiency – The new build offers opportunities for enhanced operational effectiveness by consolidating two leased sites into a single owned facility. Co-locating Distribution Lines, Distribution Operations and Forestry crews under one roof will create operational synergies and economies of scale.

Mitigating Risks to Long-Term Facility Viability – As leased facilities, the OC and Forestry Work Centre are subject to financial risk from increasing rents and business continuity risk from uncertain tenure. The leases also expose Hydro One to the business continuity risk associated with the leases' non-renewal or untenable rent increases. Building a

permanent, owned OC mitigates these uncertainties and prevents the associated risk of service interruptions.

3.3 COMPLIANCE & GOVERNANCE

The Compliance & Governance segment of investments address targeted gaps between the existing OC Admin portfolio and the organizational, workforce, and customer expectations of a modern electric utility. These investments address legal and regulatory obligations, corporate commitments, workforce needs and climate-related risks that fall outside the scope of the Sustainment and the New Builds and Major Renovations segment.

The average Hydro One OC Admin building is approximately 36 years old, and the proposed Compliance & Governance investments respond to the realities of this legacy portfolio. Many facilities were not designed for current uses and demands, have received minimal renovation, and many of these buildings do not meet contemporary standards for accessibility, inclusivity, energy efficiency, and climate resilience. Even for certain facilities that remain structurally serviceable, their layouts, systems, and site characteristics require targeted upgrades to remain fit-for-purpose as operating contexts, regulatory requirements, and workforce needs evolve.

The investment for this segment will be addressed by the following programs outlined in Table 9 below.

Table 9 - Compliance & Governance Investments - Net Expenditures for 2028-2032 ($M) [16]

Program	2028	2029	2030	2031	2032	Total
Accessibility & Compliance	3.2	12.9	11.0	13.8	7.8	48.8
GHG Reductions and Sustainability	4.0	4.1	4.1	3.7	3.7	19.6
EV Charging and Fleet Electrification	3.3	3.3	2.8	1.9	1.9	13.1
Climate Adaptation and Resilience	0.2	0.2	2.0	2.9	2.9	8.3
Work Program Enablement	3.0	3.0	3.0	3.0	3.0	15.2
Furniture and Accommodations	5.0	5.0	5.0	5.0	5.0	25.0
Total Compliance & Governance	**18.6**	**28.5**	**28.0**	**30.3**	**24.4**	**129.8**

[16] Figures presented in the tables may not sum to the totals shown due to rounding.

Accessibility & Compliance

Compliance & Governance investments in this program focus on eliminating longstanding accessibility barriers and inequities embedded in legacy facility designs. These upgrades are consistent with policy direction of the *Accessibility for Ontarians with Disabilities Act, 2005* (AODA) by aiming to create barrier-free and inclusive facilities that support a modern, diverse workforce. Where facilities are newly constructed or redeveloped, upgrades will also be consistent with applicable accessibility requirements under the AODA's Integrated Accessibility Standards and barrier-free design requirements of the Ontario Building Code. These improvements are necessary for these buildings to meet AODA requirements and accessibility standards, provide inclusive work environments, and will also support Hydro One's efforts to recruit and retain skilled personnel across all trades and roles.

This program will implement accessibility upgrades, including barrier-free entrances, lifts, ramps, and wayfinding, as well as inclusive washrooms, changing rooms, and support spaces for women and gender-diverse tradespeople within existing facilities.

The improvements proposed through this program are highly targeted to owned, high-capacity sites and those with known deficiencies that impact existing workforce. Over the 2028-2032 planning period, accessibility deficiencies will be addressed at approximately 5 high-occupancy OC Admin facilities (representing 3% of the OC Admin portfolio), and targeted inclusivity improvements delivered at about 15 priority OC sites (representing 9% of the OC Admin portfolio) across the province. These sites are prioritized based on size and number of employees, the extent of accessible and inclusive infrastructure, and a geographic dispersion to ensure that a site in each provincial region has at least one upgraded facility. This represents a measured first step toward closing systemic accessibility gaps in the legacy portfolio, recognizing that none of the currently assessed facilities meet minimum accessibility requirements.

This program is paced in multiple phases. Phase 1 will focus on planning and design work in 2028, followed by a major execution wave in 2029 to deliver initial upgrades to the highest priority sites. A second execution wave is planned for 2030, 2031 and 2032, following a second design phase in Year 3 and 4, thereby staggering the implementation.

This phased approach ensures efficient use of resources and manageable project delivery, while making prompt progress on high priority sites early in the planning period.

GHG Reductions and Sustainability

This Compliance & Governance program advances Hydro One's decarbonization commitments, targeting reduced facility-related Scope 2 greenhouse gas (GHG) emissions in line with the organization's pledge to cut emissions 30% by 2030 and achieve net-zero by 2050[17]. Compliance & Governance investments under this category advance energy efficiency and sustainability improvements across aging facility systems, a key aspect of Hydro One's climate strategy.

The program includes incremental funding to upgrade already end of life, high impact building systems (particularly end of life HVAC equipment) with high-efficiency alternatives. The investment will bridge the funding gap left from the Sustainment segment's general approach to replace components with a like-for-like minimum viable component. These measures lower energy consumption and operating costs throughout the asset lifecycle, while reducing GHG emissions. Hydro One expects to reduce the emissions intensity of its OC Admin facilities by 25% by 2032.

During the 2028-2032 planning period, the program proposes to upgrade approximately 180 buildings across Hydro One's portfolio. Each targeted facility will incur an incremental capital cost of approximately $100,000 per major system upgraded, reflecting the premium for more efficient technology. Efforts will focus on the worst-performing sites, replacing inefficient equipment and implementing advanced controls to maximize emissions reductions and long-term cost savings.

This work will be implemented at a relatively steady pace over the planning period, aligned with scheduled equipment renewals to capture efficiency gains without disrupting operations. This steady pacing ensures continuous progress toward Hydro One's 2030 GHG reduction target.

[17] Hydro One Limited, Hydro One 2025 Sustainability Report, (May 7, 2026), p. 12 (https://www.hydroone.com/Sustainability/Documents/CSR_2025/2025-Sustainability-Report.pdf).

EV Charging and Fleet Electrification:

This Compliance & Governance program supports Hydro One's Integrated Green Fleet Charging Strategy, as described in GSP Section 4.11, G-GP-01, Subsection 2.1, by providing the on-site electric vehicle (EV) charging infrastructure needed to support the company's transition to electric and plug-in hybrid light-duty trucks and passenger fleet vehicles. To ensure that adequate charging capacity exists at operational facilities, the program aims to provide charger-to-vehicle availability, enabling continuous operations as fleet electrification accelerates.

Investments include new EV charging stations at OC/Admin facilities across the province, with a focus on establishing charging infrastructure in northern and rural locations where public charging is not readily available. The program also funds electrical service upgrades and site modifications to support high-capacity charging needs for high utilization sites, ensuring sufficient power supply and reliability for simultaneous charging during peak operational periods.

Over the 2028–2032 planning period, the program plans to deploy approximately 30 new EV charging installations at key northern OC's, and high-density southern region facilities. In addition, approximately 13 of the highest-usage EV charging sites will undergo full electrical service upgrades to handle increased load where current infrastructure is insufficient. These investments ensure that the electric or hybrid vehicles added to the fleet (as described in GSP Section 4.11, G-GP-01, Subsection 2.1) have a dedicated, reliable charging point on-site, thereby maintaining Hydro One's operational effectiveness during the fleet electrification transition.

EV charger installations and supporting upgrades are phased-in concurrently with fleet electrification milestones. The rollout is planned to maintain alignment with vehicle procurement schedules, ensuring chargers are in place as new EVs are deployed. By phasing work in a steady pace throughout 2028-2032, the program manages resource demands and will have the opportunity to integrate learnings from initial installations to optimize subsequent deployments.

Climate Adaptation and Resilience

This program addresses climate-related facility risks by strengthening resilience of critical infrastructure to more frequent and severe weather events and environmental changes. Compliance & Governance investments protect Hydro One facilities against threats like flooding, extreme precipitation, high winds, heavy snow loads, and, in some regions, wildfire risk. Enhancing climate resilience of facilities reduces the likelihood of service interruptions, emergency repairs, and asset damage, thereby supporting long-term reliability and cost effectiveness.

The program includes targeted hardening measures at vulnerable sites: improved drainage and flood protection for flood-prone facilities, reinforcement of building envelopes and structures to withstand extreme storms and snow, and fire-resistant design enhancements in areas with elevated wildfire risk. These adaptive investments focus on selecting facilities where climate risks pose the greatest threat to operational continuity and safety.

Given the necessity for thorough engineering design, environmental assessment, and regulatory approvals, the bulk of Climate Adaptation and Resilience work is scheduled in the final three years of the period (2030–2032). 2028 and 2029 will focus on detailed design and planning, enabling these complex upgrades to be executed in later years once designs are finalized and permits obtained.

Work Program Enablement

This Compliance & Governance program drives facility solutions to support advanced operations and a future-ready workforce. It incorporates modern technologies and facility equipment that improve functionality, adaptability, and alignment with evolving business requirements.

Key initiatives include deployment of smart building systems (e.g. advanced building management systems and IoT sensor networks) to improve monitoring, automation, and occupancy management, as well as upgrades to digital infrastructure within facilities (e.g. enhanced connectivity, integrated security and communication systems). The program also includes upgrades to ad-hoc equipment and infrastructure specific to work programs,

including temporary canopy-like structures for sheltering fleet and equipment, and engineered pole bunks at storage yards.

Over the 2028–2032 period, this program will be rolled out on a greatest-need and opportunity basis at selected facilities across the portfolio. Initial pilot implementations will validate new technologies and design concepts, providing data to inform broader adoption in subsequent projects. The number of sites and specific technologies will be refined based on pilot outcomes and business needs, ensuring that each investment improves facility performance or workforce enablement. Investments are planned at a steady pace throughout the planning period to support iterative testing and the scaling of successful innovations.

Furniture and Accommodations

This Compliance & Governance program aims to improve the extent to which Hydro One's work environments meet contemporary standards of employee comfort, flexibility, and functionality to support employee well-being and productivity. It addresses aging or inadequate furniture and interior amenities that can hinder efficiency or fail to meet modern workplace expectations. It also includes investment to address employees in need of special accommodation in their working environment. As an example, this includes the installation of ergonomic office furniture or mobility upgrades in interior and exterior spaces.

Investments involve replacing outdated furniture and workspaces, and reconfiguring office spaces to accommodate a flexible and collaborative model of work. The program also extends to accommodations for staff needs, such as improved break areas and locker facilities, aligning the physical workplace with a modern utility's standards for occupational health and safety and inclusion.

Over the 2028–2032 period, the program will refresh and standardize office furniture and interior fit-outs, with a focus at seven core office facilities. These upgrades will modernize key administrative and operational locations to ensure they support current and future work requirements, fostering a productive and adaptable work environment for employees.

4.0 OUTCOMES

Benefits associated with this investment program are expected to be realized through several areas, including accommodation of facility-related operating requirements of lines of business, improved operational performance and climate resilience, regulatory compliance, reduced health and safety risks, and reduced risk of component failure resulting in business disruptions. The program will help mitigate the maintenance requirements associated with the rapidly deteriorating portfolio through the timely replacement of major building system or components.

4.1 OEB RRF OUTCOMES

Table 10 presents anticipated benefits as a result of the proposed investment in accordance with the Ontario Energy Board's (OEB) Renewed Regulatory Framework (RRF).

Table 10 - Outcome Summary

Customer Focus	• Improve the ability of the lines of business to address customer needs through facilities that are commensurate with operational requirements.
Operational Effectiveness	• Maintain and improve operational effectiveness of lines of business through timely and strategic facilities investments.
Public Policy Responsiveness	• Compliance with government policy and regulatory directives (e.g. Accessibility for Ontarians with Disabilities Act). • Mitigate Hydro One's greenhouse gas emissions by replacing poor condition equipment in existing facilities with more energy efficient solutions.
Financial Performance	• Cost effectiveness realized through regular BCAs, consideration of alternatives and timely investment prior to asset failure. • Cost efficiency realized through facilities investments that align with current and emerging operating requirements and business decisions. • Cost savings as a result of implementing more efficient equipment such as LED lighting, and remote monitored HVAC systems.

5.0 EXPENDITURE PLAN

Table 11 below summarizes Hydro One's forecast net capital expenditures for the 2028-2032 planning period.

Table 11 - Hydro One - Investment Expenditures[18]

($M)	2028	2029	2030	2031	2032	Total 28-32
Gross Investment Expenditures	97.2	197.2	190.7	184.5	114.3	783.9
Less Removals	-7.4	-15.4	-14.9	-14.4	-8.7	-60.7
Less Capital Contributions	0.0	0.0	0.0	0.0	0.0	0.0
Net Investment Expenditures	**89.8**	**181.9**	**175.9**	**170.1**	**105.5**	**723.2**

Table 12 below summarizes Hydro One's net capital expenditures, including planned and forecast expenditures for the 2023-2027 rate period and planned expenditures for the 2028-2032 rate period. These expenditures are presented according to the investments described in Section 3.0 Investment Description.

Table 12 - Hydro One - Expenditures Continuity Over Rate Period ($M)[19]

Description	Plan[20] 23-27	Act/Fcst[21] 23-27	Total 28-32
Sustainment: Improvements and/or Replacements	71.9	65.2	272.4
New Builds and Major Renovations/Upgrades	162.9	173.1	321.0
Compliance & Governance	5.8	5.9	129.8
Total	**240.6**	**244.2**	**723.2**

2023-2027 EXPENDITURES

Over the 2023-2027 rate period, Hydro One expenditures are forecast to be $3.6M higher than plan. Sustainment work expenditures are forecast to be $6.7M below plan primarily due to the sequencing of planned work. This underspend is more than offset by higher than planned New Builds and Major Renovations/Upgrades expenditures, primarily due to

[18] Figures presented in the tables may not sum to the totals shown due to rounding.
[19] Figures presented in the tables may not sum to the totals shown due to rounding.
[20] "Plan" refers to Hydro One's revised capital expenditure and ISA forecast to implement the OEB-approved Settlement Proposal in EB-2021-0110.
[21] "Act/Fcst" refers to actual (2023-2025) and forecast (2026-2027) expenditures.

unforeseen site conditions and increased construction costs, including costs associated with the Orillia Distribution Warehouse. In response to the increase in new build expenditures, the majority of the Peterborough OC investment was deferred to the 2028-2032 planning period, as referenced in GSP Section 4.9.2.2. Even with this deferral, expenditures in the New Builds and Major Renovations/Upgrades category are forecast to be $10.2M above plan.

2028-2032 EXPENDITURES

In the 2028-2032 planning period, Hydro One expects capital expenditures to be $479.0M higher than the 2023-2027 Forecast, reflecting the fact that the OC Admin portfolio has reached an inflection point where continued underinvestment would result in significantly increased portfolio deterioration, a growing backlog of capital deficiencies, and an elevated risk of asset write-offs, particularly at facilities that are critical to distribution and transmission operations. This is supported by building condition assessments showing that the portfolio is deteriorating, notably:

- the portfolio's 0-year FCI stands at 13.9% (poor) and, without additional investment, is projected to deteriorate to a 5-year FCI of 47% (poor) by 2030;
- approximately 37% of buildings are currently in poor condition, which is forecast to increase to over 61% by 2030 without intervention;
- the number of high-criticality buildings in poor condition is projected to increase to at least 35 (approximately 63% of the high-criticality buildings in the OC Admin Facility portfolio) with current investment levels, but would decline to at least one (approximately 2% of high-criticality buildings in the OC Admin Facility portfolio) with the proposed investment; and
- high-risk capital deficiencies are projected to increase by 75% (from $71M to $124M) with status quo funding, but would decline by 86% (from $71M to $10M) with the proposed investment.

New facilities are needed both to replace deteriorating assets that can no longer be cost-effectively sustained and to accommodate the growing operational and administrative space needs of a business that can no longer be supported within its existing footprint. Many of these aging buildings also require dedicated investment to accommodate a

modern workforce, including with respect to accessibility, sustainability, and climate resilience. Accordingly, the proposed plan includes targeted investments to retrofit and upgrade select existing facilities that do not meet modern code and accessibility requirements, supporting more compliant, inclusive and accessible workspaces.

6.0 ALTERNATIVES

Hydro One considered the following alternatives before selecting the preferred option.

ALTERNATIVE 1: RUN TO FAILURE

This alternative is a “run to failure approach” for all building assets and site infrastructure. This alternative represents continued operation with the current state of equipment and infrastructure at these facilities, only carrying out capital expenditure reactively after the occurrence of a failure of site infrastructure or equipment to impact building occupancy.

This alternative is not appropriate. Without the necessary, timely capital repairs, upgrades and replacements, facility conditions (particularly with critical components) will deteriorate to the point where operational efficiency and personnel safety become impaired. Consequences arising from such condition risks would hamper Hydro One’s ability to effectively operate its business and serve customers. Under this alternative, the required break-fix spend will increase, resulting in service disruptions and a higher cost of maintenance and repair as well as potential cascading effects on other assets (e.g., leaking roof could result in damage to equipment and HVAC systems within the facility). Due to the unacceptable risks associated with this alternative, it is not recommended.

ALTERNATIVE 2: PERFORMING ON-GOING HIGH-RISK SUSTAINMENT

This alternative funds on-going sustainment for high-risk components but does not provide funding to accommodate new builds or renovations to address operational requirements. High-risk sustainment only addresses existing building components, without any regard for work program growth, workforce accommodation, and Compliance & Governance of legacy facilities to address strategic priorities.

This alternative is not sustainable. As outlined above (under Section 3.0 Investment Description), there are facilities throughout the portfolio where investment in sustainment

alone will not address underlying needs, and where sustainment funding is clearly not a cost-effective alternative. In the proposed plan, most new builds replace existing facilities that no longer meet operational needs due to limited expansion capacity, lease considerations, or deterioration that makes replacement more prudent than continued sustainment.

ALTERNATIVE 3: PERFORMING TARGETED HIGH-RISK AND MEDIUM-RISK SUSTAINMENT WORK, PRIORITY NEW BUILDS AND MAJOR RENOVATIONS, AND PRIORITY COMPLIANCE AND GOVERNANCE INVESTMENTS (RECOMMENDED)

As presented in Section 3.0 Investment Description, this alternative would keep field facilities in a fair state of repair where this represents the most cost-effective approach, while providing strategic investment in new facilities and Compliance & Governance initiatives based on identified risk and operational need. This alternative is recommended because it targets high- and medium-risk deficiencies, advances priority new builds and major renovations where continued sustainment is not cost-effective, and addresses priority compliance and governance needs without incurring the significant customer cost associated with completing all identified work.

The spending requested herein is an estimate of the work to be performed over the planning period. The management of field facilities entails an ongoing comparative evaluation of alternatives, including the expansion and/or renovation of existing facilities, the lease or purchase of suitable facilities and greenfield developments against maintenance of the status quo condition. The specific work to be executed from year to year will be scoped and finalized based on the specific circumstances of each project. The objective is to pursue the most cost-effective strategy that addresses existing and future operational requirements and mitigates risks. Operational considerations are for both existing and future requirements. An overarching consideration is to maximize the value of existing field facilities through ongoing operations, maintenance and sustainment investments in line with operational requirements.

ALTERNATIVE 4: PERFORMING ALL SUSTAINMENT WORK AND ACCELERATE NEW BUILDS AND MAJOR RENOVATIONS FOR ALL KNOWN FACILITY REQUIREMENTS

This alternative would be to execute all required sustainment work, including building upgrades and component replacements for all high, medium, and low-risk capital deficiencies. Where possible, Hydro One would seek to upgrade and improve additional operational facilities to address needs identified by lines of business through purpose-built new builds and/or major renovations. This alternative would address all currently identified operational requirements and capital deficiencies associated with existing facilities. In addition, it would entail accelerated replacement of facilities, with less focus on retaining and maintaining current assets with useful remaining life to accommodate the growing work programs for the lines of business.

While it would more fully address the operational needs of the company and sustain the long-term condition of the FRE portfolio, this alternative does not effectively maximize the value of our existing operational facilities and components. It would also result in a significant cost impact to customers.

7.0 EXECUTION RISK AND MITIGATION

Hydro One's OC Admin facilities are geographically dispersed across the province and support a broad range of operational, administrative, workforce, training, and customer-facing functions. Work on these facilities requires specialized planning and coordination to ensure that building-system investments are executed safely, efficiently, and with minimal disruption to ongoing business operations. Execution requirements may include maintaining workforce accommodation throughout construction, coordinating work in occupied facilities, sequencing activities to minimize operational impacts, adhering to accessibility and building-code requirements, and managing site-specific operational constraints.

FRE coordinates internally with OC Admin facility users and lines of business, and with its outsourced service provider (OSP) throughout project planning and execution. This coordination validates operational requirements, identifies site-specific constraints, and aligns the timing of building work with business needs and other planned activities.

Requirements are reviewed as projects advance through annual planning and detailed design so that changes in workforce requirements, facility utilization, operational priorities, or related capital work can be incorporated before construction begins.

Projects are advanced through FRE's Stage-Gate Process, which establishes defined checkpoints from initial planning through design, procurement, construction, commissioning, and closeout. At each stage, project scope, cost, schedule, risk, and execution readiness are reviewed before the project proceeds. This process supports earlier identification of facility constraints, improves the completeness of project scopes and estimates, and reduces the risk of late-stage changes or rework during construction. A fully detailed breakdown of FRE's capital work execution process is available in GSP Section 4.10.3.3.

FRE relies on its OSP to provide scalable project-delivery capacity and access to the specialized structural, mechanical, electrical, HVAC, building-envelope, plumbing, and sitework expertise required across the OC Admin portfolio. The OSP also provides access to established regional contractor and supplier networks capable of delivering work across Hydro One's geographically dispersed facilities. Hydro One retains accountability for investment priorities, project approvals, financial oversight, performance monitoring, and delivery outcomes.

Cost risk is managed through early site investigation, clearly defined technical specifications, competitive procurement, and contractual arrangements appropriate to the scope and maturity of the work. Where practicable, FRE and its OSP also bundle similar building-system replacements across multiple OC Admin locations, standardize technical requirements, and coordinate regional delivery.

A detailed analysis of FRE's capital project execution process, risks to delivery, cost management, governance controls, workforce resourcing, and use of outsourced service providers is provided in GSP Section 4.10.3.

G-GP-04	TRANSMISSION FACILITIES
Primary Trigger:	System Reliability
OEB RRF Outcomes:	Customer Focus, Operational Effectiveness, Public Policy Responsiveness, Financial Performance

Net Capital Expenditures:

($M)	2028	2029	2030	2031	2032	Total
Hydro One	41.3	48.2	55.7	55.7	48.8	249.7

Summary:

Hydro One's Transmission Facilities investments are designed to maintain critical buildings, support growing work programs, and meet evolving code and legislative requirements. This investment portfolio focuses on Facilities & Real Estate (FRE) Transmission Station (TS) facilities and includes three main segments: Sustainment, New Builds and Major Renovations, and Compliance & Governance. Sustainment investments replace and refurbish the highest-criticality building components to prevent further deterioration and mitigate the risk of building failure. New Builds and Major Renovations replace or rebuild facilities that have reached end of useful life status and/or can no longer accommodate Hydro One's growing operational needs. Compliance & Governance investments deliver climate resilient, sustainable, inclusive facilities capable of meeting the needs of diverse employee groups and customers, and address applicable code and legislative requirements.

1.0 OVERVIEW

Transmission Facilities investments are critical to maintaining the buildings and structures at Transmission Station (TS) sites that enable Hydro One to safely and reliably transmit electricity across Ontario. These investments support the sustainment, growth, and compliance objectives of essential building assets and structures that directly serve the transmission system and equipment. The facilities addressed through this program are primarily located at TS sites and are known as the TS Facilities portfolio. These facilities include control buildings, relay buildings, communications buildings, storage buildings, and other structures that shelter power system equipment or support the delivery of the transmission work program. These facilities provide safe and productive working environments for employees and support the reliable operation of the transmission system. As a result, they are essential to Hydro One's ability to deliver reliable transmission service to customers across the Province.

Hydro One has reached an inflection point in the condition of its TS Facilities portfolio. The portfolio 0-year Facility Condition Index (FCI)[1] is 13.7%, which is already considered poor. Without additional investment, the portfolio is projected to deteriorate significantly to a five-year FCI of 50.5% (by 2030). This means that Hydro One forecasts approximately 50.5% of the portfolio's asset replacement value will be past its condition-adjusted useful life and will need refurbishment or replacement by 2030, without intervention. This continued deterioration would increase the risk of building component failures, asset write-offs, and disruptions to the facilities that support Hydro One's transmission operations. Because TS Facilities house protection and control systems, relay equipment, communications infrastructure, batteries, backup power systems, and other sensitive electrical equipment, a building failure at a critical TS site has a high likelihood of leading to downstream loss-of-supply incidents or interruptions to customers' service.

[1] Facility Condition Index (FCI) is an industry-recognized asset management metric used to quantify high-level building condition and investment need based on validated condition assessment information; including currently identified deficiencies (0-Year FCI) and deficiencies expected to emerge within the next five years based on observed asset condition and assessor forecasts (five-year FCI). FCI produces a percentage score, with higher values indicating a greater proportion of deficiencies and poorer overall condition, and is categorized as Excellent, Good, Fair, or Poor based on established thresholds. Hydro One interprets FCI alongside risk, criticality, and other asset management considerations. Additional details regarding the methodology, thresholds, and application of FCI are provided in GSP Section 4.2.4.2, *Condition*.

The proposed investment level is intended to mitigate this risk by targeting the highest facility-related risks to the transmission system to support the safe, secure, and reliable operation of critical transmission infrastructure. To this end, approximately 85% of the proposed sustainment investments are directed toward building components classified as "high-risk", in accordance with Hydro One's risk-based asset management approach discussed in GSP Section 4.7.2.3.2. This is expected to reduce high-risk capital deficiencies by approximately 34% (from $139M to $92M) by 2032, compared to a 24% increase in high-risk deficiencies that would materialize with status quo funding levels. In addition, through strategic and targeted investments, the number of high-criticality TS buildings projected to be in poor overall condition would decline from the current level of 215 (approximately 33% of high-criticality TS buildings) to at least[2] 129 (approximately 20% of the high-criticality TS buildings) with the proposed investment levels. By contrast, with current funding levels, the number of poor condition high criticality TS buildings would increase to at least 249 (approximately 38% of the high-criticality buildings in the TS Facilities portfolio).

The planned capital investment level over 2028-2032 is $249.7M, with 65% ($161.8M) focused on Sustainment investments, 7% ($18.6M) focused on New Builds and Major Renovations, and 28% ($69.1M) focused on Compliance & Governance, as shown in Table 1.

Table 1 - Net Investments by Category for 2028-2032 ($M)[3]

	2028	2029	2030	2031	2032	Total
Sustainment: Building Improvements and Component Replacements	33.7	31.7	31.4	31.4	33.6	161.8 (65%)
New Build and Major Renovations	5.3	2.1	4.2	4.2	2.8	18.6 (7%)
Compliance & Governance	2.2	14.4	20.1	20.1	12.3	69.1 (28%)
Total Net Investments	**41.3**	**48.2**	**55.7**	**55.7**	**48.8**	**249.7**

[2] In light of limitations associated with forecasting building condition data more than five years beyond a BCA, this figure uses the number of buildings projected to be in poor condition in 2030 as its starting point and incorporates the effects of refurbishment work planned through 2032. Accordingly, it does not reflect any additional building deterioration that would occur throughout 2031 and 2032.
[3] Figures presented in the tables may not sum to the totals shown due to rounding.

Sustainment capital investments (i.e., building renewal and asset replacements) mitigate building integrity and safety risks associated with deteriorating and/or failing building components at existing TS facilities. This includes the lifecycle replacement of roofing systems, HVAC units, and capital repairs to building shells, as examples. Since these facilities are grid-critical in nature, the failure of a building presents a major reliability risk to the provision of transmission. Hydro One does not operate redundant buildings on a TS site, which reinforces the need to ensure that its existing TS facilities are fit for their intended purposes. For example, the loss of a control building at a critical TS site has a high likelihood of leading to downstream loss-of-supply or service interruptions.

Sustainment investments are crucial to enterprise asset management practices to maintain assets in a state of good repair, managing the risk of aged and poor condition assets, while optimizing break-fix and operational costs. As more than 55% of buildings in the TS Facilities portfolio would be expected to fall below the threshold for poor condition (of a five-year FCI of 35%) by 2030 without intervention, the most critical elements of the building (including building envelope, roofing, and HVAC systems) will be prioritized. Consistent with this risk-based approach, the proposed sustainment investment is targeted at the highest-priority facility needs. As described in Section 3.1 below, the program addresses only 20% of the deficiencies identified through building condition assessments (BCAs), focusing on the most critical building components with the greatest risk, rather than the full extent of known deficiencies. These investments are required before asset failures occur and adversely impact system reliability, business continuity, or the health and safety of Hydro One personnel. The planned investments will also mitigate the risk of increasing maintenance costs associated with poor condition sites and reduce the need for more costly future interventions through timely refurbishment and replacement of critical building components.

New Builds and Major Renovations investments support business continuity and accommodate the growing facilities requirements associated with the construction, operation, and maintenance of the transmission system. Hydro One requires additional storage, marshalling, and operational facilities to accommodate the increased volumes of material, equipment, and resources needed to deliver the Transmission System Plan and support a growing operations and maintenance program. While portions of the existing TS

Facilities portfolio have historically provided sufficient capacity, many facilities were not designed to accommodate current and forecasted operational requirements. As Hydro One's transmission capital and maintenance programs continue to expand, several facilities have reached, or are approaching, their practical capacity limits. Without additional facilities capacity, Hydro One's ability to efficiently execute planned transmission construction, operation, and maintenance activities is expected to be increasingly constrained. This segment also addresses facilities where conditions have deteriorated so severely that continued component repair or replacement is not economically justified. The two major investments under this segment are the Timmins Transmission Work Centre ($14.0M) and the Hanmer Transmission Marshalling Yard ($4.7M). The investment drivers for each of these projects are described in detail in Section 3.2 below.

Compliance & Governance investments facilitate Hydro One's compliance with legal and regulatory requirements and policy objectives in respect of portions of its TS Facilities portfolio, such as worker accessibility and environmental objectives.

Approximately 40 TS sites act as homebase reporting locations for the majority of Hydro One's approximately 2,000 employees in the Stations and Transmission Lines business units. These facilities require washrooms, changing rooms, meeting and break-out spaces, to comply with occupational workplace standards and regulatory requirements. Approximately 65% of Hydro One's TS Facilities portfolio was built before 2000, prior to significant advancements in accessibility standards and inclusion initiatives, sustainability objectives, and requirements relating to climate resilience.

Investments in Compliance & Governance will deliver targeted improvements in these areas. By retrofitting and upgrading select facilities, Hydro One will address compliance, inclusivity, and accessibility needs. The investments will also support Hydro One’s commitment in emissions reduction, sustainability, climate resilience, safety decarbonization, while supporting improved customer response. [4]

[4] Hydro One Limited, Hydro One 2025 Sustainability Report, p. 12 (https://www.hydroone.com/Sustainability/Documents/CSR_2025/2025-Sustainability-Report.pdf).

2.0 INVESTMENT NEED

Investment in the Transmission Station (TS) Facility portfolio is required to address its deteriorating condition and aging infrastructure, and will promote compliance with current legal, regulatory, and policy requirements. It will also accommodate the growth needs necessary to support Hydro One's work programs. Portfolio investment at current levels is not sufficient to achieve these critical objectives. Without investment as proposed in this ISD, Hydro One would face increasing facility deterioration, a growing backlog of capital deficiencies, and an elevated risk of asset write-offs, particularly at facilities that are critical to transmission operations[5].

2.1 TS FACILITIES PORTFOLIO DEMOGRAPHICS

As outlined in GSP Section 4.2.4, the TS Facilities portfolio consists of 371 sites and 1,085 buildings with an average building age of approximately 43 years. Hydro One manages this portfolio with a view to optimizing the portfolio's total lifecycle costs, using an industry-recognized asset management metric—the Facility Condition Index (FCI)—to quantify the current and expected overall condition of the portfolio based on asset replacement value (ARV) [6] of the deficiencies identified through comprehensive Building Condition Assessments (BCAs) and routine inspections.

Table 2 below shows that the portfolio's current FCI score as of 2025 and the expected FCI score by 2030 without investment.[7] Currently, approximately 13.7% of the portfolio's total ARV corresponds to assets that require refurbishment or replacement based on observed deficiencies identified through BCAs. Without intervention, over half of the

[5] Asset write-offs occur when the cost of addressing accumulated capital deficiencies approaches or exceeds the asset replacement value of the facility. In such circumstances, continued component-level refurbishment may no longer represent the most prudent long-term solution, requiring a demolition and rebuild of the facility at a significantly higher cost.

[6] For an explanation of ARV, refer to GSP Section 4.2.4.2.

[7] Facility Condition Index (FCI) is an industry-recognized asset management metric used to quantify high-level building condition and investment need based on validated condition assessment information; including currently identified deficiencies (0-Year FCI) and deficiencies expected to emerge within the next five years based on observed asset condition and assessor forecasts (five-year FCI). FCI produces a percentage score, with higher values indicating a greater proportion of deficiencies and poorer overall condition, and is categorized as Excellent, Good, Fair, or Poor based on established thresholds. Hydro One interprets FCI alongside risk, criticality, and other asset management considerations. Additional details regarding the methodology, thresholds, and application of FCI are provided in GSP Section 4.2.4.2, *Condition*.

portfolio is expected to require refurbishment or replacement by 2030.[8] This outcome is not acceptable because it would result in a substantial increase in deteriorated facility assets, increasing the likelihood of asset failures, operational disruptions, health and safety risks, and facility-related impacts to the safe and reliable operation of the transmission system. Hydro One's proposed investments are intended to mitigate these risks by addressing the highest-priority deficiencies before failures occur.

Table 2 - Facility Condition Index (FCI) of TS Facilities Portfolio

Scenario	Asset Replacement Value (ARV) % of Total Portfolio	Overall Portfolio Condition
Current State (i.e. 0-year FCI)	13.7% of the portfolio requires replacement or refurbishment	Poor[9]
Future State 2030 without investment (i.e. five-year FCI)	50.5% of the portfolio requires replacement or refurbishment	Poor[10]

In addition to using FCI to assess the overall condition of the TS Facilities portfolio, Hydro One also applies this metric to assess the overall condition of its buildings. Table 3 indicates the number of buildings within the TS Facilities portfolio that are currently in poor condition, and that are expected to be in poor condition by 2032. Table 4 provides the same information for high-criticality buildings. In the TS Facilities portfolio, high criticality buildings shelter protection and control systems, relay equipment, communications infrastructure, batteries, backup power systems, and other sensitive electrical equipment necessary for the safe operation of transmission assets.[11]

[8] In accordance with widely adopted methodology, Hydro One employs a five-year outlook to building component deterioration, using condition data as of 2025.
[9] In accordance with industry established thresholds, a 0-year FCI that is greater than 10% reflects a portfolio that is in poor condition.
[10] In accordance with industry established thresholds, a five-year FCI that is greater than 35% reflects a portfolio that is in poor condition.
[11] There are 649 high criticality buildings in the TS portfolio.

Table 3 - Number of TS Facilities Buildings in Poor Condition

Scenario	Buildings in Poor Condition
Current State (i.e. 0-year FCI)	387 (approx. 36% of portfolio)
Future State 2030 without investment	593 (approx. 55% of portfolio)
Future State 2032 with current investment levels (i.e. status quo)	At least[12] 489 (approx. 45% of portfolio)
Future State 2032 with proposed investment plan	At least[13] 353 (approx. 33% of portfolio)

Table 4 - Number of High Criticality TS Facilities Buildings in Poor Condition

Scenario	High Criticality Buildings in Poor Condition
Current State (i.e. 0-year FCI)	215 (approx. 33% of total high criticality TS buildings)
Future State 2030 without investment	337 (approx. 52% of total high criticality TS buildings)
Future State 2032 with current investment levels (i.e. status quo)	At least 249 (approx. 38% of total high criticality TS buildings)
Future State 2032 with proposed investment plan	At least 129 (approx. 20% of total high criticality TS buildings)

As shown in the figures above, a significant number of TS facilities are projected to deteriorate during the upcoming rate period. The quantity of poor condition buildings expected in 2032 (including high-criticality buildings) was estimated using a conservative methodology—actual figures may be greater. Specifically, as noted above, these figures use the 2030 projected state as a baseline, and for the years 2031 and 2032, account only for incremental improvements without incremental deterioration, to ensure the forecast remains within the five-year industry standard and is supported by BCA and other inspection data. Given the serious consequences that a high-criticality building failure can have on business operations and transmission service, the proposed investment levels are necessary to reduce the current number of high-criticality poor condition buildings. By contrast, maintaining current investment levels would increase this number, heightening the risk of building failures and resulting service interruptions.

[12] In light of the limitations associated with forecasting building condition data more than five years beyond a BCA, as discussed in the preceding footnote, this figure uses the number of buildings projected to be in poor condition in 2030 as its starting point and incorporates the effects of refurbishment work planned through 2032. Accordingly, it does not reflect any additional building deterioration that would occur throughout 2031 and 2032.
[13] *Ibid*.

As such, the proposed investments are needed to address this deterioration and mitigate the safety, reliability, compliance, and operational effectiveness risks associated with operating facility assets in deteriorated condition. These risks are further discussed in Section 2.3 below. Further details on the condition of the various building components and how the proposed investment addresses them are provided in Section 3.1 of this ISD.

2.2 BUILDING CONDITION ASSESSMENTS (BCA)

Hydro One's investment needs for the TS Facilities portfolio are informed by a comprehensive data collection process centered on Building Condition Assessments (BCAs). This process also includes supporting engineering analyses and inspections that evaluate facility components such as exterior walls, roofing, heating, ventilation and air conditioning systems, interior finishes, electrical systems, plumbing, fire protection systems, and siteworks. In total, Hydro One has completed 312 BCAs in the TS portfolio, representing 88% of the TS Facilities portfolio's serviceable sites, with an average assessment age of 2.6 years. These assessments provide the foundation for identifying asset deficiencies, evaluating risk, and prioritizing investment needs across the portfolio[14] and the methodology used to perform these assessments has been independently verified by a third-party expert, Jones Lang LaSalle (JLL) as further described in GSP Section 4.3.5 and in Attachment 5 of that section.

2.3 FAILURE RISK

A key driver of the proposed investment is mitigating the risk of building component failure across the TS Facilities portfolio. These facilities play a critical role in supporting the reliable operation of the transmission system by housing protection and control systems, relay equipment, communications infrastructure, batteries, backup power systems, and other sensitive electrical equipment necessary for the safe operation of transmission assets.

Failure of core building systems can directly affect transmission system reliability and operational continuity. As building components deteriorate, they can contribute to structural deterioration, water intrusion, and mould growth, creating health and safety

[14] As of December 2025.

concerns for Hydro One employees and increasing the risk of facility unavailability. Building envelope deficiencies, roof failures, HVAC failures, and water ingress can also compromise sensitive electrical and electronic equipment, potentially resulting in equipment faults, protection system malfunctions, forced outages, or interruptions to service. As a result, failures at TS facilities can create impacts that extend well beyond the affected building itself. Maintaining the condition and reliability of these facilities is therefore essential to protecting critical station equipment, reducing transmission system risks, and supporting the safe and reliable delivery of electricity to customers.

The consequences of facility deterioration are not merely hypothetical. During the 2023-2027 rate period, Hydro One experienced transmission system interruptions resulting from water infiltration into critical TS facilities, demonstrating the direct relationship between facility condition and transmission system reliability. Another example includes poor condition HVAC units experiencing failures or performance issues causing extreme heat or cold within buildings sheltering sensitive equipment and causing failures of power system and station assets.

Facility-related risks are not merely hypothetical; building failures and vulnerabilities have resulted in significant operational impacts during the current rate period and resulted in real challenges for Hydro One. During an extreme rainfall event in Ontario, flooding occurred within critical buildings at a major transmission station. Water ingress into buildings sheltering protection and control equipment resulted in the loss of multiple transmission elements from service and caused widespread customer interruptions.

The event was driven by an exceptional weather occurrence that exceeded the capacity of portions of the surrounding drainage infrastructure and exposed vulnerabilities associated with the movement of stormwater into below-grade station facilities. While the event was not directly attributable to the failure of a specific poor condition building component, it demonstrates how facility-related issues can affect critical transmission equipment and contribute to significant system impacts. It also highlights the increasing challenges that severe weather events can present for aging infrastructure and facility components.

Figure 1: Extreme climatic events can exceed the design capacity for siteworks at legacy transmission sites

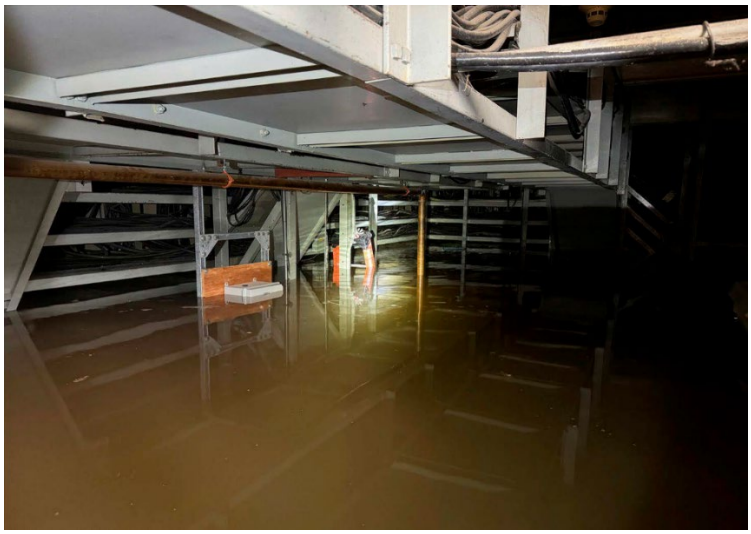

Figure 2: Flooding resulting in submerged equipment at critical transmission building

Figure 3: Flooding resulting in submerged equipment at critical transmission building

Figures 1 to 3 provide examples that illustrate the importance of proactively maintaining and improving transmission station facilities, including building envelopes, siteworks and drainage systems, and other high criticality systems that protect critical protection, control, communications, and electrical equipment. As Hydro One's facilities continue to age and extreme weather events become more frequent and severe, investments to minimize facility vulnerabilities are necessary to minimize the risk that building-related issues contribute to equipment failures, operational disruptions, or customer outages.

To address the deficiencies that pose the greatest risk to the organization and its customers, Hydro One prioritizes its investments using a risk-based framework. As described in GSP Section 4.7.2.3.2, the framework evaluates both the probability of failure, based primarily on condition assessments, and the impact of failure (i.e., criticality of buildings and components). High-risk deficiencies are associated with assets that exhibit both a high probability of failure and significant impact of failure.

The outcome of this risk-based prioritization is illustrated in Figure 4 and 5 below, which compare the projected value of capital deficiencies within the TS Facilities portfolio by risk

category under the status quo funding scenario and the proposed investment plan. While the value of total capital deficiencies is projected to increase under both scenarios, the proposed plan prioritizes investment in the highest-risk assets and building components to mitigate the safety, reliability, and operational impacts associated with their failure.

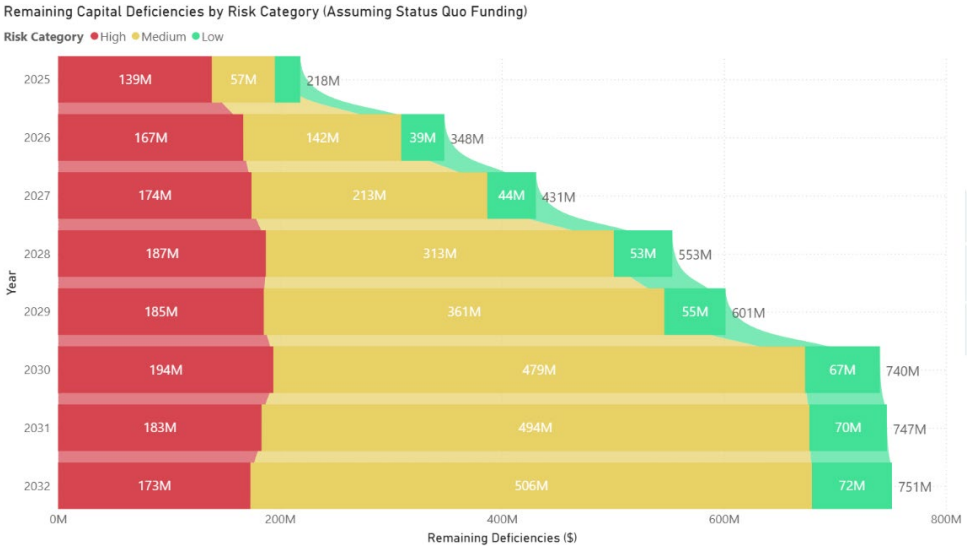

Figure 4: Forecasted $ Value of Transmission Building Deficiencies by Risk with Status Quo Investment Levels

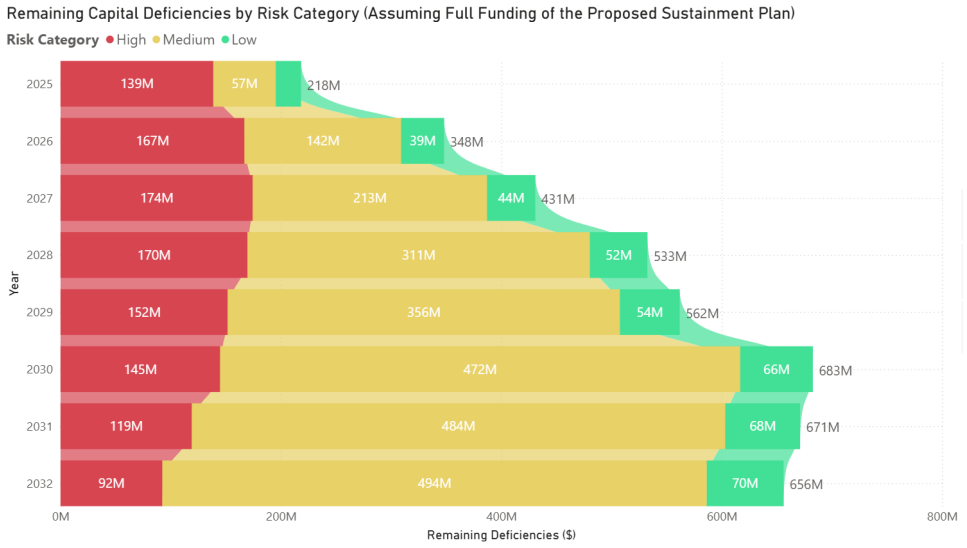

Figure 5: Forecasted $ Value of Transmission Building Deficiencies by Risk with Proposed Investment Levels

Figure 5 demonstrates that the proposed plan directs the majority of available funding to high-risk deficiencies, resulting in a substantial reduction in high-risk capital deficiencies relative to the status quo investment scenario. Specifically:

- Approximately 85% of the proposed sustainment investments described in Section 3.1 below are directed toward high-risk building components. As a result, high-risk capital deficiencies are projected to decline from $139M in 2025 to $92M by 2032 under the proposed plan, representing a reduction of approximately 34%. By contrast, under status quo funding levels, high-risk capital deficiencies are projected to increase from $139M in 2025 to $173M by 2032, representing an increase of approximately 24%.
- Approximately 13% of the proposed sustainment investments described in Section 3.1 below are directed toward medium-risk building components. Medium-risk capital deficiencies are projected to increase from $57M in 2025 to $494M by 2032 under the proposed plan, representing an increase of approximately 766%. By contrast, under status quo funding levels, medium-risk capital deficiencies are projected to increase from $57M in 2025 to $506M by 2032, representing an increase of approximately 787%.
- Approximately 2% of the proposed sustainment investments described in Section 3.1 below are directed toward low-risk assets. While these assets are lower priority under Hydro One's risk-based framework, their replacement or refurbishment remains necessary in certain circumstances where deterioration creates employee safety concerns or affects the functionality of occupied facilities.

Examples of high-risk deficiencies include poor condition building envelope components (e.g., walls, windows, doors, and roofs), HVAC systems, and fire and life safety systems. The majority of high-risk deficiencies pertain to building components with high criticality because of the elevated impact of failure of these components. Failure of these components can have significant consequences for employee safety, facility operations, and transmission system reliability. Figures 6 to 10 below depict examples of deteriorated high-risk assets within the TS Facilities portfolio.

Figure 6: Failed ballast and ponding of water on the roof of a critical transmission building. (October 2025). Water ponding on the roof results in roof membrane deterioration, an elevated likelihood of leaks, and strain on structural components.

Figure 7: Excessive degranulation on roof of a critical transmission building (October 2025). Degranulation is an indicator of poor condition – poor condition roof systems have elevated likelihood of leaks.

Figure 8: Deteriorated foundation/structural footing of a critical transmission building (October 2025). Structural deficiencies can compromise a building's integrity.

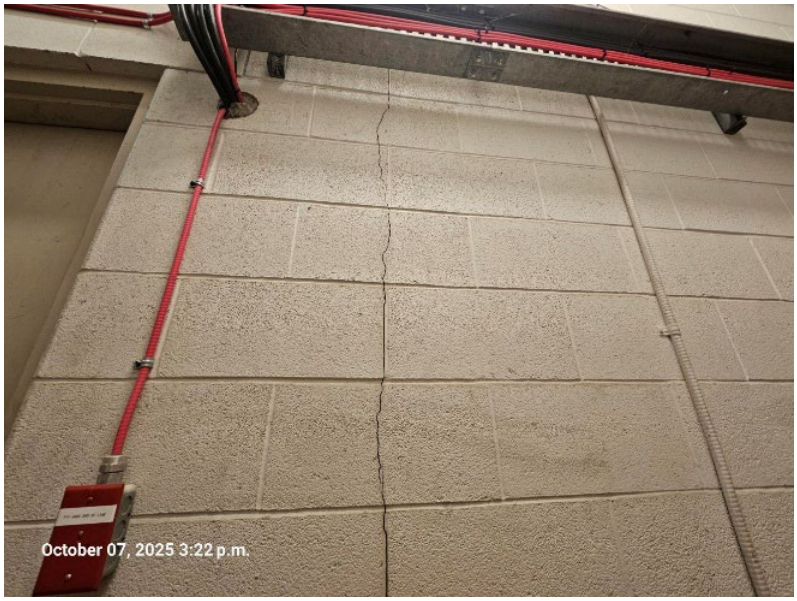

Figure 9: Cracks in the building superstructure of a critical transmission building (October 2025). Cracks can indicate structural deficiencies or repair needs that, if left unaddressed, can compromise a building's integrity.

Figure 10: Deterioration of brick exterior walls of a critical transmission building (October 2025). Poor condition building envelope elevates the likelihood of leaks and can impact the integrity or longevity of superstructure components they protect.

Examples of medium-risk deficiencies include gravel and paved yards, fencing, and drainage systems. While the consequences of failure are generally less severe than for high-risk assets, deterioration of these components can result in flooding, washouts, security vulnerabilities, and health and safety concerns for Hydro One employees. These impacts can affect access to critical station assets, impair facility operations, and disrupt business continuity.[15] Figures 11 to 15 below depict examples of deteriorated medium-risk assets within the TS Facilities portfolio.

[15] Medium-risk deficiencies can include "high-criticality" building components when their probability of failure is high, but the components are part of a building with low criticality (i.e., because of the lower impact of failure to business operations or health and safety). For example, a poor condition foundation or roof on a storage facility can be considered medium-risk. This is considered a low criticality building because, in the event that it fails, it is less likely to result in an impact to grid reliability, personnel safety, or cause a major business disruption. For a full description of Hydro One's risk scoring methodology, see GSP Section 4.7.2.3.2, *Investment Prioritization*

Figure 11: Corroded exterior door frame and hardware of a critical transmission building (October 2025). Poor condition exterior doors can allow water infiltration, reduce security of buildings, and impact the integrity and longevity of surrounding interior finishes and the structural components it is adjacent to.

Figure 12: Cracked window and corroded window frame of a staffed transmission building (October 2025). Failed windows can allow water infiltration and impact the integrity and longevity of surrounding interior finishes and the structural components it is adjacent to.

Figure 13: Cracked supports for loading equipment at a major Hydro One transmission site (October 2025). Equipment out of service and poor condition siteworks can impact Hydro One's ability to carry out its business safely and efficiently.

Figure 14: Deteriorated concrete floor of a transmission building (October 2025). Poor condition floors can impact personnel safety. If capital repairs are not completed, deterioration can accelerate the overall deterioration of structural components of the building.

Figure 15: Deteriorated concrete entrance platform with material loss and corrosion at a transmission building (October 2025)

Examples of low-risk deficiencies include interior finishes such as floors and ceiling finishes failing at staffed station buildings. While these assets generally have a lower impact on reliability and operations, replacement or refurbishment may still be required where deterioration creates health and safety concerns or affects the functionality of occupied facilities. For example, where a roof leak has caused excessive moisture, replacement of affected flooring or carpets may be required to address mould growth and mitigate associated health and safety risks. Figures 16 to 18 below depict examples of deteriorated low-risk assets within the TS Facilities portfolio.

Figure 16: Peeling interior finishes due to failed window system of a staffed transmission building (October 2025)

Figure 17: Poor condition ceiling tiles due to a leaking roof of a staffed transmission building (October 2025)

Figure 18: Failed interior finishes in the change room of a staffed transmission building (April 2026)

2.4 WORKFORCE AND CAPITAL PLAN GROWTH

Hydro One requires additional facilities capacity and infrastructure to support the unprecedented growth associated with the construction, operation, and maintenance of the transmission system. As part of the proposed plan, Hydro One requires additional storage, marshalling, and operational facilities to accommodate the increased volumes of material, equipment, and resources needed to deliver the Transmission System Plan and support a growing operations and maintenance program.

While portions of the existing TS Facilities portfolio have historically provided sufficient capacity, many facilities were not designed to accommodate current and forecasted operational requirements. As Hydro One's transmission capital and maintenance programs continue to expand, several facilities have reached, or are approaching, their practical capacity limits. Without additional facilities capacity, Hydro One's ability to efficiently execute planned transmission construction, operation, and maintenance activities is expected to be increasingly constrained. Section 3.2 below describes the specific projects included in the New Builds and Major Renovations segment that will

address this need, including the Timmins Transmission Work Centre and Hanmer Transmission Marshalling Yard.

2.5 FACILITY UPDATES TO PROMOTE COMPLIANCE AND POLICY ALIGNMENT

Several legal, regulatory, and policy factors underpin the need for Compliance and Governance investments in the portfolio. Approximately 40 TS sites serve as staffed homebase reporting locations for the majority of Hydro One's approximately 2,000 employees in the Stations and Transmission Lines business units. These staffed TS facilities must comply with occupational workplace standards and regulatory requirements. Approximately 65% of the portfolio was built before the year 2000, and accessibility, inclusivity, and environmental requirements have evolved significantly since then. Many of these facilities have received minimal renovation and do not meet contemporary standards for accessibility, inclusivity, and environmental performance, even where they remain structurally serviceable. Continued investment is necessary to ensure Hydro One provides a safe, accessible, and inclusive workplace for its employees, consistent with the standards expected of a modern electric utility. Some examples are outlined in Figure 19 and Figure 20 below.

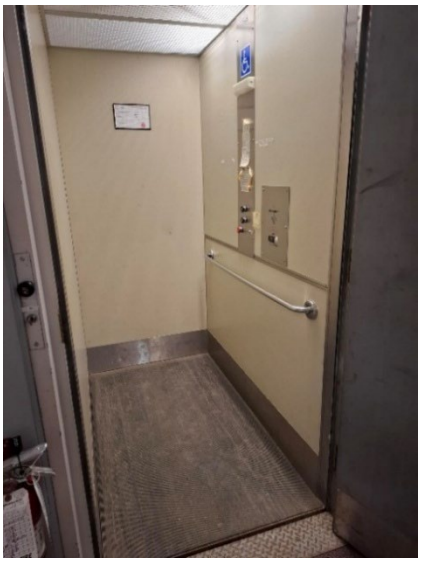

Figure 19: A legacy elevator at a staffed transmission building. Accessibility limitations include insufficient cab size, restricted maneuvering space, and limited door width. Hydro One intends to address legacy accessibility infrastructure at the most highly staffed transmission buildings in the 2028-2032 planning period.

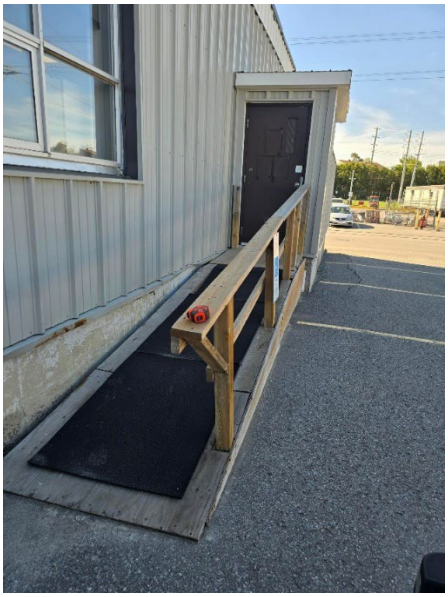

Figure 20: A legacy ramp at a staffed transmission building. Accessibility limitations include inadequate ramp and door width, limited turning radius, handrail configuration, an out-swinging door without Automatic Door Operator, and aging ramp construction.

Hydro One's investments are informed by the following legislative and regulatory requirements:

- Provincial and Federal Building Codes – Changes to construction and occupancy standards affect future facility improvements and work planning needed to meet occupancy objectives. Code changes can also broaden the scope of renovations or upgrades undertaken for other reasons, affecting connected or complementary systems (e.g., air quality systems).
- Accessibility – Pursuant to the *Accessibility for Ontarians with Disabilities Act*, *2005, S.O. 2005, c. 11*, Hydro One is required to upgrade certain buildings or site components (including parking spaces, ramp access, door widening, and wayfinding and tactile cues) when existing facilities undergo new construction, redevelopment, or major renovations.
- Environmental Regulations (e.g., *O. Reg. 490/09: Designated Substances, under the Occupational Health and Safety Act, 1990*) – Various environmental regulations affect the development or redevelopment of facilities, including the identification and management of designated substances (e.g., asbestos), which are common given the age of FRE assets.

Deferring these investments creates a risk that facilities will no longer be fit for purpose or aligned with applicable workplace, accessibility and environmental requirements. For example, if a building lacks necessary accommodations for women (e.g., washroom or changing room) or is not accessible, employees may be unable to perform their work safely, effectively or equitably.

3.0 INVESTMENT DESCRIPTION

The proposed investment program for 2028-2032 includes the following categories of work:

- Sustainment – Building improvements and component replacements organized into the following work programs:
    - Base Building & Fire/Life Safety
    - Services and HVAC
    - Mechanical and Siteworks

    - Interiors and Upgrades
- New Builds and Major Renovations:
    - Major renovations of existing facilities and construction of new facilities to address business growth, and/or facilities which have reached end of life condition and/or no longer adequately suit the operational requirements for the Line(s) of Business.
- Compliance & Governance:
    - Investments in retrofitting and upgrading select facilities for compliant, inclusive and accessible facilities at existing facilities that do not meet modern code and accessibility requirements.
    - Further investments will seek to deliver on commitments in emissions reductions, sustainability, and climate resiliency – initiatives that deliver on improved customer response, and commitments to safety and decarbonization.

Further details on each category of work are provided below.

3.1 SUSTAINMENT: BUILDING IMPROVEMENTS AND COMPONENT REPLACEMENTS

The majority of Transmission Facilities investment will be directed to the Sustainment segment, in the amount of approximately $161.8M (65%) throughout the 2028-2032 planning period. Investments in ongoing sustainment, which includes building component refurbishment and replacement, are necessary to ensure TS facilities are kept in acceptable condition to minimize asset failure risk, meet line of business requirements, ensure business continuity and minimize health and safety risks.

The management of the TS Facilities portfolio involves the ongoing comparative evaluation of execution risks given the unique nature of completing work around high-voltage electrified infrastructure. The specific work to be executed from year to year will be scoped and finalized based on the specific circumstances of each project, such as the availability of circuit outages for roofing replacements within limits of approach to high-voltage equipment. The objective is to pursue the most cost-effective strategy that

addresses operational requirements and mitigates risks in accordance with the risk-based framework described in GSP Section 4.7.2.3.2.

Table 5 - Sustainment Investments – Net Expenditures for 2028-2032 ($M)

Program	2028	2029	2030	2031	2032	Total
Base Building & Fire/Life Safety	28.6	27.0	18.2	16.3	17.2	107.3
Services and HVAC	4.1	3.2	7.4	8.3	6.6	29.6
Mechanical and Siteworks	0.6	1.0	5.4	6.3	9.3	22.6
Interiors and Upgrades	0.4	0.5	0.5	0.5	0.5	2.3
Total Sustainment	**33.7**	**31.7**	**31.4**	**31.4**	**33.6**	**161.8**

Sustainment investments will be bundled into the work programs described in Table 5 above to create efficiencies in work that typically occurs between complementary building systems (e.g. replacing windows and doors at the same time as exterior building envelope can be more cost-effective than executing these projects individually), or to leverage efficiencies when labour mobilized at a certain site can execute work across several buildings (where applicable).

Table 6 describes the extent to which the proposed investment in the Sustainment segment will address the known and expected deficiencies within the TS Facilities portfolio based on condition assessments and inspections. The Table shows that proposed investment is targeted to address approximately 20% of total capital deficiencies.

Table 6 - Asset Replacement Value (ARV) of Building Components in Condition-Adjusted End of life

Program	Component Criticality	ARV[16] of Known Deficiencies ($M)	ARV of Forecasted Deficiencies ($M)[17]	Allocated Amounts In Plan ($M)	% of Forecasted Deficiencies Addressed in Plan
Base Building & Fire/Life Safety		**104.7**	**304.1**	**107.3**	**35%**
Structural	H/M	12.0	44.4		
Exterior Enclosure	M	44.2	146.1		
Roofing	H	48.2	107.4		
Fire Protection	H	-	1.4		
Conveying and Stairs	H	0.3	4.8		
Services and HVAC		**39.3**	**165.4**	**29.6**	**18%**
HVAC	H	15.6	50.9		
Building Plumbing	H/M	5.2	9.3		
Building Electrical	H/M	18.5	105.2		
Mechanical and Siteworks		**60.8**	**279.8**	**22.6**	**8%**
Civil/Mechanical Utilities	H/M	22.8	36.6		
Electrical Utilities	H/M	2.0	6.9		
Siteworks and Drainage	M	36.0	236.3		
Interiors and Upgrades		**13.4**	**68.5**	**2.3**	**3%**
Interior Construction	M/L	1.7	13.5		
Interior Finishes	L	11.5	53.4		
Interior Equipment	L	0.2	1.6		
Total Sustainment		**218.3**	**817.8**	**161.8**	**20%**

[16] For a discussion on asset replacement value with the FRE portfolio, refer to GSP Section 4.2.4.2.
[17] The forecasted value of deficiencies includes all needs up to 2032. However, deficiencies that are planned to be addressed in 2026 and 2027 have been subtracted from this figure.

These figures underscore both the scale of investment required to maintain the portfolio and the fact that proposed funding levels address only a targeted portion of the identified capital deficiencies.

Base Building and Fire/Life Safety

This program includes building components that Hydro One has determined to have the highest risk (i.e., high impact and probability of failure). For a discussion of these components (e.g., superstructure, roofs, foundations) in the context of the OC Admin portfolio – which also applies to the TS Facilities portfolio – refer to GSP Section 4.11 G-GP-03, Subsection 3.1. The images below depict examples of building components within the TS Facilities portfolio that need to be addressed by the Base Building and Fire/Life Safety program.

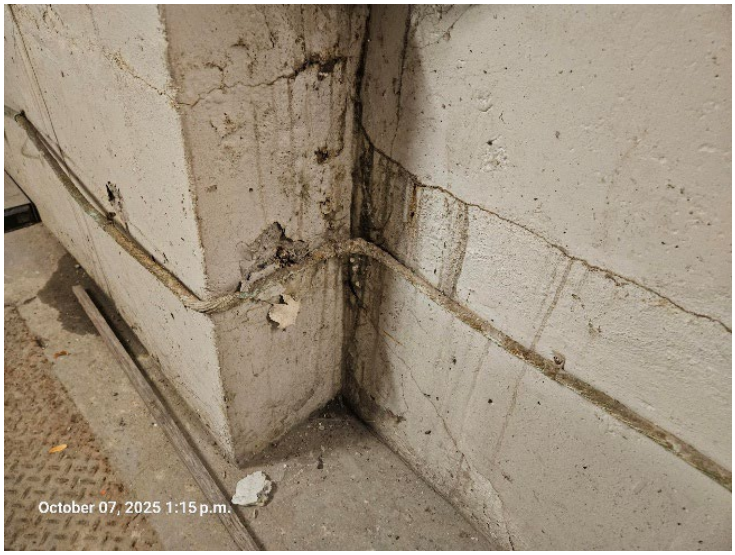

Figure 21: Poor condition structural components of a critical transmission building (October 2025)

Figure 22: Deteriorated building envelope of a critical transmission building (October 2025)

Figure 23: Failed roof system resulting in snow inside of a transmission building (February 2024).

This work program is paced to complete a higher volume of work in 2028 and 2029, to prioritize the high-risk building components addressed by this program earlier in the planning period.

Services and HVAC: This program addresses high-risk assets in need of replacement or refurbishment. For a discussion of these components (e.g., building plumbing, electrical, HVAC) in the context of the OC Admin portfolio – which also applies to the TS Facilities portfolio – refer to GSP Section 4.11 G-GP-03, Subsection 3.1. Figure 24 below depicts examples of building components within the TS Facilities portfolio that need to be addressed by the Services and HVAC program.

Figure 24: Poor condition HVAC exhibiting visible weathering, corrosion and deterioration at a critical transmission building (October 2025)

This work program is paced to complete a larger volume of work in 2030 and 2031, consistent with timelines required for design, engineering and the long-lead times for HVAC equipment typically required for TS projects.

Mechanical and Siteworks: This program addresses high and medium-risk assets in need of replacement or refurbishment. For a discussion of these components (e.g., civil

mechanical utilities, electrical utilities, siteworks, and drainage) in the context of the OC Admin portfolio – which also applies to the TS Facilities portfolio – refer to GSP Section 4.11 G-GP-03, Subsection 3.1. Figure 25 below depicts an example of building components within the TS Facilities portfolio that need to be addressed by the Mechanical and Siteworks program.

This work program is paced to complete the majority of planned work in the later years of the planning period to address high-risk long-lead projects and capital-intensive medium-risk siteworks, drainage and grading projects.

Figure 25: Poor condition exterior siteworks leading to a critical transmission building (April 2026)

Interiors and Upgrades: This program addresses medium and low-risk category assets in need of replacement or refurbishment. For a discussion of these components (e.g. interior construction, finishes, safety devices and kitchen equipment) in the context of the OC Admin portfolio – which also applies to the TS Facilities portfolio – refer to GSP Section

4.11 G-GP-03, Subsection 3.1. Figure 26 and Figure 27 below depict examples of building components within the TS Facilities portfolio that need to be addressed by the Interiors and Upgrades program.

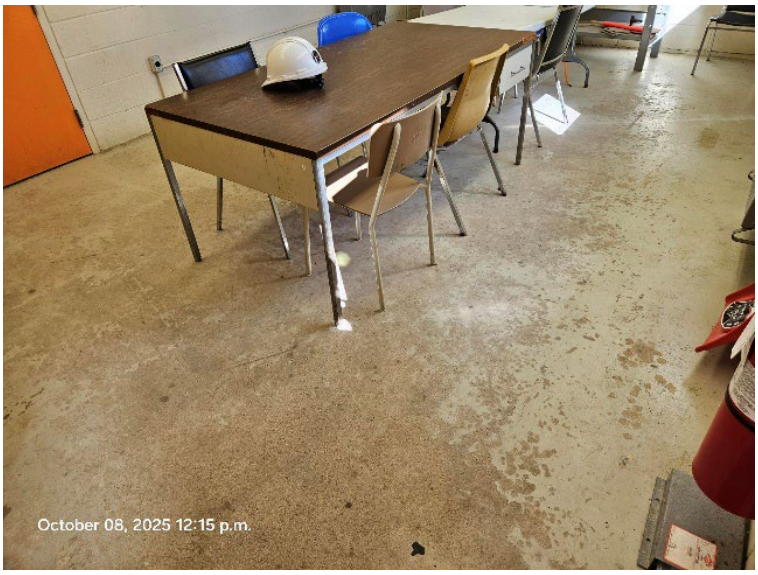

Figure 26: Poor condition interior finishes and furniture in the training/lunch/meeting room of a staffed transmission building (October 2025)

Figure 27: Poor condition interior finishes and furniture in the training/lunch/meeting room of a staffed TS building (August 2026)

Because these building systems typically have lower criticality than the components in other work programs, Hydro One's risk-based framework addresses a minor portion (i.e., approximately 3%) of these components in poor condition. This work program is paced relatively evenly through the planning period to respond to emergent health and safety-related issues typically involving designated substances (e.g., asbestos).

3.2 NEW BUILDS AND MAJOR RENOVATIONS

Investments in New Builds and Major Renovations to support new transmission facilities and major upgrades account for $18.6M (approximately 7%) of the program costs from 2028-2032. These are comprised of the two major investments listed in Table 7 and summarized below.

Table 7 - New Builds and Major Renovations - Net Investments for 2028-2032 ($M)[18]

Facility	2028	2029	2030	2031	2032	Total
Timmins Transmission Work Centre	0.7	2.1	4.2	4.2	2.8	14.0
Hanmer Transmission Marshalling Yard	4.7	0.0	0.0	0.0	0.0	4.7
Total Growth and Major Upgrades/Renovations	**5.3**	**2.1**	**4.2**	**4.2**	**2.8**	**18.6**

Investments under this Transmission Facilities ISD (G-GP-04) do not include the initial capital cost of establishing new TS sites and buildings,[19] other than permanently staffed, non-electrified sites dedicated to the ancillary program support functions, such as material storage work centres, equipment fabrication or repair facilities, and permanent marshalling sites.

The key drivers for New Builds and Major Renovations in Transmission Facilities include:

- **Poor Condition Existing Facilities:** Facility deterioration confirmed through BCAs and supplemental evaluations or inspections. Sites with condition ratings well beyond the poor threshold (indicating significant capital deficiencies) are

[18] Figures presented in the tables may not sum to the totals shown due to rounding.
[19] The capital costs to develop these facilities are captured by the relevant System Service programs within the TSP. This ISD covers the cost of TS sites only after they are placed in-service (see Section 3.1, *Sustainment*, above).

rebuilt to address escalating operational disruptions and safety risks. The alternative, applying costly patchwork repairs, can ultimately exceed the replacement value of the sustained asset over time while not addressing other factors.

- **Operational Growth and/or Changing Business Needs:** Expansion of work programs and transmission systems, workforce increases, changing equipment and vehicle needs and new operational requirements where existing sites are constrained and cannot support Hydro One's business objectives without additional or expanded facilities.
- **Consolidation:** Investments are pursued where the consolidation of multiple buildings and/or sites delivers efficiencies and enhance operational effectiveness.
- **Risk to Long-Term Viability:** Unique site-specific considerations threaten the business continuity at certain facilities, such as challenges associated with existing facility location.

Through 2028-2032, the proposed investment plan allocates approximately $18.6M in capital for two projects (average $3.7M annually). These projects are discussed below.

3.2.1 TIMMINS TRANSMISSION WORK CENTRE ($14.0M)

Summary

The Timmins Transmission Work Centre major upgrade is a proposed capital investment of $14.0M to replace and consolidate aging and capacity-constrained facilities in the Timmins area. The project is planned to be situated adjacent to the associated Timmins Operations Centre (OC) (which is described GSP Section 4.11 G-GP-03, Subsection 3.2.8), and supports efficient operations and the broader rationalization of Hydro One's footprint in the region.

Of the ten buildings that constitute the current Timmins Transmission Work Centre, Hydro One intends to renovate three buildings (representing approximately 13,000 sq. ft. of the total cumulative building size of 33,785 sq. ft.). The upgraded facilities will serve as a critical operational hub for transmission and stations work programs in the Northeast

operations area, where increasing project volumes and system investments are driving the need for additional storage and work space.

The investment is supported by multiple drivers, including 1) poor condition existing facilities, 2) capacity constraints tied to program growth, and 3) enhancing operational efficiencies alongside the Timmins OC consolidation.

The execution plan will include a site expansion and/or land acquisition in 2028 to support co-location opportunities with the Timmins OC, followed by detailed design in 2028-2029. Construction is planned over a 24-month period spanning most of 2030 and 2031, with an in-service target of early 2032.

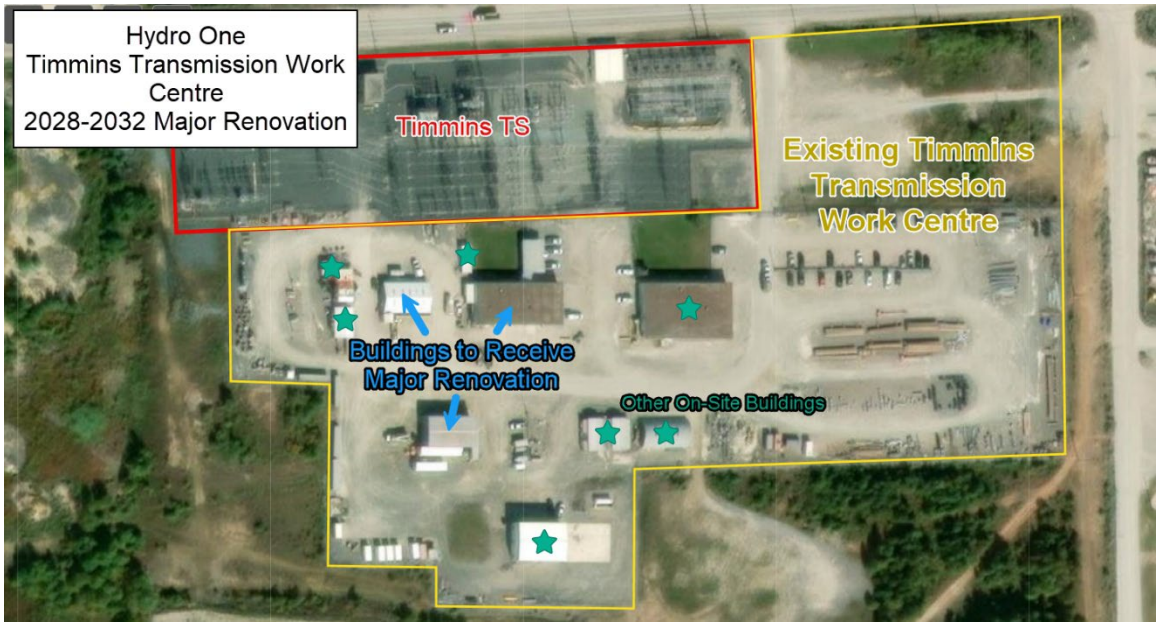

Figure 28: Aerial image of Timmins Transmission Work Centre (yellow boundary), the buildings proposed for major renovation (blue) and the other buildings on site (green)

Analysis (Investment Need)

Poor Condition Existing Facilities – BCAs confirm that there is building component deterioration within many of the existing Timmins Work Centre buildings, and that they are expected to further deteriorate into poor condition over the planning period according to

their five-year FCI. The Civil Workshop, Lines Warehouse, and Equipment Maintenance Building are the buildings on the site with the greatest capital deficiencies and will require major renovation as part of this investment. The investments in the Timmins Transmission Work Centre are expected to bring the overall site condition to 'Fair', which will mitigate the need for future maintenance activities.

The Civil Workshop has a 77% five-year FCI, meaning expected deficiencies within the next five years will equal about 77% of its replacement value. This indicates poor condition well beyond the poor threshold of 35%. The 2025 BCA for the Civil Workshop reported deficiencies that include the following:

- Impact damage and excessive corrosion at the bottom of the wall
- Corrosion on the exterior doors and their hinges
- Cracking and spalling on the concrete paved surfaces
- Tank type water closet and lavatory on main floor not in serviceable condition
- Various interior finishes in poor condition

The Lines Warehouse's 58% five-year FCI (meaning expected deficiencies within the next five-years equal about 58% of its replacement value) denotes poor condition well beyond the poor threshold of 35%. The 2025 BCA for the Lines Warehouse reported deficiencies that include the following:

- Exterior spalling on the floor slab by the overhead doors
- cracking on the foundation wall
- Impact damage noted on the metal siding at all elevations
- Excessive paint scuffing and corroded hinges
- Various interior finishes in poor condition

The Equipment Maintenance Building's 85% five-year FCI (meaning expected deficiencies within the next five-years equal about 85% of its replacement value) denotes poor condition well beyond the poor threshold of 35%. The 2025 BCA for the Equipment Maintenance Facility reported deficiencies that include the following:

- Surface corrosion on the exterior stairs
- Impact damage and cracking on the metal siding

- Corrosion at bottom door frames
- Various interior finishes in poor condition

Consolidation and Efficiency – The Timmins Transmission Work Centre and the Timmins Operations Centre (OC) (proposed in GSP Section 4.11 G-GP-03, Subsection 3.2.8) will be located on the same approximately 25-acre site, consolidating all local operations (transmission lines, distribution lines, stations, forestry, and fleet) into one owned, purpose-built campus. Consolidation of this nature will enhance operational effectiveness and service delivery to customers in the Timmins area. Transmission crews will be co-located with distribution and fleet support on-site, streamlining equipment sharing and coordination while eliminating the logistical delays and inefficiencies of operating from separate locations.

Operational Growth & Constrained Capacity – The Timmins region has experienced ongoing growth in workload and staff, outpacing the capacity of its outdated facilities. The priority transmission line projects in the Timmins area will require a permanent maintenance hub to ensure continuity of the transmission maintenance programs in the Timmins area. Currently, field operations are split between multiple sites – an aging owned Transmission Work Centre and two leased facilities for distribution (OC) and fleet, collectively supporting about 83 staff (including 46 transmission lines & station staff at the Transmission Work Centre). This distributed workforce is already stretching beyond the intended occupancy limits of the current buildings. There is no ability to accommodate further workforce expansion or new program requirements under present space constraints. The major renovations to the Timmins Tranmission Work Centre will meet growth needs by right-sizing the storage and workshop requirements to support the project demand increases in the Timmins area. The planned design capacity of approximately 90 staff will provide adequate workspace and yard storage for expected needs and room for modest future growth. This expansion restores efficient operations and allows Hydro One to meet the growing requirements of transmission projects in the Northeast region safely and effectively while seizing opportunities of scale alongside the Timmins OC project described in GSP Section 4.11 G-GP-03, Subsection 3.2.8.

3.2.2 HANMER TRANSMISSION MARSHALLING YARD ($4.7M)

Summary

Hydro One continues to require replacing the Hanmer Transmission Marshalling Yard facilities in the Greater Sudbury area to support transmission operations and ultimately replace the aging Hanmer facilities. Accordingly, Hydro One is proposing $4.7M in 2028 to acquire approximately 25 acres of suitable land in the Greater Sudbury region. Securing an appropriate site is a necessary first step in enabling the future relocation of the marshalling yard and associated operational facilities while accommodating the planned expansion of the Hanmer Transmission Station. Funding for the design and construction of the replacement facilities is not included within this ISD, and will be incorporated into a future transmission station expansion program once the final scope and location requirements have been confirmed.

In Hydro One's 2023-2027 rate application, Hydro One identified the need to replace the aging Hanmer Transmission Marshalling Yard. As described in that application, the existing facilities support the storage, operation, and maintenance of transmission equipment serving northeastern Ontario and have reached the end of their useful lives. The project did not advance as planned during the 2023-2027 period due to factors outside of FRE's control. Namely, FRE determined that the original planned location for the replacement yard and associated buildings would be required to support the future expansion of the adjacent Hanmer TS. As the transmission expansion is necessary to accommodate future transmission system requirements, proceeding with redevelopment of the marshalling yard at, or near, the existing location is not feasible. Any newly constructed facility at the existing location could ultimately require demolition to accommodate the future station expansion, resulting in stranded investment.

During the current rate period, Hydro One deferred the project and reallocated the capital to address other emergent, critical facility needs within the transmission portfolio. Specifically, the capital initially intended for this project was used to replace several failed roof systems at transmission facilities across the province where immediate investment was required to maintain safe and reliable operations.

During the current rate period, Hydro One considered siting the marshalling yard on existing lands already owned by Hydro One. However, suitable lands were not identified due to significant site development requirements, environmental constraints, and limitations associated with supporting Hydro One's outdoor storage, equipment maintenance, and operational needs of a large site around 25 acres in size.

Figure 29: Map of the Hanmer TS and existing Marshalling Yard, including new build candidate locations

Analysis (Investment Need)

Operational Growth & Constrained Capacity – Acquiring a suitable site in the Greater Sudbury region will provide the land required to enable the future relocation and upgrade of the Hanmer Marshalling Yard. It will provide the required land capacity to accommodate

current and future operational needs, support efficient material and fleet management activities, and allow Hydro One to develop facilities that align with long-term transmission operational requirements.

The existing Hanmer Transmission Marshalling Yard supports the storage, staging, maintenance, and deployment of transmission materials and equipment serving the Greater Sudbury region and surrounding areas. The facility was developed to support historical operational requirements and is constrained in its ability to accommodate evolving operational needs, equipment storage requirements, and future transmission infrastructure expansion. As transmission system continues to expand and work programs continue to grow in complexity, Hydro One requires a suitably sized and strategically located site capable of supporting long-term operational requirements while maintaining efficient access to the regional transmission network.

Mitigating Risks to Long-Term Facility Viability – The long-term viability of the existing Hanmer Marshalling Yard is challenged by planned expansion requirements for the adjacent Hanmer TS.[20] As transmission station needs evolve, the existing marshalling yard location is no longer a viable site. Acquiring a new site mitigates the risk of stranded investments, preserves future operational flexibility, and enables Hydro One to advance transmission station expansion plans while maintaining the capability required to support regional transmission operations.

3.3 COMPLIANCE & GOVERNANCE

Compliance and Governance investments facilitate Hydro One's compliance with legal and regulatory requirements and policy objectives in respect of portions of its TS Facilities portfolio, such as worker inclusivity, accessibility, and environmental objectives. These investments are focused on existing staffed or administrative buildings within the TS Facilities portfolio and address gaps that will not be addressed as part of the Sustainment or New Builds/Major Renovations segments.

[20] For information on the expansion projects at the Hanmer TS, refer to TSP Section 2.12, T-SS-11.02 and T-SS-11.06

The average Hydro One TS building is approximately 43 years old, and the proposed Compliance and Governance investments respond to the realities of this legacy portfolio. Many facilities were not designed for current uses and demands, have received minimal renovation, and many of these buildings do not meet contemporary standards for accessibility, inclusivity, energy efficiency, and climate resilience. Even for certain facilities that remain structurally serviceable, their layouts, systems, and site characteristics require targeted upgrades to remain fit-for-purpose as operating contexts, regulatory requirements, and workforce needs evolve.

Table 8 - Compliance & Governance Investments - Net Expenditures for 2028-2032 ($M)[21]

Program	2028	2029	2030	2031	2032	Total
Accessibility & Compliance	0.7	8.5	8.8	8.8	1.7	28.5
GHG Reductions and Sustainability	0.3	0.6	0.6	0.6	0.6	2.5
EV Charging and Fleet Electrification	0.7	2.4	2.8	2.8	2.7	11.5
Climate Adaptation and Resilience	0.3	0.3	4.6	4.6	4.5	14.2
Work Program Enablement	0.3	2.6	3.3	3.3	2.8	12.5
Total Compliance & Governance	**2.2**	**14.4**	**20.1**	**20.1**	**12.3**	**69.1**

Accessibility & Compliance

Compliance & Governance investments in this program focus on eliminating longstanding accessibility barriers and inequities embedded in legacy facility designs. These upgrades are consistent with the policy direction of the Accessibility for Ontarians with Disabilities Act, 2005 (AODA) by aiming to create barrier-free and inclusive facilities that support a modern, diverse workforce. These improvements are necessary for these buildings to meet AODA requirements and accessibility standards, provide inclusive work environments, and will also support Hydro One's efforts to recruit and retain skilled personnel across all trades and roles.

[21] Figures presented in the tables may not sum to the totals shown due to rounding.

This program will implement accessibility upgrades, including barrier-free entrances, lifts, ramps, and wayfinding, as well as inclusive washrooms, changing rooms, and support spaces for women and gender-diverse tradespeople within existing facilities. The improvements proposed through this program are highly targeted to high-capacity sites and those with known deficiencies that impact existing workforce.

Over the 2028–2032 rate period, Hydro One will implement accessibility upgrade at 14 of the highest utilized staffed sites in the TS Facilities portfolio. This represents a measured first step toward closing systemic accessibility gaps in the legacy portfolio, recognizing that TS facilities currently lack accessibility infrastructure meeting modern design standards. This program is paced to focus on planning and design work in 2028, followed by a major execution wave in 2029, 2030 and 2031 to deliver upgrades to the highest priority sites, followed by minor works at select other staffed sites in 2032. This approach ensures that economies of scale for materials and labour can be achieved across the relevant TS sites.

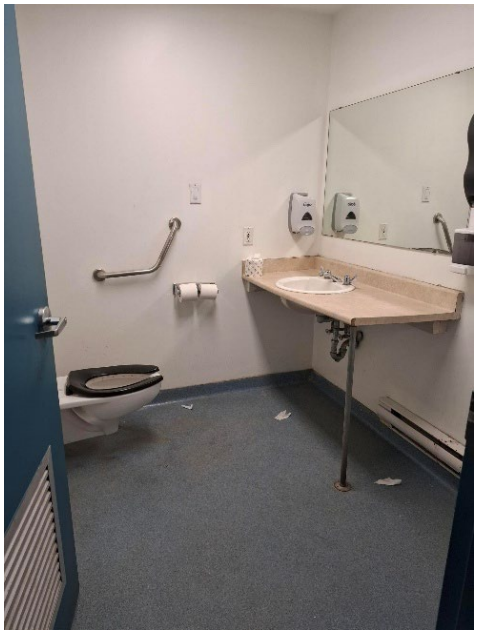

Figure 30: Washroom with insufficient clear floor and turning space, inadequate grab bar provision, and obstructed accessible clearance at the sink at transmission building (March 2025).

GHG Reductions and Sustainability

This Compliance & Governance program advances Hydro One's decarbonization commitments, targeting reduced facility-related Scope 2 greenhouse gas (GHG) emissions in line with the organization's pledge to cut emissions 30% by 2030 and achieve net-zero by 2050[22]. Compliance & Governance investments under this category advance energy efficiency and sustainability improvements across aging facility systems, a key aspect of Hydro One's climate strategy.

The program includes incremental funding to upgrade already end of life, high-impact building systems (particularly end of life HVAC equipment) with high-efficiency alternatives. The investment will bridge the funding gap left from the Sustainment segment's general approach to replace components with a like-for-like minimum viable component. These measures lower energy consumption and operating costs throughout the asset lifecycle, while reducing GHG emissions. Hydro One expects to reduce the emissions intensity of its TS facilities by 10% by 2032.

During the 2028-2032 period, the program proposes to upgrade approximately 25 high-emissions buildings across Hydro One's TS Facilities portfolio. Each targeted facility will incur an incremental capital cost of roughly $100,000 per major system upgraded, reflecting the premium for more efficient technology. Efforts will focus on the worst-performing sites, replacing inefficient equipment and implementing advanced controls to maximize emissions reductions and long-term cost savings.

This work will be implemented at a relatively steady pace over the planning period, aligned with scheduled equipment renewals to capture efficiency gains without disrupting operations. This steady pacing ensures continuous progress toward Hydro One's 2030 GHG reduction target.

[22] Hydro One Inc., Hydro One 2025 Sustainability Report, (May 7, 2026), p. 12 (https://www.hydroone.com/Sustainability/Documents/CSR_2025/2025-Sustainability-Report.pdf).

EV Charging and Fleet Electrification

This Compliance and Governance program supports Hydro One's Integrated Green Fleet Charging Strategy by providing the on-site electric vehicle (EV) and plug-in-hybrid (PHEV) charging infrastructure needed to support the company's transition to electric and plug-in hybrid light-duty trucks and passenger fleet vehicles. To ensure that adequate charging capacity exists at operational facilities, the program aims to provide charger-to-vehicle availability, enabling continuous operations as fleet electrification accelerates.

Investments include new EV charging stations at OC Admin facilities across the province, with a focus on establishing charging infrastructure in northern and rural locations where public charging is not readily available. The program also funds electrical service upgrades and site modifications to support high capacity charging needs for high utilization sites, ensuring sufficient power supply and reliability for simultaneous charging during peak operational periods.

Over the 2028-2032 planning period, the program plans to deploy approximately 45 new EV charging installations at key northern transmission locations, highly staffed sites, and strategically positioned transmission sites that are in proximity to highways or arterials where Hydro One expects to have high EV use. These investments ensure that each new electric or hybrid vehicle added to the fleet has a dedicated, reliable charging point on-site, thereby maintaining Hydro One's operational effectiveness during the fleet electrification transition.

EV charger installations and supporting upgrades are phased in concurrently with fleet electrification milestones. The rollout is planned to maintain alignment with vehicle procurement schedules, ensuring chargers are in place as new EVs are deployed. By phasing work in a steady pace throughout 2028-2032, the program manages resource demands and integrates learnings from previous installations to optimize subsequent deployments.

Climate Adaptation and Resilience

This Compliance and Governance program addresses climate-related facility risks by strengthening resilience of critical infrastructure to more frequent and severe weather

events and environmental changes. These investments protect Hydro One facilities against threats like flooding, extreme precipitation, high winds, heavy snow loads, and, in some regions, wildfire risk. Enhancing climate resilience of facilities reduces the likelihood of service interruptions, emergency repairs, and asset damage, thereby supporting long-term reliability and cost effectiveness.

The program includes targeted hardening measures at vulnerable sites: improved drainage and flood protection for flood-prone facilities, reinforcement of building envelopes and structures to withstand extreme storms and snow, and fire-resistant design enhancements in areas with elevated wildfire risk. These adaptive investments focus on selecting facilities where climate risks pose the greatest threat to operational continuity and safety.

Given the necessity for thorough engineering design, environmental assessment, and regulatory approvals, the bulk of Climate Adaptation and Resilience work is scheduled in the final three years of the period (2030-2032). Early years will focus on detailed design and planning, enabling these complex upgrades to be executed in later years once designs are finalized and permits obtained.

Work Program Enablement

This Compliance & Governance program drives facility solutions to support advanced operations and a future-ready workforce. It incorporates modern technologies and facility equipment that improve functionality, adaptability, and alignment with evolving business requirements.

Key initiatives include deployment of smart building systems at staffed sites (e.g. advanced building management systems and IoT sensor networks) to improve monitoring, automation, and occupancy management, as well as upgrades to digital infrastructure within facilities (e.g. enhanced connectivity, integrated security and communication systems). The program also includes upgrades to ad-hoc equipment and infrastructure specific to work programs, including temporary canopy-like structures for sheltering fleet and equipment, and engineered pole bunks at storage yards.

Over the 2028–2032 period, this program will be rolled out on a greatest-need and opportunity basis at selected facilities across the portfolio. Initial pilot implementations will validate design concepts and technologies intended to enable work programs through ancillary facility needs. The number of sites and specific technologies will be refined based on pilot outcomes and business needs, ensuring that each investment improves facility performance or workforce enablement. Investments are being paced steadily throughout the planning period to allow for iterative testing and scaling of successful innovations.

4.0 OUTCOMES

Outcomes associated with this investment include reduced risk of component failure resulting in business or system disruptions, protection of health and safety, lower operating and maintenance costs, improved operational performance and climate resilience of facility assets in line with operational demands and corporate commitments, and regulatory compliance. The program will help mitigate the maintenance requirements associated with deteriorating assets through the timely replacement of major building system/components. It will also align contractual commitments and investments with known and emerging operating requirements.

4.1 OEB RRF OUTCOMES

Table 9 presents anticipated benefits as a result of the proposed investment in accordance with the Ontario Energy Board's (OEB) Renewed Regulatory Framework (RRF).

Table 9 - Outcome Summary

Customer Focus	• Support the ability of the lines of business to address customer needs through facilities that are commensurate with operational requirements. • Minimize customer interruptions due to TS equipment outages associated with poor condition TS building assets.
Operational Effectiveness	• Maintenance and improvement of operational effectiveness of the lines of business through timely and strategic facilities investments that are aligned with operational requirements. • Minimize reliability and safety risks posed by poor condition TS building assets.
Public Policy Responsiveness	• Compliance with government policy and regulatory requirements (e.g. *Accessibility for Ontarians with Disabilities Act*).

	• Mitigate Hydro One's greenhouse gas emissions by replacing poor condition equipment in existing facilities with more energy efficient solutions.
Financial Performance	• Cost effectiveness realized through regular BCAs, consideration of alternatives, and timely investment prior to failure. • Cost efficiency realized through facilities investments that align with current and emerging operating requirements.

5.0 EXPENDITURE PLAN

Table 10 below summarizes Hydro One's forecast net capital expenditures for the 2028-2032 planning period.

Table 10 - Hydro One - Investment Expenditures[23]

($M)	2028	2029	2030	2031	2032	Total 28-32
Gross Capital Expenditures	44.6	51.5	59.0	59.0	52.1	266.3
Less Removals	-3.3	-3.3	-3.3	-3.3	-3.3	-16.6
Less Capital Contributions	0.0	0.0	0.0	0.0	0.0	0.0
Net Capital Expenditures	**41.3**	**48.2**	**55.7**	**55.7**	**48.8**	**249.7**

Table 11 below summarizes Hydro One's net capital expenditures, including planned and forecast expenditures for the 2023-2027 rate period and planned expenditures for the 2028-2032 rate period. These expenditures are presented according to the investments described in Section 3.0 Investment Description.

Table 11 - Hydro One - Expenditure Continuity Over Rate Periods ($M)[24]

Description	Plan[25] 23-27	Act/Fcst[26] 23-27	Total 28-32
Sustainment: Building Improvements and Component Replacements	55.4	60.5	161.8
New Builds and Major Renovations	4.0	0.3	18.6
Compliance & Governance	**0.0**	**0.0**	69.1
Total	**59.4**	**60.8**	**249.7**

[23] Figures presented in the tables may not sum to the totals shown due to rounding.
[24] Figures presented in the tables may not sum to the totals shown due to rounding.
[25] "Plan" refers to Hydro One's revised capital expenditure and ISA forecast to implement the OEB-approved Settlement Proposal in EB-2021-0110.
[26] "Act/Fcst" refers to actual (2023-2025) and forecast (2026-2027) expenditures.

2023-2027 EXPENDITURES

In the 2023-2027 rate period, Hydro One expects forecast expenditures to be $1.4M higher than the Plan. This variance is mostly attributable to Sustainment investments, such as expenditures of $5.1M due to emergency roof replacements, urgent building envelope repairs, and other structural or imminent life safety capital work on critical buildings. However, these capital exceedances were partly offset by the deferral of the Hanmer Transmission Marshalling Yard ($3.7M), and the reprioritization of the associated capital to address urgent Sustainment needs, as described in Section 3.2.2 above.

2028-2032 EXPENDITURES

In the 2028-2032 period, Hydro One expects expenditures to be $188.9M higher than the 2023-2027 Forecast, reflecting the fact that the TS Facilities portfolio has reached an inflection point where current investment levels will drive exponential deterioration and asset write-offs. This is supported by building condition assessments showing that the portfolio is deteriorating, notably:

- the portfolio's 0-year FCI stands at 13.7% (poor) and, without additional investment, is projected to deteriorate to a five-year FCI of 50.5% (poor) by 2030;
- approximately 36% of buildings are currently in poor condition, which is forecast to increase to over 55% by 2030 without intervention;
- the number of high-criticality buildings in poor condition is projected to increase to at least 249 (approximately 38% of the high-criticality buildings in the TS Facilities portfolio) with current investment levels, but would decline to at least 129 (approximately 20% of high-criticality buildings in the TS Facilities portfolio) with the proposed investment;
- high-risk capital deficiencies are projected to increase by 24% (from $139M to $173M) with status quo funding, but would decline by 34% (from $139M to $92M) with the proposed investment;

Compliance & Governance investments are also necessary because approximately 65% of the portfolio was built before the year 2000, and accessibility, inclusivity, environmental, and climate resilience requirements have evolved significantly since then. These

investments will deliver the targeted improvements expected from a modern electric utility, including retrofitting facilities that do not meet current code and accessibility standards.

6.0 ALTERNATIVES

Hydro One considered the following alternatives before selecting the preferred option.

ALTERNATIVE 1: RUN TO FAILURE

This alternative is a “run to failure approach” for building assets and site infrastructure at TS facilities. This alternative represents continued operation with the current state of equipment and infrastructure at these facilities, only carrying out capital expenditure reactively after the occurrence of a failure of site infrastructure or equipment.

This alternative was rejected as it is likely to undermine Hydro One’s ability to support system reliability, pose undue risks to personnel and business operations, and will result in non-compliance with regulatory requirements and corporate policies.

A run to failure approach ultimately increases the likelihood of unplanned system outages and emergency situations that will have a negative impact on system performance, operational efficiencies and costs, health and safety, and customer service/value. Typically, TS buildings house critical assets, and would directly impact service to customers (e.g. the case of a roof leak or a heating/cooling system failure could trigger power system asset outages). Non-compliance with respect to regulatory requirements or other building code violations could also result if these facility assets are allowed to run to failure.

ALTERNATIVE 2: PERFORMING ON-GOING SUSTAINMENT ONLY

This alternative funds on-going sustainment work but does not provide funding to accommodate new builds or major renovations to address operational requirements and additional facility capacity.

This alternative is not sustainable. As outlined above, the proposed major investments leverage opportunities to consolidate and create lasting efficiencies in work program delivery while simultaneously addressing poor condition assets. Given the overall

condition and sub-optimal state of the assets, sustainment improvements will not suffice to meet operational requirements in a cost-effective manner.

ALTERNATIVE 3: PERFORMING TARGETED HIGH-RISK AND MEDIUM-RISK SUSTAINMENT WORK, PRIORITY NEW BUILDS AND MAJOR RENOVATIONS, AND PRIORITY COMPLIANCE AND GOVERNANCE INVESTMENTS (RECOMMENDED)

As presented in Section 3.0 Investment Description, this alternative would bring the Timmins Transmission Work Centre and future state Hanmer Transmission Marshalling Yard to an acceptable state by replacing building assets that are not easily serviceable and have exhausted their operational/performance life by carrying out timely and cost-effective site improvements, or preparing for relocation, respectively.

Further, partial advancements in key Compliance & Governance initiatives will be targeted at priority transmission sites, particularly sites with large numbers of permanently reporting staff, high climate vulnerability, or emissions implications.

The proposed alternative is an estimate of the work to be performed over the planning period necessary to keep high-risk assets from failing and causing service disruptions and potential health and safety risks. This has been determined to be the most cost-effective strategy that addresses operational requirements and manages risk.

The prime consideration throughout is to maximize the value of existing TS facilities through ongoing operations, maintenance and sustainment investments in line with operational requirements.

ALTERNATIVE 4: ALL ON-GOING SUSTAINMENT WORK, FULL EXECUTION OF ALL MAJOR RENOVATIONS/UPGRADES OF ALL REQUIREMENTS, AND FULL COMPLIANCE & GOVERNANCE NEEDS COMPLETED

This alternative contemplates full sustainment replacements of all high and medium-risk components across the entire transmission facilities portfolio, in addition to broader compliance and governance investments to address all identified needs from the lines of business. Under this approach, all requested upgrades would be advanced, extending beyond the prioritized facilities and scope outlined in this ISD.

While this alternative would more comprehensively address operational requirements and improve the long-term condition profile of the Transmission Facilities portfolio, it is not executable. The scale and concurrency of work would introduce significant execution risk, particularly due to conflicts with planned transmission system projects at many critical sites. These constraints limit the ability to safely and efficiently deliver both facilities and transmission upgrades in parallel.

In contrast, the recommended alternative strategically prioritizes and profiles investments across the portfolio to mitigate these execution risks, reducing project conflicts at transmission station sites and enabling more efficient delivery. Additionally, the full scope alternative would result in materially higher costs to customers without a commensurate increase in near-term benefits relative to the proposed, risk-balanced approach.

7.0 EXECUTION RISK AND MITIGATION

Hydro One's TS facilities are geographically dispersed across the province and are located within operating high-voltage environments. Work on these facilities requires specialized planning and coordination to ensure that building-system investments are executed safely, efficiently, and without adversely affecting station operations or the reliability of the transmission system. Execution requirements may include site-access controls, grounding and bonding considerations, limits of approach, coordination with concurrent station work, and the use of qualified personnel trained to work within energized environments.

FRE coordinates internally with transmission and stations Lines of Business, and with its outsourced service provider (OSP) throughout project planning and execution. This coordination validates requirements, identifies site-specific operating constraints, and aligns the timing of building work with other planned activities. Requirements are reviewed as projects advance through annual planning and detailed design so that changes in operational priorities, station conditions, or related capital work can be incorporated before construction begins.

Projects are advanced through FRE's Stage-Gate Process, which establishes defined checkpoints from initial planning through design, procurement, construction,

commissioning, and closeout. At each stage, project scope, cost, schedule, risk, and execution readiness are reviewed before the project proceeds. This process supports earlier identification of site constraints, improves the completeness of project scopes and estimates, and reduces the risk of late-stage changes or rework during construction. A fully detailed breakdown of FRE's capital work execution process is available in GSP Section 4.10.3.3.

FRE relies on its OSP to provide scalable project-delivery capacity and access to the specialized structural, mechanical, electrical, HVAC, building envelope, plumbing, and sitework expertise required across the TS portfolio. The OSP also provides access to established regional contractor and supplier networks, including certified personnel capable of working within the specific requirements of energized station environments. Hydro One retains accountability for investment priorities, project approvals, financial oversight, performance monitoring, and delivery outcomes.

Cost risk is managed through early site investigation, clearly defined technical specifications, competitive procurement, and contractual arrangements appropriate to the scope and maturity of the work. Where practicable, FRE and its OSP also bundle similar building-system replacements across multiple TS locations, standardize technical requirements, and coordinate regional delivery.

A detailed analysis of FRE's capital project execution process, risks to delivery, cost management, governance controls, workforce resourcing, and use of outsourced service providers is provided in GSP Section 4.10.3.

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G-GP-05	INFORMATION TECHNOLOGY SERVICES ENABLEMENT
Primary Trigger:	Business Support Sustainment
OEB RRF Outcomes:	Customer Focus, Operational Effectiveness, Public Policy Responsiveness

Net Capital Expenditures[1]:

($M)	2028	2029	2030	2031	2032	Total
Hydro One	40.9	42.3	46.3	37.6	34.0	201.2

Prepaid Expenditures Related to Cloud:

($M)	2028	2029	2030	2031	2032	Total
Hydro One	10.3	13.0	10.1	10.2	8.3	51.9

Summary:

This investment includes the lifecycle renewal and enhancement of Hydro One's core IT infrastructure, end-user computing devices, networking systems, and enterprise enablement platforms because these assets and systems must remain reliable, secure, vendor supported, and compatible with evolving business and operational requirements. The primary trigger of the investment is Business Support Sustainment. The investment is expected to maintain reliable access to enterprise applications and IT services, reduce the risk of service disruption, cybersecurity exposure, and unsupported technology, and strengthen Hydro One's IT environment through more integrated and supportable platforms that enable corporate, customer, and operational systems across the organization.

[1] Figures presented in the tables may not sum to the totals shown due to rounding.

1.0 OVERVIEW

The investments described in this Exhibit sustain Hydro One's core IT infrastructure and enterprise technology environment through the lifecycle renewal of hardware, operating systems, and supporting software. These investments ensure critical technology assets remain secure, reliable, compliant with technology standards, and supported by vendors, while maintaining the underlying technology environment that supports Hydro One's enterprise applications and business functions.

Investments in infrastructure assets are driven by vendor support timelines, technology standards, and operational requirements, with lifecycle renewal activities ensuring continued performance, security and compatibility across Hydro One's IT environment. Investments in enterprise platforms and enablement tools focus on enhancing service delivery capabilities, improving operational efficiency, consolidating fragmented processes, and improving the long-term supportability of Hydro One's application landscape.

Together, these investments provide the foundational capabilities that support Hydro One's broader IT environment, enabling reliability, interoperability, and consistent standards across the Company's operating environment. The systems addressed by these expenditures are critical to the reliable operation of a wide range of IT applications and services relied upon across the organization, while targeted enterprise platform investments improve integration, process consistency, and long-term supportability.

Over the 2028-2032 planning period, Hydro One plans to invest $201.2M in capital and $51.9M in prepaid in these areas as summarized in Table 4 below.

2.0 INVESTMENT NEED

These investments are required to sustain Hydro One's technology environment, and maintain the secure, reliable, and efficient operations of the corporate, customer, and operational systems that support the business. These investments address both foundational IT infrastructure and enterprise technology platforms that are essential to delivering technology services across the organization.

The investments are grouped into four categories:

- **Data Centre Infrastructure** – computing, storage, backup, virtualization, and hosting platforms that support enterprise and operational applications.
- **End-User Computing Devices** – laptops, desktops, tablets, and related peripherals used by employees in office, field, and operational environments.
- **Communication and Networking Systems** – network and communication technologies that provide connectivity, secure system access, and reliable communications across Hydro One's operations.
- **Enterprise Platforms and Enablement Tools** – enterprise technology platforms that support IT service delivery, workflow automation, application lifecycle management, and employee collaboration, including ServiceNow, the Application Rationalization Program, and Windows operating system sustainment. Enterprise application platforms managed through separate investment exhibits are excluded from this category.

Investment in data centre infrastructure, end-user computing devices, and communication and networking systems are primarily driven by asset lifecycle requirements. As hardware and software assets approach end of life or end of support, the risk of equipment failure, cybersecurity vulnerabilities, performance degradation, and application incompatibility increases. Lifecycle renewal is required to maintain vendor support, reliable performance, and alignment with evolving cybersecurity and technology standards.

Investments in enterprise platforms and enablement tools are required to modernize and consolidate technology capabilities, address fragmented processes, improve visibility into software and hardware assets, manage software end of support risks, and streamline the application landscape.

The intended outcome of these investments is to maintain a secure, reliable, vendor-supported, and operationally sustainable technology environment that supports Hydro One's business operations, customer services, and critical operational systems.

2.1 DATA CENTRE INFRASTRUCTURE

Hydro One requires continued investment in data centre infrastructure to sustain the secure, reliable, and recoverable technology environment that supports critical enterprise and operational systems across the company. The data centre environment operates across two facilities and supports approximately 8,000 users, as well as a broad range of enterprise, customer, engineering, asset management, financial, and operational applications.

The need for investment is primarily driven by the lifecycle profile and operational criticality of data centre assets, including servers, storage systems, backup and recovery platforms, virtualization infrastructure, operating systems, databases, networking equipment, and supporting power systems. As these assets age and approach end of support or end of life thresholds, they become increasingly difficult to maintain, more susceptible to failure, and less compatible with evolving enterprise platforms, operating systems, and cybersecurity requirements.

Lifecycle renewal is required to maintain vendor support, security patching, and compatibility with modern technology platforms. Failure to renew these assets would increase the risk of service disruptions, recovery limitations, cybersecurity vulnerabilities, and unplanned replacement costs. In particular, aging backup and recovery systems could impair Hydro One's ability to restore critical systems and data following a disruption, creating risks to business operations, customer service, and compliance with legal, regulatory, and record-retention requirements.

The need is also driven by the increasing complexity of Hydro One's enterprise hosting environment and the limitations of its current cloud capabilities. Critical workloads are supported across a combination of on-premises, virtualized, and approved cloud-hosted environments, requiring a sustainable and supportable hosting foundation. Continued reliance on a single virtualization platform increases vendor dependency and limits workload portability. In parallel, cloud-hosted services require standardized landing zones, security and compliance controls, automation, monitoring, cost management capabilities and governance practices to support consistent deployment and management. Without these foundational capabilities, teams would face inconsistent deployments, greater

reliance on manual processes, limited cost visibility, higher operational risk, and slower migration of approved workloads and platform services.

2.2 END-USER COMPUTING DEVICES

End-user computing devices enable employees across corporate and field environments to access enterprise systems and perform day-to-day business activities. These devices include laptops, desktops, tablets and associated peripherals that support a distributed workforce and a wide range of operational functions across office locations, operational sites and field environments.

Investment is required to replace aging devices that are approaching or have exceeded their planned lifecycle and to maintain vendor support, security, performance, and compatibility with enterprise applications and operating platforms. As devices age, the risk of hardware failures, reduced performance, unsupported components, and application compatibility issues increases, which can affect operational effectiveness. Ongoing renewal is also necessary to support evolving technology requirements, including increased computing demands associated with modern workplace tools and emerging AI-enabled capabilities.

These investments are necessary to maintain a reliable, secure, and supportable end-user computing environment, reducing device-related disruptions and enabling employees to effectively perform their roles across corporate and operational environments.

2.3 COMMUNICATION AND NETWORKING SYSTEMS

Hydro One requires continued investment in communication and networking systems to maintain reliable, secure, and supportable connectivity across corporate offices, operational sites, and field locations. These systems connect employees, devices, and applications across Hydro One's enterprise environment and provide access to corporate systems, communication tools, and cloud-based services.

Hydro One’s communication and networking assets are at or approaching the end of their supported lifecycles and require renewal. As shown in Table 2, below in section 3.3, several key asset classes are at or approaching typical refresh planning horizons. This

includes network routers with an average age of 5.3 years, network switches at 6.5 years, Uninterrupted Power Supply (UPS) systems at 5.6 years, and wireless access points and firewalls at 4.7 years. These average ages are approaching or exceed Hydro One's typical refresh planning horizons of approximately five years for most network equipment and seven years for UPS systems. Aging infrastructure becomes increasingly difficult to support, may no longer receive vendor security updates, and may be less capable of supporting evolving business and operational requirements.

Investment is also required to accommodate increasing network demands associated with modern enterprise applications, cloud-based services, video conferencing, wireless connectivity, cybersecurity controls, and collaboration platforms. Reliable network and communication services are essential to enabling employees to communicate effectively and access systems, whether working remotely, in the office, or in the field, and are critical in emergency situations where uninterrupted communication between field and office staff supports coordination of response activities.

These investments are required to maintain a secure and reliable networking environment, reduce the risk of service disruptions and cybersecurity vulnerabilities, and support dependable access to corporate applications, communication services, and collaboration tools across Hydro One locations. The investments are also required to support a consistent user experience, improved network performance, and a standardized and supportable technology environment.

2.4 ENTERPRISE PLATFORMS AND ENABLEMENT TOOLS

Investments in enterprise platforms and enablement tools are required to address fragmented service-management processes, improve visibility and governance of software and hardware assets, manage application portfolio complexity, and maintain vendor-supported software platforms. Without continued investment, Hydro One would face increasing operational inefficiencies, reliance on manual processes, limited visibility into asset lifecycle and renewal requirements, growing technology complexity, and increased risks associated with unsupported software and legacy applications.

Enterprise platforms and enablement tools include systems and services that support Hydro One's IT operations and enable efficient service delivery across all lines of business. These platforms provide the foundation for incident management, asset tracking, workflow automation, enterprise application performance, and employee collaboration.

The investments under this category are organized into four distinct initiatives:

1. Sustaining and expanding ServiceNow enterprise service management platform.
2. Continuing the Application Rationalization Program to modernize and streamline the application portfolio.
3. Maintaining secure and supported enterprise operating systems (OS) through scheduled Windows software refreshes.
4. Improving collaboration tools used for communication, content sharing, and hybrid work.

2.4.1 SERVICENOW

Several important service management, asset management, and work management processes at Hydro One currently operate across multiple standalone tools, custom applications, and manual workflows. This fragmented environment creates inconsistent user experiences, duplicate administration, limited end-to-end visibility, and increased effort to manage and maintain multiple platforms.

Key business processes, including employee onboarding, employee service delivery, software and hardware asset management, project and investment planning, and OT service management, continue to rely on disconnected tools, portals, and workflows. This limits process standardization, reduces visibility into assets and work activities, and increases manual effort to coordinate activities across multiple systems.

Without investment, Hydro One would continue to operate with fragmented employee service experiences, limited visibility into software and hardware assets, separate service-management platforms across IT and OT, and manual or spreadsheet-based processes in areas where greater automation and governance are required. This would reduce Hydro

One's ability to standardize processes, improve service visibility, manage assets proactively, and support future growth through a scalable enterprise workflow platform.

These investments are expected to improve process standardization, workflow automation, asset visibility, governance, and employee experience by consolidating targeted processes onto a common enterprise platform. Expected outcomes include a more unified employee service experience, improved oversight of hardware and software assets, enhanced management of licensing and renewals, greater visibility into project and investment activities, and more consistent service-management practices across IT and OT functions.

2.4.2 APPLICATION RATIONALIZATION PROGRAM

Hydro One currently maintains approximately 600 applications supporting corporate, customer, and operational functions. As enterprise platforms, business requirements, cybersecurity expectations, and vendor technologies evolve, maintaining a large and diverse application portfolio increases support complexity, technology risk, and reliance on aging or unsupported applications.

Lifecycle investments for Hydro One’s larger enterprise applications are generally addressed through separate DTS Investment Summary Documents, as described in GSP Section 4.8. However, Hydro One’s application portfolio also includes hundreds of smaller applications that support specific business processes and user groups. Although these applications may have lower individual criticality or more limited technology requirements, collectively they support a broad range of business activities and require ongoing lifecycle management.

During the current rate period, Hydro One prioritized available investment toward larger and more critical applications. As a result, lifecycle requirements have accumulated across the remaining application portfolio, with more than 35% of Hydro One’s applications currently beyond vendor support. Without targeted remediation, this exposure will continue to increase during the 2028-2032 period.

Hydro One has previously managed selected unsupported applications through interim measures, including limiting application changes where modifications could introduce

instability. These measures can reduce near-term implementation risk but do not restore vendor support, security patching, or compatibility with supported technology platforms. Given the current number of unsupported applications, continued reliance on interim measures is no longer a sustainable portfolio-wide approach. Applications operating beyond vendor support also increase operational and cybersecurity risk because defects may not be corrected and security vulnerabilities may not receive vendor patches or updates. These risks also increase as the underlying servers, databases, operating systems, interfaces, and security controls are renewed. Required upgrades or patches to supporting infrastructure may cause legacy applications to fail or become incompatible. Conversely, delaying infrastructure and security updates to preserve compatibility with unsupported applications can increase risk elsewhere in Hydro One's technology environment.

The application portfolio also includes small custom tools developed to meet specific local business needs, such as forms, workflows, and information repositories built using Microsoft Access databases or Microsoft Excel workbooks with macros. Although these tools may operate on supported desktop software, they are not necessarily supportable, governable, or readily extensible as enterprise solutions. They can depend on individual knowledge, have limited documentation and controls, and create isolated stores of business information that are difficult to integrate, secure, maintain, or scale. Where appropriate, moving these capabilities and their associated information to approved enterprise platforms enables more consistent data management, governance, integration, lifecycle support, and scalability.

Investment in the Application Rationalization Program is therefore required to address prioritized application risks, reduce the number of applications operating beyond vendor support, improve the supportability of custom and desktop-built solutions where appropriate, preserve required business capabilities, and reduce operational, cybersecurity, compliance, and vendor-management risk across Hydro One's application landscape.

2.4.3 WINDOWS OPERATING SOFTWARE

Hydro One requires a vendor-supported client operating system environment to maintain security, compatibility, supportability, and alignment with enterprise endpoint standards.

Windows operating system versions have defined vendor-support lifecycles. For example, Windows 10 reached end of support on October 14, 2025. As these versions approach end of support, continued investment is required to maintain security updates, compatibility with business applications and security controls, and a supportable client computing environment.

Investment is required to transition Hydro One's client computing environment to supported Windows operating system versions and to maintain compatibility between end-user devices, business applications, and security controls.

The expected outcome is a secure, supported, and patchable client operating environment that reduces cybersecurity risk, maintains application compatibility, and supports ongoing business operations.

2.4.4 COLLABORATION TOOLS

Hydro One requires consistent, secure, and reliable collaboration tools to support communication, content sharing, and hybrid work across the organization. These tools include enterprise email, document management and file-sharing capabilities, team collaboration platforms, and video conferencing services including conference room solutions. These tools are implemented and support corporate, operating, and field staff and locations.

The need for investment is driven by inconsistent collaboration experiences across Hydro One locations, particularly in shared meeting spaces and conference rooms that support in-room and hybrid participation. In some locations, room based audio-visual equipment and collaboration endpoints do not provide a reliable meeting experience, particularly for users who join meetings without personal laptops or dedicated devices. This can reduce meeting effectiveness, create inconsistent user experiences, and increase reliance on local workarounds or technical support.

As hybrid work and virtual collaboration continue to be an integral part of Hydro One's operating model, reliable collaboration technologies are increasingly important to supporting communication among office-based employees, field personnel, contractors, and external stakeholders. Without continued investment, Hydro One would continue to experience inconsistent collaboration capabilities across locations, increased operational inefficiencies during meetings and information-sharing activities, and growing challenges in maintaining a standardized and supportable collaboration environment.

These investments are required to support a more consistent and reliable collaboration experience across Hydro One locations, improve meeting and communication capabilities, reduce dependence on workarounds and personal devices, and provide a standardized platform for collaboration and information sharing across the organization.

3.0 INVESTMENT DESCRIPTION

Technology infrastructure assets are managed through structured lifecycle practices, informed by industry standard IT asset management practices and vendor guidance. Replacement decisions are informed by original equipment manufacturer (OEM) lifecycle guidance, including vendor end of support timelines, asset condition, performance and capacity requirements, cybersecurity considerations, and operational needs rather than fixed replacement intervals alone.

Enterprise platforms and enablement tools are advanced through targeted investments that sustain and expand core capabilities, including enterprise service management, application portfolio management, operating-system upgrades, and collaboration tools. These investments support improved service delivery, operational efficiency, standardization, integration, and long-term supportability across the organization.
The subsections below describe the scope of assets, systems and platforms included within each category and outline the planned investments over the 2028-2032 period.

3.1 DATA CENTRE INFRASTRUCTURE

Planned investments over the 2028-2032 period will renew and enhance core data centre infrastructure to maintain performance, supportability and alignment with evolving technology requirements. Investments address compute, storage, backup and recovery,

virtualization platforms, operating systems, databases, networking infrastructure, supporting power systems, and foundational hybrid-platform capabilities.

Key components that are planned to be addressed during the 2028-2032 period include:

- **Server hardware** - phased replacement of servers that reach lifecycle replacement requirements to maintain vendor support, performance, and alignment with OEM lifecycle guidance, including end of support timelines. The current environment includes approximately 196 enterprise servers with an average age of approximately two years (as of December 31, 2025) and a typical refresh cycle of approximately five years based on vendor lifecycle guidance. Replacement activity is expected to occur programmatically over the rate period, based on asset age, supportability requirements, and operational needs.
- **Enterprise storage systems** - upgrading storage platforms supporting application data, analytics workloads, and backups, to maintain capacity, performance and vendor supportability, with refresh activities informed by platform lifecycle and demand requirements. The current environment supports approximately 4,900 TB of enterprise storage, with an average platform age of approximately 2 years (as of December 31, 2025). Planned refresh activities are based on a typical 5-year vendor-supported lifecycle and are expected to address storage platforms that reach lifecycle replacement requirements during the 2028-2032 period, including where capacity, performance, or supportability requirements trigger replacement or expansion.
- **Backup and recovery systems** – refreshing backup appliances and associated technologies to maintain reliable data protection and disaster recovery capabilities, with lifecycle decisions driven by supportability and recovery requirements. Planned refresh activities will address backup and recovery appliances that reach lifecycle replacement requirements during the 2028-2032 period, including where replacement or modernization is required to maintain recovery capability, vendor supportability, and compatibility with enterprise storage and server infrastructure.
- **Virtualization platforms (hypervisors)** – upgrading virtualization software to maintain compatibility with underlying infrastructure, supportability and alignment with vendor supported versions. This environment supports approximately 3,500

virtual servers operating on shared host infrastructure, with lifecycle managed through operating system support requirements, virtualization platform lifecycle guidance, application compatibility, and the lifecycle of the underlying host infrastructure rather than discrete hardware refresh cycles for each virtual server. Planned work includes transitioning targeted virtual workloads from VMware to Microsoft Hyper-V, together with the platform configuration, migration planning, testing, cutover activities, and related implementation effort required to reduce vendor dependency and support a more flexible enterprise hosting foundation.

- **Hybrid platform and platform-as-a-service enablement** – implementation of foundational cloud and hybrid platform capabilities required to support approved cloud-hosted workloads and platform services in a secure, scalable, and repeatable manner. This includes standard landing-zone capabilities, security and compliance controls, automated guardrails, monitoring, cost-management capabilities, and governance practices. This work establishes the enterprise platform foundation required before approved workloads or platform services can be hosted, managed, monitored, secured, or governed through cloud-based models.
- **Server operating systems** – upgrading operating system versions reaching end of support or transitioning into reduced support phases to maintain security patching, vendor support and compatibility with refreshed infrastructure. This includes managing Microsoft lifecycle timelines for Windows Server 2019, which reaches the end of extended support on January 9, 2029, and Windows Server 2022, which reaches the end of mainstream support on October 13, 2026.
- **Database software versions** – applying required database upgrades to maintain vendor support, performance and alignment with vendor roadmaps and supported configurations.
- **Data centre network equipment** – replacing core switches, routers, and firewalls that manage traffic within the data centre environment. Planned replacement activity is expected to address equipment that reaches lifecycle replacement requirements during the 2028-2032 period, with timing aligned to vendor lifecycle guidance, performance requirements, supportability, and operational needs.

- **Power and electrical support systems –** replacing UPS units that protect critical compute and storage equipment from power disruptions. Planned replacement activity is expected to address UPS units that reach lifecycle replacement requirements during the 2028-2032 period, with timing based on asset condition, battery performance, vendor supportability, and the need to maintain power protection for critical data centre equipment.

Together, these investments maintain a current and supportable data centre environment capable of meeting ongoing compute, storage and networking requirements. This supports the continued operation of enterprise applications and enables application upgrades and platform improvements over the investment period. The virtualization modernization and hybrid platform enablement components further support a more flexible hosting foundation by improving workload portability, reducing vendor dependency, strengthening provisioning and recovery practices, and enabling more consistent governance of approved cloud-hosted platform services.

Over the 2028-2032 planning period, Hydro One plans to invest approximately $50.2M in capital in Data Centre Infrastructure initiatives and approximately $21.5M in prepaid cloud-related costs supporting hybrid-platform and platform-as-a-service enablement capabilities.

3.2 END-USER COMPUTING DEVICES

Planned investments focus on the ongoing replacement and management of end-user devices through structured lifecycle programs. Refresh activities are informed by vendor support timelines, asset condition, performance requirements, and operational needs.

Key components addressed within this category, aligned with the summary shown in Table 1 below include:

- **Client Personal Computer (PC)** – phased replacement of Hydro One's client PC fleet used across corporate and field environments, based on a four-year average lifecycle, with approximately 25% of devices refreshed annually to maintain

performance, vendor support, security, and compatibility with business applications.

- **Tablets** – phased replacement of tablets used primarily by field staff, based on a four-year average lifecycle, to maintain device reliability, vendor support, security, and compatibility with operational applications used in the field.
- **Printers and Plotters** – recurring annual replacement of aging and obsolete printers, multifunction devices, and large-format plotters used across company offices and field locations, targeting devices that have reached end of life or no longer meet performance requirements, with refresh timing based on usage levels, condition, and vendor support availability rather than a fixed lifecycle.

Table 1 - End-User Computing Devices as of December 31, 2025

Description	Quantity	Average Age (Years)	Typical Refresh Cycle (Years)*
Client PC	8,811	2.2	4
Tablets	1,031	2.2	4
Printers and Plotters	801	7.4	5-10**

**Refresh values represent typical planning assumptions based on vendor lifecycle guidance. Actual replacement timing is determined by vendor support timelines, asset condition and operational requirements.*

***Printer and plotter refresh timing is influenced by elements such as usage levels, device condition, and vendor support availability rather than a fixed lifecycle.*

Over the 2028-2032 rate period, Hydro One plans to invest approximately $55.0M in capital in End-User Computing Devices.

3.3 COMMUNICATION AND NETWORKING SYSTEMS

Planned investments over the 2028-2032 period focus on the ongoing renewal and targeted improvement of communication and networking infrastructure to maintain performance, vendor support, and compatibility with enterprise systems and communication platforms.

Replacement timing is determined based on vendor supportability, asset condition, and operational requirements, with an approximate five-year planning horizon used for most network equipment and seven years for UPS systems.

Hydro One prioritizes investments in locations with high workforce concentration and critical operational functions, where network outages would have the greatest impact on employees' ability to access corporate systems, communicate, and coordinate field operations. In these environments, reliable connectivity is essential for daily work execution and for supporting centralized response activities during emergency events such as storm restoration. This approach ensures communication and networking infrastructure remains secure, reliable and aligned with business needs.

Key components addressed within this category over the 2028-2032 period align with the asset classes shown in Table 2 and include:

- **Network Routers** – replacement of routers that connect Hydro One facilities to corporate networks, applications, data, and external services. Routers direct network traffic between locations and help maintain reliable connectivity for office, field, and operational users. Planned replacement activity is expected to focus on in-scope routers that reach lifecycle replacement requirements.
- **Network Switches** – replacement of switches that connect users, devices, servers, wireless access points, and other network equipment within Hydro One facilities. Switches support local network connectivity and are required for reliable access to corporate applications, shared services, and communication tools. Planned replacement activity is expected to address in-scope switches that reach lifecycle replacement requirements.
- **Firewalls** – replacement of firewall equipment that protects Hydro One's network environment by controlling and monitoring traffic between systems, sites, and external networks. Firewalls are refreshed to maintain vendor support, security patching, performance, and alignment with cybersecurity requirements. Planned replacement activity is expected to address in-scope firewalls that reach lifecycle replacement requirements.
- **UPS Systems** – replacement of UPS units that provide short duration backup power and power conditioning for communication and network equipment during localized power disruptions. UPS systems support the continued availability of network and communication services and are refreshed as they reach lifecycle

replacement requirements, based on age, condition, battery performance, and vendor supportability.

- **Wireless Access Points** – replacement of wireless access points that provide secure wireless connectivity for employees, field staff, contractors, and devices across Hydro One facilities. Wireless access points support access to corporate applications, collaboration services, and network-based tools in office, operational, and shared work environments. Planned replacement activity is expected to address in-scope wireless infrastructure that reaches lifecycle replacement requirements.
- **Load Balancers** – replacement of load balancing equipment that distributes network traffic across applications, services, or infrastructure to support availability and performance. Load balancers help prevent individual systems from becoming overloaded and support reliable access to network-based services. Because these assets are newer than other communication and networking asset classes, replacement activity is expected to be limited to assets that become due based on vendor lifecycle or operational requirements.

Table 2 - Communication and Networking Systems as of December 31, 2025

Description	Quantity	Average Age (Years)	Typical Refresh Cycle (Years)*
Network Routers	174	5.3	5
Network Switches	768	6.5	5
Firewalls	31	4.7	5
UPS Systems	257	5.6	7**
Wireless Access Points	959	4.7	5
Load Balancers	19	1.2	5

**Refresh values represent typical planning assumptions based on vendor lifecycle guidance. Actual replacement timing is determined by vendor support timelines, asset condition and operational requirements.*
***UPS systems are typically replaced on an approximate seven-year cycle, with battery components replaced mid-cycle as required based on condition and performance.*

In addition to the lifecycle replacement of the asset classes shown above, planned investments include targeted branch office technology enhancements. This work includes upgrades and additions to branch office audio-visual systems, wireless connectivity, and

related collaboration infrastructure to support reliable meeting experiences, hybrid participation, and consistent technology standards across targeted branch locations. These enhancements address outdated or inconsistent branch office technology environments and improve reliability and supportability across office and field locations.

Together, these lifecycle replacements and targeted branch office technology enhancements sustain vendor support, improve network reliability, reduce cybersecurity risk, and support dependable access to corporate applications, communication tools, and collaboration services across Hydro One locations.

Over the 2028-2032 rate period, Hydro One plans to invest approximately $29.2M in capital in Communication and Networking Systems Infrastructure related initiatives.

3.4 ENTERPRISE PLATFORMS AND ENABLEMENT TOOLS

Investments in enterprise platforms and enablement tools sustain and improve core enterprise systems. These investments address the needs identified in Section 2.0 by maintaining core enterprise systems, addressing end of support software, improving workflow efficiency across business functions, and supporting more standardized and integrated service-management and collaboration practices.

Over the 2028-2032 planning period, Hydro One plans to invest approximately $66.7M in capital and $30.4M in prepaid cloud-related costs for Enterprise Platforms and Enablement Tools.

3.4.1 SERVICENOW

Planned investments over the 2028-2032 period will expand Hydro One's existing ServiceNow platform and migrate targeted service management, asset management, and work management capabilities to a common enterprise workflow platform.

The planned work under this investment includes:

- **Software Asset Management (SAM)** – implementation of ServiceNow's SAM module to consolidate software contract and software asset data from multiple sources and improve visibility into licensing, entitlements, usage, renewals, and

related risks and opportunities, supporting better compliance and cost control through more accurate software and contract data. This investment will replace fragmented software asset tracking and reporting processes with a centralized system of record and standardized workflows for managing software assets and contracts. For example, software contract details, license costs, forecasting inputs, usage counts, renewal information, and entitlement data that are currently tracked through separate tools or spreadsheet-based processes would be brought into ServiceNow to support more consistent software asset management and renewal planning.

- **Hardware Asset Management (HAM)** – implementation of ServiceNow's HAM module to consolidate hardware asset data from multiple sources and improve visibility into inventory, lifecycle status, procurement needs, and asset-management processes from planning through retirement, supporting more centralized asset tracking and lifecycle management. This investment will allow Hydro One to establish a single platform for managing hardware assets, reducing reliance on multiple repositories and manual lifecycle-management activities.
- **Employee On/off Boarding Transformation** – implementation of ServiceNow capabilities supporting the employee onboarding process redesign, with the objective of providing hiring managers with a single workflow and portal to track and complete onboarding activities for new employees. With the proposed investment Hydro One will replace the current coordination of onboarding activities across multiple tools, contacts, and processes with a more integrated workflow experience.
- **Employee Centre Foundations** – consolidation of ServiceNow portals, primarily for HR and IT services, into a more unified employee-facing portal intended to make it easier for employees to find information, submit requests, report issues, and access services through a more consistent experience. This work is intended to streamline access to services, requests (e.g., automated request fulfilment), and information (e.g., business knowledge article consolidation and enhanced search capabilities) through a single employee-facing platform. The implementation of this investment will reduce the need for employees to navigate multiple service portals

and access points by providing a more centralized entry point for employee services.

- **Strategic Portfolio Management (SPM)** – implementation of ServiceNow's Strategic Portfolio Management module to support project and investment intake, prioritization, planning, resource management, and execution tracking through a more centralized workflow, providing improved visibility across the DTS work program and stronger alignment between strategy and execution. This investment will replace the existing legacy Portfolio and Program Management solution and disconnected intake, planning, and tracking activities with a common platform for managing the investment lifecycle.
- **Operations Technology IT Service Management migration** – migration of OT ITSM services from the legacy Remedy platform to ServiceNow to support a more common enterprise service management platform, more consistent and harmonized processes across IT and OT, and a more unified support approach for service-management activities currently delivered through separate environments. This investment will retire the legacy Remedy-based service-management environment and bring OT service management processes onto Hydro One's enterprise ServiceNow platform.
- **Operations Maturity Enhancements** – future ServiceNow modules, feature enhancements, integrations, reporting, and workflow improvements intended to support the continued expansion and maturation of the platform over the rate period. This includes structured platform upgrade activities intended to maintain platform currency, continuity, and compliance with vendor-supported versions, while enabling Hydro One to take advantage of new features and enhancements introduced through ServiceNow release cycles. Potential enhancements may include agentic AI, AIOps, predictive analytics, cybersecurity orchestration, digital employee experience capabilities, and expanded enterprise workflows across business functions beyond IT, HR, and Security.

These initiatives will consolidate targeted capabilities onto ServiceNow, retire selected legacy platforms and point solutions, and replace spreadsheets, disconnected tracking processes, and manual workflows with integrated workflows, automation, self-service

capabilities, reporting, and analytics. This will support more consistent service-management practices across IT and OT, improved employee access to services, and stronger visibility and governance of software, hardware, project, investment, and work-management activities.

3.4.2 APPLICATION RATIONALIZATION PROGRAM

Investment under this program provides annual funding to address prioritized applications across Hydro One's application landscape. Specific applications and solutions will be selected through ongoing application assessments and portfolio reviews, considering factors such as vendor support status, operational and cybersecurity risk, business criticality, technical condition, architectural alignment, and opportunities to move localized capabilities onto approved enterprise platforms.

The investment will fund implementation activities required to rationalize and uplift prioritized applications. Activities may include application upgrades, remediation, replacement, re-platforming, consolidation, integration, and the implementation of capabilities on supported enterprise or cloud platforms. The investment may also address custom desktop tools and isolated data stores, such as solutions built using Microsoft Access or Microsoft Excel macros, where moving the underlying business capability and information to an enterprise platform (e.g. to Microsoft Power Platform) provides a more supportable, governed, integrated, and scalable solution.

The mix of applications addressed in each year will be determined through ongoing prioritization rather than a fixed list established for the full rate period. This approach provides the capacity to respond to changing vendor roadmaps, emerging end of support requirements, application and infrastructure dependencies, cybersecurity risks, and evolving business priorities.

Collectively, these investments are expected to reduce technical debt, restore or improve application supportability, reduce operational and cybersecurity risk, and improve alignment with Hydro One's enterprise technology architecture while preserving required business capabilities.

3.4.3 WINDOWS OPERATING SOFTWARE

This investment funds the planning, testing, certification, deployment, and support activities required to upgrade Hydro One's client PC fleet to supported Windows operating system versions. The specific target version and deployment timing will be aligned with Microsoft's product roadmap, vendor support timelines, application compatibility, security requirements, and Hydro One's endpoint standards. The planned investment includes:

- Hardware and compatibility validation
- Application certification and testing
- Pilot deployments
- Standard image and deployment package preparation
- Enterprise-wide phased deployment

The initiative is intended to transition approximately 95% of eligible client PCs to the applicable supported Windows operating system version. Deployment will be phased to minimize user disruption, with timing determined based on Microsoft's product roadmap, vendor support timelines, application readiness, and operational requirements.

3.4.4 COLLABORATION TOOLS

This investment funds the infrastructure and implementation activities required to provide more consistent collaboration capabilities across Hydro One. Planned work includes the deployment and support of enterprise collaboration tools for email, document management, file sharing, video conferencing, and team collaboration, together with the related network, cabling, endpoint, and conference room technologies required to enable reliable use of these tools across targeted locations.

The investment also includes on-premises collaboration solutions for conference rooms across the province, with a focus on equipping shared spaces so that employees, field staff, and other users can participate in meetings without depending on personal laptops or ad hoc device connections. This includes meeting-room connectivity, audio-visual equipment, room-based collaboration technology, and supporting infrastructure required to provide a more consistent and supportable hybrid meeting experience.

Key activities under this investment include standardizing collaboration tool deployment, improving conference room technology at targeted sites, enabling reliable video conferencing and content sharing, and supporting secure access to collaboration platforms. These activities are intended to improve meeting quality, reduce inconsistent user experiences, and support more effective communication between remote and on-site teams.

4.0 OUTCOMES

Hydro One must maintain its IT hardware and software assets as they are necessary to operate its business and deliver a range of outcomes for customers. A current, secure, and supportable IT asset base reduces the risk of prolonged IT system outages, enhances cybersecurity resilience, and reduces the need for reactive or emergency technology replacements and the associated costs of addressing system failures or outages. By keeping IT systems up-to-date and vendor supported, Hydro One enables reliable access to the technologies that support customer service and the daily activities of Hydro One's operations, while reducing risks associated with unsupported or aging technology.

The planned investments are necessary to ensure that the IT infrastructure provides a strong foundation to enable the implementation and reliable operation of other IT solutions across Hydro One's broader IT environment. These outcomes extend beyond system reliability to include improvements in workflow automation, service transparency, operational efficiency, standardization, and application portfolio governance.

Together, these investments help maintain secure, current, and vendor-supported applications and supporting technologies, reduce cybersecurity and operational risks, and improve service quality and IT support responsiveness across the enterprise.

4.1 OEB RRF OUTCOMES

Table 3 presents anticipated benefits as a result of the proposed investment in accordance with the Ontario Energy Board's (OEB) Renewed Regulatory Framework (RRF). The outcomes continue to align with OEB performance objectives by improving reliability, efficiency, and customer experience while supporting secure and sustainable operations across Hydro One's enterprise IT environment.

Table 3 - Outcome Summary

Customer Focus	• Improves external customer experience by reducing interruptions to customer IT applications that provide access to important information such as power usage and billing and improving the stability and performance of systems that support customer service activities. • Enhanced enterprise service-management capabilities (ServiceNow) improve visibility and responsiveness to IT service requests across the organization, supporting faster resolution of customer facing issues.
Operational Effectiveness	• Maintains the reliable operation of data centre infrastructure, and enterprise applications to support optimal uptime as designed and provide Hydro One employees with the information and tools they require to perform their daily work. • Integrated enterprise platforms and supported operating systems reduce manual processes, strengthen workflow automation, and help ensure IT assets and applications remain secure, supportable, and effectively managed.
Public Policy Responsiveness	• Maintains the efficacy of the IT systems that interact with market participants and support the IESO in its market oversight mandate. • Lifecycle renewals and targeted platform improvements support compliance with cybersecurity and privacy requirements by maintaining secure and supported enterprise systems that protect corporate and customer information and enable Hydro One to respond to evolving regulatory and operational requirements.

5.0 EXPENDITURE PLAN

Table 4 below summarizes Hydro One's forecast net capital and prepaid expenditures for the 2028-2032 period. Annual expenditure levels reflect the timing of lifecycle renewal, vendor support requirements, and planned enterprise platform activities across the IT environment.

The highest planned expenditure year is 2030, reflecting the concentration of multiple major activities in that year, including increased data centre infrastructure activity, the planned Windows client operating system upgrade, continued end-user device refresh work, and significant ServiceNow related implementation activity. Expenditures are lower in 2031 and 2032 as several discrete platform and migration initiatives are completed or move past their peak implementation period, while recurring lifecycle activities continue for infrastructure, end-user devices, networking equipment, printers and plotters, application rationalization, and other below-materiality sustainment investments. This pacing supports a planned lifecycle renewal approach that aligns investment timing with asset supportability and operational requirements.

Table 4 - Hydro One - Investment Expenditures[2]

($M)	2028	2029	2030	2031	2032	Total 28-32
Gross Capital Expenditures	40.9	42.3	46.3	37.6	34.0	201.2
Less Removals	0.0	0.0	0.0	0.0	0.0	0.0
Less Capital Contributions	0.0	0.0	0.0	0.0	0.0	0.0
Net Capital Expenditures	**40.9**	**42.3**	**46.3**	**37.6**	**34.0**	**201.2**
Prepaid Expenditures Related to Cloud	**10.3**	**13.0**	**10.1**	**10.2**	**8.3**	**51.9**

Table 5 below summarizes Hydro One's net capital and prepaid expenditures, including planned and forecast expenditures for the 2023-2027 rate period and planned expenditures for the 2028-2032 rate period. These expenditures are presented according to the investment categories described in Section 3.0 Investment Description.

Table 5 - Hydro One - Expenditures Continuity Over Rate Period ($M)[3]

Description	Capital Expenditures			Prepaid Expenditures		
	Plan[4] 23-27	Act/Fcst[5] 23-27	Total 28-32	Plan 23-27	Act/Fcst[5] 23-27	Total 28-32
Data Centre Infrastructure	65.5	49.7	50.2	0.0	0.0	21.5
End-User Computing Devices	25.3	34.9	55.0	0.0	0.0	0.0
Communication and Networking Systems	11.1	12.4	29.2	0.0	0.0	0.0
Enterprise Platforms and Enablement Tools	26.3	51.7	66.7	0.0	4.3	30.4
Total	**128.3**	**148.7**	**201.2**	**0.0**	**4.3**	**51.9**

[2] Figures presented in the tables may not sum to the totals shown due to rounding.
[3] Figures presented in the tables may not sum to the totals shown due to rounding.
[4] "Plan" refers to Hydro One's revised capital expenditure and ISA forecast to implement the OEB-approved Settlement Proposal in EB-2021-0110. Plan includes expenditures previously mapped to different ISDs in EB-2021-0110, as further discussed in GSP Section 4.11.
[5] "Act/Fcst" Refers to actual (2023-2025) and forecast (2026-2027) expenditures.

2023-2027 EXPENDITURES

During the 2023–2027 rate period, IT Services Enablement expenditures are forecast to be $20.4M higher than Plan in capital, and $4.3M higher than Plan in prepaid. These variances are primarily attributable to:

- **Enterprise Platforms and Enablement Tools:** Capital expenditures are forecast to be $25.4M higher than Plan, and prepaid expenditures are forecast to be $4.3M higher than Plan. The increase reflects new and expanded requirements that emerged after the 2023-2027 Plan was established, as well as the growing need to maintain secure, supportable, and integrated enterprise platforms. These requirements include responding to vendor end of support timelines, expanding enterprise workflow and service-management capabilities, addressing aging applications and platforms, and enabling evolving Microsoft 365 and cloud-based capabilities.
    - **Migration from Remedy to ServiceNow:** Hydro One transitioned from its legacy Remedy IT service-management platform to a shared Capgemini-hosted ServiceNow environment and subsequently to a Hydro One-owned ServiceNow platform. The expanded investment supports platform implementation, migration activities, workflow modernization, and the consolidation of service-management processes onto a common enterprise platform.
    - **Windows 11 Deployment**: Microsoft announced the end of support for Windows 10 effective October 14, 2025, after the 2023-2027 Plan was established. As a result, Hydro One had to deploy Windows 11 to approximately 10,000 endpoints to maintain vendor support, security updates, and compatibility with enterprise applications and security standards.
    - **Microsoft 365 and SharePoint Enhancement**: The scope of SharePoint enhancement expanded beyond the migration from the unsupported SharePoint 2010 environment to SharePoint Online. Additional investments were required to enable Microsoft 365 capabilities, improve integration across the Microsoft ecosystem, and support emerging functionality such as Copilot, AI-enabled search, analytics, reporting, and content management; and

- **Expansion of the Application Rationalization Program**: The program evolved from a portfolio assessment and rationalization initiative into a broader modernization effort that includes application migration, remediation, re-platforming, infrastructure upgrades, restoration of vendor support, and risk reduction activities. The expanded scope addresses growing application portfolio complexity and helps mitigate operational, cybersecurity, supportability, and vendor-management risks associated with legacy and unsupported technologies.

- **End-User Computing Devices:** Capital expenditures are forecast to be $9.6M higher than Plan. The increase reflects additional lifecycle renewal and deployment requirements that were not fully contemplated in the 2023-2027 Plan. Additional expenditures were also required for client devices and peripherals, including a large tablet replacement program, associated vehicle and office docking stations, and the replacement of devices that could not reliably support the Windows 11 upgrade.

Offset by:

- **Data Centre Infrastructure:** The higher than Plan expenditures in the above categories were partially offset by lower Forecast capital expenditures of $15.8M in the Data Centre Infrastructure category.

2028-2032 EXPENDITURES

Over the 2028-2032 period, IT Services Enablement investments are planned to be $52.5M higher in capital and $47.6M higher in prepaid expenditures than the 2023-2027 Forecast. The increase reflects expanded lifecycle renewal requirements, enterprise-platform modernization, application risk remediation, and the introduction of hybrid and cloud-platform capabilities that were either not anticipated or were less mature when the current rate-period forecast was developed. Key drivers include:

- **Data Centre Infrastructure:** Capital expenditures are planned to be $0.5M higher than Forecast, while prepaid expenditures increase by $21.5M. The increase in prepaid expenditures reflects investments in hybrid-platform and cloud-enablement capabilities that establish the foundational landing zones, security controls, governance, monitoring, and automation required to support approved

cloud-hosted services and workloads. Planned investments also include virtualization upgrades, including the migration of targeted workloads from VMware to Microsoft Hyper-V, to reduce vendor dependency and improve hosting flexibility.

- **End-User Computing Devices:** Capital expenditures are planned to be $20.1M higher than Forecast. The increase is required to sustain an approximately four-year refresh cycle, address device refresh backlogs, and complete printer and plotter renewals. Planned expenditures also reflect higher market costs ranging between 13% to 40% across representative device categories. These increases are consistent with the market cost pressures described in SPF Section 1.8, Table 1. The variance also reflects evolving hardware standards and the increased use of higher capability devices required by business and field users.
- **Communication and Networking Systems:** Capital expenditures are planned to be $16.8M higher than Forecast. The increase reflects a larger lifecycle replacement program for networking assets that are reaching or exceeding their typical refresh horizons, including routers, switches, firewalls, UPS systems, wireless access points, and load balancers. The increase is also driven by growth in certain asset categories, particularly wireless infrastructure, together with targeted branch-office connectivity and collaboration enhancements. As a result, expenditures reflect both a larger asset base requiring lifecycle management and the higher cost and capability of replacement technologies.
- **Enterprise Platforms and Enablement Tools:** Capital expenditures are planned to be $15.0M higher than Forecast, and prepaid expenditures are planned to be $26.1M higher than Forecast. The increase reflects continued expansion of ServiceNow beyond the foundational work completed during the current rate period. The planned investments are expected to extend the platform into software and hardware asset management, employee onboarding and service delivery, strategic portfolio management, Operations Technology service management, and further workflow and operations maturity enhancements. Planned expenditures also continue the Application Rationalization Program through both capital and cloud-based arrangements, fund the next required Windows operating system refresh, and support collaboration tool improvements. Together, these investments build on the platform changes initiated during the 2023–2027 period by

consolidating fragmented processes, replacing unsupported technologies, and establishing more integrated and supportable enterprise platforms.

6.0 ALTERNATIVES

Hydro One evaluated the alternatives based on the nature of the investments. Lifecycle-based alternatives were considered for data centre infrastructure, end-user computing devices, communication and networking systems, and Windows operating software. Enterprise platform investments were evaluated based on business capability needs, process consolidation, platform standardization, application portfolio health, and the risks of maintaining the current fragmented environment.

ALTERNATIVE 1: DEFERRING INVESTMENTS

Under this alternative Hydro One would defer planned infrastructure, device, networking, and operating system lifecycle refresh activities beyond typical vendor-supported lifecycles and postpone selected modernization initiatives.

This alternative was rejected because it would increase operational, cybersecurity, supportability, and reliability risks across Hydro One's technology environment. As assets age beyond their supported lifecycle, the likelihood of failures, performance degradation, compatibility issues, and security vulnerabilities increases. Deferral of investment would result in:

- Increased risk of system outages and service disruptions affecting employees and business operations
- Reduced reliability of critical applications and technology services.
- Increased cybersecurity exposure where software, firmware, and operating systems no longer receive vendor-supported security updates.
- Reduced compatibility with evolving enterprise applications, cloud services, and security standards.
- Increased technical debt and larger, more complex replacement requirements in future rate periods.
- Greater risk of customer and stakeholder impacts resulting from disruptions to enterprise and operational systems.

Given these risks, deferral was not considered a viable alternative.

ALTERNATIVE 2: PURSUE EXTENDED SUPPORT (WHERE AVAILABLE)

Hydro One considered extending the use of aging assets and software platforms through vendor-provided extended support services where available.

While extended support can temporarily maintain vendor assistance beyond standard support periods, it does not renew the underlying technology, restore assets to a sustainable lifecycle position, or eliminate the need for eventual replacement. Many lifecycle, compatibility, performance, and cybersecurity risks remain, and extended support is often limited in scope and duration.

This alternative was rejected because:

- Extended support is a temporary deferral strategy rather than a long-term solution.
- It does not address aging hardware, declining reliability, or increasing supportability challenges.
- Availability varies significantly across platforms and technologies.
- It can increase support costs while leaving the underlying replacement requirement unchanged.
- It contributes to future replacement backlogs and delays improvements in security, reliability, and operational efficiency.

Hydro One therefore concluded that extended support may be appropriate only in limited circumstances and is not a substitute for planned lifecycle renewal.

ALTERNATIVE 3: MAINTAIN THE CURRENT ENTERPRISE PLATFORM ENVIRONMENT

For Enterprise Platforms and Enablement Tools, Hydro One considered maintaining the current environment.

For ServiceNow, this would involve continuing to manage service management, asset management, employee service delivery, project planning, and workflow activities through

a combination of separate systems, spreadsheets, manual processes, and the legacy Remedy-based Operations Technology service-management environment.

This alternative was rejected because it would:

- Maintain fragmented processes and inconsistent user experiences.
- Limit visibility into software, hardware, and work-management activities.
- Increase reliance on manual processes and duplicate administration.
- Continue separate service-management environments across IT and OT functions.
- Reduce the ability to standardize, automate, and govern enterprise workflows.

For the Application Rationalization Program, maintaining the status quo would mean continuing to operate a large and increasingly out-of-support application portfolio without sufficient funding to address the growing risk through a structured approach to assessment, modernization, migration, consolidation, and elimination.

This alternative was rejected because it would:

- Increase technology complexity and technical debt.
- Allow unsupported technologies and applications to remain in service longer.
- Increase operational, cybersecurity, and vendor-support risks.
- Reduce alignment between applications, business capabilities, and enterprise architecture standards.
- Increase the long-term effort required to maintain and support the portfolio.

Hydro One determined that continued investment in ServiceNow and the Application Rationalization Program provides a more sustainable approach by improving standardization, governance, supportability, and long-term management of enterprise technology assets.

ALTERNATIVE 4: PROCEED WITH PLANNED INVESTMENTS (RECOMMENDED)

Hydro One selected the proposed investment portfolio because it provides the most effective balance of reliability, supportability, cybersecurity, operational efficiency, and long-term sustainability. The proposed approach applies lifecycle planning, portfolio prioritization, and phased implementation to address assets and platforms based on

vendor support timelines, asset condition, operational requirements, and technology risk, rather than deferring the portfolio or relying broadly on temporary support arrangements.

The recommended approach:

- Maintains vendor-supported technology platforms and devices.
- Reduces the risk of unplanned outages and service disruptions.
- Supports compatibility between infrastructure, business applications, security technologies, and cloud-enabled services.
- Reduces technology complexity and technical debt through modernization and rationalization activities.
- Improves workflow standardization, automation, and governance across enterprise platforms.
- Supports a reliable, secure, and supportable technology environment for employees, customers, and business operations.

Hydro One concluded that the planned investments represent the most sustainable approach to managing lifecycle, operational, cybersecurity, and technology risks while supporting the ongoing evolution of enterprise technology capabilities.

7.0 EXECUTION RISK AND MITIGATION

These investments involve execution risks typical of a broad, multi-year IT lifecycle renewal and enterprise platform enablement portfolio. These risks include schedule delays, vendor or supply-chain constraints, sequencing dependencies, implementation complexity, business disruption during cutover or deployment activities, compatibility issues between refreshed infrastructure and existing applications, data migration or integration challenges, and user readiness or adoption risks for new or enhanced platforms.

Hydro One mitigates these risks through established project and program governance, including lifecycle planning aligned to vendor support timelines, portfolio prioritization, phased implementation, testing and validation, change and release management, business readiness planning, stakeholder communications, and coordination with impacted business and technology teams. For infrastructure and end-user technology refreshes, mitigation activities include scheduling work to minimize service disruption,

validating compatibility before deployment, using standard build and configuration practices, and maintaining rollback or contingency plans where appropriate. For enterprise platform initiatives, mitigation activities include process design, data readiness assessment, integration planning, pilot or phased rollout approaches, user training and adoption support, and ongoing monitoring through project governance processes, as described in GSP Section 4.10 Capital Work Execution Strategy.

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G-GP-06	CORPORATE SERVICES ENABLEMENT
Primary Trigger:	Business Enhancements
OEB RRF Outcomes:	Operational Effectiveness, Financial Performance

Net Capital Expenditures:

($M)	2028	2029	2030	2031	2032	Total
Hydro One	3.4	2.9	2.9	2.9	2.9	15.0

Prepaid Expenditures Related to Cloud[1]:

($M)	2028	2029	2030	2031	2032	Total
Hydro One	20.9	18.5	14.5	14.9	13.8	82.5

Summary:

These investments support the enhancement and sustainment of technologies used by Hydro One's Corporate Services functions, including Finance, Human Resources, Supply Chain, Facilities and Real Estate, Health and Safety, Fleet Services, Regulatory Affairs, Legal, Helicopter Services, and Business Continuity Planning. The primary driver for these investments is business enhancement, as existing technologies face increasing challenges associated with fragmented information, evolving business requirements, and growing operational complexity.

The portfolio is organized into three investment categories:

- Application Integration and Data Enablement for Corporate Services
- Business Operations Enhancements
- Corporate Services Delivery Excellence

Together, these investments improve the quality and accessibility of information, enhance key business processes, and strengthen enterprise delivery capabilities to support Hydro One's ongoing operational, regulatory, and business requirements.

[1] Figures presented in the tables may not sum to the totals shown due to rounding.

1.0 OVERVIEW

The Corporate Services Enablement investments support Hydro One's Corporate Services technologies over the 2028–2032 investment period. These investments sustain and enhance the enterprise platforms, applications, and data foundations that underpin core corporate business functions, including Finance, Human Resources, Supply Chain, Facilities and Real Estate, Health and Safety, Fleet Services, Regulatory Affairs, Legal, Helicopter Services, Business Continuity Planning, and related corporate services delivery functions. These systems enable planning, governance, financial integrity, workforce management, asset oversight, safety and regulatory activities essential to Hydro One's regulated operations.

The proposed investments are required to maintain the Corporate Services technologies that are embedded across Hydro One's operating environment, and to enable incremental improvements to address system, data, or process limitations. The scope of these investments includes both capital and prepaid investments that support the technologies, information capabilities, and business processes used across Corporate Services functions. These investments are required to improve access to information, strengthen integration between systems, enhance business processes, address evolving regulatory and governance requirements, and maintain stable and supportable technology environments.

The investments described in this ISD are organized into three categories that reflect both the nature of the work being undertaken and the outcomes being delivered:

- **Application Integration and Data Enablement for Corporate Services** investments will improve how information from Facilities and Real Estate, Health and Safety, Supply Chain Operations, and Helicopter Services is captured, integrated, governed, and used for planning, reporting, compliance, and operational oversight.
- **Business Operations Enhancements** investments will enhance existing business processes and technologies across Human Resources, Finance, Fleet Services, Regulatory Affairs, Strategy and Planning, and related Corporate Services functions.

- **Corporate Services Delivery Excellence** investments will establish enterprise testing, quality assurance, impact analysis, and delivery controls that support safe and reliable changes across Hydro One's highly integrated SAP-enabled business processes.

2.0 INVESTMENT NEED

Corporate Services functions provide critical support to Hydro One's transmission and distribution operations, including workforce administration, financial management, supply chain, fleet, facilities, regulatory, and safety services. These functions rely on technologies that support workforce planning, financial reporting, inventory and material availability, property and asset records, safety oversight, service delivery, regulatory submissions, and enterprise governance.

The need for continued investment is driven by improving access to trusted and connected information; evolving Corporate Services business processes as operational, workforce, regulatory, and planning requirements become more complex; and reducing delivery and operational risk in a highly integrated SAP-enabled business environment. Without investment, Corporate Services functions would face increasing reliance on manual coordination, fragmented information, limited visibility into business activities, higher sustainment effort, and reduced ability to respond efficiently to evolving requirements.

The key drivers of each investment category are summarized below:

Application Integration and Data Enablement for Corporate Services: Information required to manage facilities, real estate, safety, supply chain, and helicopter service activities is often distributed across multiple applications, repositories, vendor-managed platforms, and manual processes. This can require employees to consolidate, reconcile, and validate information from several sources before decisions can be made or reports can be produced. Investment is required to improve system integration, information accessibility, data quality, reporting, and governance so Corporate Services functions can better support planning, compliance, operational oversight, and decision-making.

Business Operations Enhancements: Corporate Services processes have evolved through incremental changes to systems, integrations, and function-specific tools. As Hydro One's capital program, workforce planning activities, regulatory obligations, and enterprise planning requirements grow in scale and complexity, existing technologies must be enhanced to reduce manual workarounds, simplify process execution, improve usability, strengthen controls, and better connect activities that span Human Resources, Finance, Fleet, Regulatory Affairs, Strategy and Planning, and related functions.

Corporate Services Delivery Excellence: Hydro One's SAP-enabled business processes are highly integrated across Finance, Human Resources, Supply Chain, Customer Services, and other corporate functions. Even minor changes can have downstream impacts if they are not properly assessed, tested, and governed. Investment is required to implement technologies that advance Hydro One's common test management, quality assurance, automated regression testing, change impact analysis, and SAP delivery controls to reduce defects, rework, and production instability as enterprise systems continue to evolve.

3.0 INVESTMENT DESCRIPTION

Hydro One's Corporate Services Enablement portfolio includes three functional areas: Application Integration and Data Enablement for Corporate Services, Business Operations Enhancements, and Corporate Services Delivery Excellence. Each delivers distinct capabilities while contributing to a more integrated, reliable, and supportable Corporate Services technology environment.

3.1 APPLICATION INTEGRATION AND DATA ENABLEMENT FOR CORPORATE SERVICES

This category establishes the integration, platform, and information management capabilities needed to connect fragmented Corporate Services data environments before downstream reporting, analytics, and business-specific enhancements are implemented. Investments in the 2028-2032 period are forecast to be $35.1M in prepaid and $6.3M in capital expenditures to fund the delivery of the following initiatives.

Facilities and Real Estate Enablement: Facilities and Real Estate manages critical project, facilities, contract, real estate, asset, billing, payment, and stakeholder information that is currently distributed across vendor-managed platforms, enterprise systems, GIS tools, document repositories, and manual tools. As a result, information must often be manually consolidated and reconciled to support planning, reporting, contract administration, stakeholder management, and operational oversight activities. This fragmented information environment limits visibility into facility assets, real estate obligations, project status, contractual commitments, and stakeholder interactions required to support investment planning, regulatory reporting, and decision-making.

This investment will consolidate Facilities and Real Estate capabilities currently delivered through specialized and standalone applications (including REMS, Interlink, and Land Assessment and Remediation Systems) into Hydro One's enterprise technology platforms. The scope includes migrating business functionality and data into SAP, ServiceNow, OpenText, GIS solutions, and enterprise data platforms while establishing the integrations required to support end-to-end facilities management, real estate administration, contract management, billing, payment management, and stakeholder engagement processes.

The investment will extend enterprise platforms to provide capabilities that are currently distributed across multiple applications, establish centralized repositories for property, real estate, contract, and stakeholder information, and standardize workflows and records management across Facilities and Real Estate operations. As capabilities are migrated, standalone applications and custom workflows will be retired where practical, reducing the number of systems required to support these functions and aligning them with Hydro One's long-term enterprise technology architecture.

By establishing a centralized and integrated information foundation, Hydro One will strengthen oversight of facilities, real estate, projects, contracts, and assets, while supporting more effective planning, investment decision-making, regulatory reporting, and stakeholder management.

Safety Improvements: Health and Safety activities rely on information related to incidents, investigations, corrective actions, audits, risk assessments, claims management, and

compliance activities that are currently maintained across multiple systems, repositories, and reporting tools. As a result, personnel may need to access, reconcile, and interpret information from several sources to obtain a complete view of safety performance and risk. This fragmented information environment can limit visibility into trends and emerging risks, increase effort associated with reporting and analysis, and constrain more proactive safety management and decision-making.

This investment will replace and retire aging safety technologies, archive legacy safety information, and consolidate fragmented training solutions. The work includes addressing the unsupported Incident and Claims Management application currently operating on Windows 2003 servers, implementing an archival technology solution for historical Environment, Health & Safety Management and incident records that were not migrated to the current system, Cority, and establishing the search, retrieval, and user-interface capabilities required to manage and access those records following retirement of the legacy applications. The investment will also replace aging training-content development tools and consolidate safety-related training content currently maintained across multiple platforms, portals, and repositories into enterprise-supported learning environments. Additional enhancements may be completed on supported safety platforms as required to maintain and integrate safety processes and information.

The proposed investments will establish a more integrated and accessible safety information environment by consolidating and governing safety-related information across key platforms and repositories. This will improve the consistency, accessibility, and analytical use of safety information, strengthen visibility into safety performance and compliance activities, reduce technology risks associated with unsupported legacy applications, and support more informed risk management and continuous improvement initiatives.

Supply Chain Operations: Information used to manage inventory, procurement, vendor relationships, contracts, material availability, and warehouse operations is distributed across multiple supply chain applications and processes. Supply Chain personnel often rely on information from SAP ECC, Ariba, Fieldglass, Taulia, IssueTrax, and other supporting tools to develop a complete view of inventory, procurement, vendor

performance, material availability, and supply chain activities. The timing and maturity of these tool implementations have resulted in fragmented information which increases the effort required to support inventory planning, material forecasting, contract management, and operational decision-making required to deliver Hydro One's capital and operational work programs.

Current warehouse operations rely on a combination of SAP, warehouse automation technologies, and manual interfaces to support inventory management, material picking, and packing. This investment will implement automated integrations between SAP and warehouse automation systems and expand deployment of warehouse technologies and radio frequency handheld scanning devices to additional material storage locations. It will also implement additional SAP Integrated Business Planning modules to improve inventory optimization, replenishment planning, and demand forecasting. The work will also establish the interfaces, data structures, and system configurations required to support material management processes across Hydro One's supply chain technology environment.

Together, these investments will create a more integrated and sustainable technology foundation for Supply Chain Operations by improving how information is exchanged and managed across core systems. The investments will improve visibility into inventory, procurement, vendor, contract, and material management activities, reduce reliance on fragmented information sources, and support more reliable planning, forecasting, reporting, and operational decision-making across Hydro One's supply chain functions.

3.2 BUSINESS OPERATIONS ENHANCEMENTS

Business Operations Enhancements include enhancements to existing Corporate Services technologies that address process inefficiencies, usability constraints, and integration gaps that emerge over time. Unlike the Application Integration and Data Enablement for Corporate Services category, which focuses on information, integration, and analytics, these investments focus on the business processes enabled by technology. The category supports ongoing enhancements to technologies used by Human Resources, Finance, Fleet Services, Regulatory Affairs, Strategy and Planning, and other Corporate Services functions to ensure that existing technologies continue to evolve

alongside changing business requirements, workforce structures, regulatory obligations, and service expectations.

The scope includes process automation, workflow improvements, usability enhancements, business rule configuration, planning and coordination capabilities, and targeted technology enhancements that improve operational efficiency and service delivery. These investments build upon technologies that Hydro One has already implemented and focus on maximizing the value of those platforms by addressing process limitations, reducing manual effort, improving consistency, and supporting ongoing evolution of business operations. These improvements help Corporate Services functions scale their support for field operations, construction activities, regulatory requirements, workforce administration, and enterprise planning activities as the Capital work program grows.

Human Resources Technology Enhancements: Human Resources relies on approximately 35 applications and technology services to support workforce administration, payroll, employee services, workforce planning, onboarding, labour relations, and workforce reporting. Core platforms include SAP SuccessFactors Employee Central, Workforce Software, ServiceNow, and SAP Payroll, supported by numerous custom and point-to-point integrations used to exchange employee information across business systems. This environment has resulted in duplicate employee data, complex integration architecture, manual processes, and ongoing maintenance requirements to support business and regulatory needs.

This investment will enhance Hydro One's existing Human Resources technology platforms by consolidating employee master data within SuccessFactors Employee Central, simplifying and replacing legacy integrations, and establishing standardized interfaces between HR systems and downstream applications. The work includes implementing automated workflows supporting workforce administration, training assignment, access provisioning, employee data management, and other employee lifecycle processes, while improving workforce reporting and data-management capabilities.

The investment will also address technical debt within the HR technology environment by reducing reliance on custom integrations and duplicative data repositories, retiring legacy components where practical, and improving the maintainability and scalability of the underlying technology architecture. In addition, it will fund ongoing platform configuration and technology enhancements required to support collective agreement changes, legislative requirements, workforce policies, and evolving business requirements.

By consolidating employee information, standardizing system integrations, and automating workforce processes, Hydro One will establish a more integrated and sustainable Human Resources technology environment that improves data quality, operational efficiency, reporting, and workforce management capabilities.

Finance Technology Investments: This investment funds the implementation of SAP Financial Closing Cockpit (FCC), a finance automation module within SAP used to manage and execute financial close activities. Today, financial close activities are coordinated through a combination of manual processes, spreadsheets, email-based task management, and decentralized tracking across multiple business areas.

The investment will configure and deploy the SAP FCC, including close-management workflow configurations, business rules, task libraries, and system integrations required to support month-end and year-end close processes through SAP FCC, replacing the current reliance on manually coordinated close activities performed across multiple business areas. The solution will automate and standardize activities that are currently manually coordinated, providing a centralized platform for planning, executing, monitoring, and reporting on financial close activities.

Additional investments within this category support process enablement across Fleet Services, Regulatory Affairs, Strategy and Planning, and other Corporate Service functions. These initiatives improve service delivery processes, strengthen planning and governance activities, reduce manual administration, and ensure that Corporate Services technologies continue to support evolving business requirements. These investments focus on improving operational efficiency, service quality, consistency, and

responsiveness rather than introducing new standalone systems or major platform replacements.

Enhancements are delivered incrementally based on business readiness, operational priorities, and alignment with existing technology roadmaps to minimize disruption while enabling continuous improvement across Corporate Services functions.

Over the 2028–2032 period, Hydro One plans to invest approximately $36.2M in this category comprising $8.8M of capital expenditures, and $27.4M of prepaid expenditures.

3.3 CORPORATE SERVICES DELIVERY EXCELLENCE

The Corporate Services Delivery Excellence investment category establishes the enterprise technologies, toolsets, and supporting capabilities used to facilitate the implementation, enhancement, testing, and sustainment of SAP-enabled business solutions across Hydro One. These investments implement common enterprise platforms and delivery technologies that support Finance, Human Resources, Supply Chain, Customer Services, and other SAP-enabled business functions by improving how technology changes are evaluated, tested, validated, and introduced into production environments. The category is focused on enterprise delivery capabilities rather than individual business features or functional enhancements.

Key investments within this category include implementation of Test Management and QA Enablement technologies, as well as SAP Change Impact Analysis capabilities. Test Management and QA Enablement technologies will establish centralized test planning, test execution, defect management, test asset repositories, and automated regression testing capabilities used to validate changes across Hydro One's SAP-enabled business processes. SAP Change Impact Analysis capabilities will implement technologies that analyze configurations, integrations, custom developments, and process dependencies to identify downstream impacts of proposed system changes and determine testing requirements prior to deployment. Together, these investments will establish a common enterprise toolset for testing, validation, change assessment, and release readiness that supports the ongoing enhancement and sustainment of SAP-enabled solutions across

Finance, Human Resources, Supply Chain, Customer Services, and other enterprise business functions.

Unlike business-specific investments that implement or enhance individual SAP business capabilities, these investments establish the enterprise technologies used to manage testing, change evaluation, release planning, and solution sustainment across Hydro One's broader SAP environment. By implementing automated testing platforms, centralized test management technologies, change impact analysis capabilities, and supporting SAP delivery toolsets, Hydro One will establish the technology foundation required to consistently evaluate, validate, and deploy changes across a highly integrated enterprise landscape.

These capabilities form a foundational component of Hydro One's SAP sustainment and delivery model by providing the technologies and capabilities required to consistently introduce change across a highly integrated enterprise environment. As SAP-enabled capabilities continue to expand through initiatives such as the SAP S/4HANA program described in GSP Section 4.11 G-GP-29, these investments ensure that delivery teams can efficiently manage increasing volumes of change while maintaining quality, consistency, and production readiness across SAP-supported business processes.

These capabilities are implemented early and continuously throughout the rate period because they support the safe and efficient delivery of SAP-enabled enhancements across multiple business functions and establish the technology foundation required to strengthen Hydro One's long-term SAP sustainment and delivery organization.

Over the 2028-2032 period, Hydro One plans to invest approximately $20.0M in this category, all of which is forecast as prepaid expenditures.

4.0 OUTCOMES

Collectively, these investments improve information quality, modernize business processes, and strengthen technology delivery capabilities across Corporate Services. These outcomes help ensure that enterprise technologies remain vendor-supported,

secure, and effective in supporting Hydro One's evolving operational, regulatory, and planning requirements.

4.1 OEB RRF OUTCOMES

Table 1 presents anticipated benefits as a result of the proposed investment in accordance with the Ontario Energy Board's (OEB) Renewed Regulatory Framework (RRF).

Table 1 - Outcome Summary

Operational Effectiveness	• Improves data quality, timeliness, and accessibility by consolidating fragmented Corporate Services data into integrated, analytics-ready environments. • Enhances planning and execution capability through modernized supply-chain and inventory data, enabling more reliable operational decision-making. • Enables more proactive safety management by centralizing safety data and supporting analytics-driven identification of trends and risks. • Reduces manual effort and process inefficiency through incremental enhancement of HR, Finance, Fleet, and planning workflows. • Improves cross-functional coordination and continuity by enabling single-source-of-truth approaches for enterprise processes such as regulatory submissions. • Increases stability of SAP-enabled operations by reducing defects, rework, and unplanned disruption through improved testing and impact analysis. • Maintains security and vendor supportability of Corporate Services technologies by addressing end-of-life and lifecycle constraints.
Financial Performance	• Limits financial exposure from unsupported or aging technologies by proactively addressing lifecycle and support risks. • Reduces avoidable operational costs by lowering manual effort, rework, and exception handling in Corporate Services processes. • Protects the value of SAP investments by reducing the likelihood and cost of production defects and emergency remediation. • Improves inventory and material management discipline through better data and planning, reducing waste, delay risk, and inefficiency. • Strengthens workforce cost insight and control through consolidated, reliable HR data and analytics. • Supports revenue certainty and regulatory outcomes by improving the quality, traceability, and defensibility of regulatory filings. • Reduces the direct and indirect cost impacts of safety incidents by enabling more proactive, data-driven prevention.

5.0 EXPENDITURE PLAN

Table 2 below summarizes Hydro One's forecast net capital and prepaid expenditures for the 2028-2032 period.

Table 2 - Hydro One - Investment Expenditures[2]

($M)	2028	2029	2030	2031	2032	Total 28-32
Gross Investment Expenditures	3.4	2.9	2.9	2.9	2.9	15.0
Less Removals	0.0	0.0	0.0	0.0	0.0	0.0
Less Capital Contributions	0.0	0.0	0.0	0.0	0.0	0.0
Net Investment Expenditures	**3.4**	**2.9**	**2.9**	**2.9**	**2.9**	**15.0**
Prepaid Expenditures Related to Cloud	**20.9**	**18.5**	**14.5**	**14.9**	**13.8**	**82.5**

The expenditures outlined in Table 2 reflect a combination of multi-year projects and recurring enhancement activities delivered across the 2028-2032 period. Investments are sequenced to align foundational capabilities, business readiness, and organizational delivery capacity. Foundational platforms, integration capabilities, and solution designs are established before dependent enhancements, reporting capabilities, and broader deployment activities are undertaken. This phased approach reduces execution risk, supports business adoption, and enables lessons learned from earlier activities to inform subsequent implementations.

Sequencing varies by investment category. Within Application Integration and Data Enablement foundational integration, data management, and platform capabilities are implemented before downstream reporting, analytics, and business-specific enhancements. Within Business Operations Enhancements, investments are prioritized based on business need, readiness, and alignment with existing platforms. Within Corporate Services Delivery Excellence testing, quality assurance, impact analysis, and delivery-management capabilities are implemented early and maintained throughout the period to support ongoing SAP-enabled initiatives across Hydro One. This approach ensures investments build upon one another while minimizing operational disruption and delivery complexity.

[2] Figures presented in the tables may not sum to the totals shown due to rounding.

A portion of annual funding is also allocated to smaller-scale enhancements, lifecycle upgrades, and regulatory or business-driven changes that arise throughout the rate period. These recurring investments maintain system currency, address emerging requirements, and support continuous improvement across Corporate Services functions.

Table 3 below summarizes Hydro One's net capital and prepaid expenditures, including planned and forecast expenditures for the 2023-2027 rate period and planned expenditures for the 2028-2032 rate period. These expenditures are presented according to the investment categories described in Section 3.0 Investment Description.

Table 3 - Hydro One - Expenditures Continuity Over Rate Period ($M)[3]

Description	Capital Expenditures			Prepaid Cloud Expenditures		
	Plan[4] 23-27	Act/Fcst[5] 23-27	Total 28-32	Plan 23-27	Act/Fcst[5] 23-27	Total 28-32
Application Integration and Data Enablement for Corporate Services	38.5	13.0	6.3	0.0	1.2	35.1
Business Operations Enhancements	17.1	33.0	8.8	0.0	4.9	27.4
Corporate Services Delivery Excellence	0.0	3.7	0.0	0.0	0.8	20.0
Total	**55.7**	**49.6**	**15.0**	**0.0**	**6.8**	**82.5**

2023-2027 EXPENDITURES

During the 2023-2027 rate period, Corporate Services Enablement expenditures are $6.1M lower than plan in Capital and $6.8M higher than plan in prepaid. On a combined capital and prepaid basis, expenditures remained generally aligned with budget, reflecting a shift in the mix of spending between capital and prepaid expenditures rather than a material change in overall investment levels.

The primary drivers for these variances are:

[3] Figures presented in the tables may not sum to the totals shown due to rounding.
[4] "Plan" refers to Hydro One's revised capital expenditure and ISA forecast to implement the OEB-approved Settlement Proposal in EB-2021-0110. Plan includes expenditures previously mapped to different ISDs in EB-2021-0110, as further discussed in GSP Section 4.11.
[5] "Act/Fcst" refers to actual (2023-2025) and forecast (2026-2027) expenditures.

- **Application Integration and Data Enablement for Corporate Services:** decreased capital expenditures of $25.5M primarily due to the cancellation of Enterprise Robotics Process Automation ($8.3M) and Machine Learning & Enterprise Enablement ($9.0M) projects, and the deferral of Facilities & Real Estate Technology Transformation ($11.8M).

Offset by:

- **Application Integration and Data Enablement for Corporate Services:** capital expenditures increased by $5.9M for the IREIS Replacement project, which was initiated after the existing application reached end of life. Variances in prepaid expenditures were primarily attributable to the Fleet Enablement project ($1.1M), which implemented a new fleet request and management interface to replace manual and SharePoint-based processes used to administer fleet vehicle and equipment requests.
- **Business Operations Enhancements:** capital expenditures increased by $15.9M, primarily due to additional investment in the Human Resources Pay Transformation Project ($11.9M) and the Environment, Health and Safety Upgrade project ($3.6M). The increased investment in Human Resources Pay Transformation reflected the effort required to fully replace legacy HR, time reporting, and benefits systems and establish the capabilities necessary to support Hydro One's future operating model. These HR systems were foundational to ongoing business operations and carried significant operational risk if not replaced. Prepaid expenditures increased by $3.6M, primarily due to Human Resources Records Management and Reporting initiatives that delivered additional reporting, records management, and information governance capabilities following implementation of the HR platform.

2028-2032 EXPENDITURES

Compared with actual and forecast expenditures for the 2023-2027 period, planned Corporate Services Enablement investments for 2028-2032 are $75.7M higher than prepaid expenditures and $34.6M lower in capital expenditures. This reflects both the continued adoption of cloud-based delivery models and the inclusion of new and

expanded investments across Corporate Services functions that were not contemplated within the original 2023-2027 plan. More specifically:

- **Application Integration and Data Enablement for Corporate Services** investments are $33.9M higher than forecast in prepaid and $6.7M lower than forecast in capital, reflecting increased use of cloud-based delivery models. Relative to the 2023-2027 period, higher investment levels reflect the growing need to strengthen data management, system integration, information sharing, and workflow enablement capabilities across Corporate Services functions. As business processes become increasingly dependent on interconnected platforms and data sources, ongoing investment is required to establish and extend enterprise integration capabilities, improve information accessibility and quality, reduce reliance on manual data management practices, and support more consistent business processes across Facilities and Real Estate, Health and Safety, Supply Chain, and other Corporate Services functions.
- **Business Operations Enhancements** investments are $22.5M higher than forecast in prepaid and $24.2M lower than forecast in capital, also reflecting a continued shift toward cloud-based delivery models. The increase relative to the 2023-2027 period reflects the need for ongoing investment in the core technologies that support workforce management, financial management, planning, regulatory, and other Corporate Services functions. As business requirements, regulatory obligations, collective agreements, and workforce processes continue to evolve, incremental investment is required to enhance workflow automation, simplify system integrations, strengthen data management capabilities, and extend existing enterprise platforms to support increasingly complex operational requirements.
- **Corporate Services Delivery Excellence** investments are $19.2M higher than forecast in prepaid and $3.7M lower than forecast in capital, reflecting the implementation of cloud-based delivery and sustainment technologies. The increase relative to the 2023-2027 period reflects Hydro One's growing need for enterprise capabilities that support the testing, validation, deployment, and sustainment of an increasingly integrated SAP-enabled business environment. As enterprise platforms expand and become more interconnected, ongoing

investment is required to implement and maintain testing automation, quality assurance, change impact analysis, and release management capabilities that improve Hydro One's ability to assess, validate, and deploy technology changes while maintaining system reliability and operational continuity.

6.0 ALTERNATIVES

Hydro One considered the following alternatives before selecting the proposed Corporate Services Enablement investment plan. The alternatives were assessed across the full portfolio, including Application Integration and Data Enablement for Corporate Services, Business Operations Enhancements, and Corporate Services Delivery Excellence.

ALTERNATIVE 1: STATUS QUO (REJECTED ALTERNATIVE)

Under this alternative, Hydro One would continue to operate its existing Corporate Services applications, integrations, information repositories, and technology-supported business processes without implementing the proposed portfolio of platform consolidation, integration, workflow, information-management, and SAP delivery technology investments. Existing systems would be maintained through available vendor support, targeted remediation, and operational workarounds, with investment generally limited to urgent lifecycle, regulatory, security, or business continuity requirements.

Under this approach, Hydro One would continue to incur sustainment costs and operational effort associated with maintaining multiple specialized applications, interfaces, vendor-managed platforms, information repositories, and manual processes across Corporate Services functions. Information used by Facilities and Real Estate, Health and Safety, Supply Chain, Human Resources, Finance, and other functions would remain distributed across different technologies, requiring continued manual coordination, reconciliation, and movement of information between systems.

Maintaining this environment would preserve existing technology fragmentation and business process constraints while limiting Hydro One's ability to adapt technologies and processes as workforce, financial, regulatory, planning, and operational requirements evolve. Existing application and integration complexity would remain in place, while aging

or unsupported technologies would continue to require increasing sustainment effort and eventual replacement.

This alternative was rejected because it would not address the technology constraints, information fragmentation, lifecycle risks, and process limitations identified by the Corporate Services stakeholders. While near-term expenditures would be reduced, Hydro One would continue to rely on duplicate technologies, manual processes, fragmented information sources, and aging applications, resulting in higher long-term sustainment effort and reduced ability to address evolving business requirements.

ALTERNATIVE 2: ACCELERATED CORPORATE SERVICES TECHNOLOGY CONSOLIDATION AND ENABLEMENT (NOT RECOMMENDED)

Under this alternative, Hydro One would accelerate the modernization, consolidation, and transformation of Corporate Services technologies across the 2028-2032 period. Rather than focusing on the highest-priority business needs, technology constraints, and capability gaps, Hydro One would pursue a broader program of application rationalization, platform consolidation, workflow modernization, information management improvements, and business process transformation across Facilities and Real Estate, Health and Safety, Supply Chain, Human Resources, Finance, and other Corporate Services functions.

This alternative would accelerate the retirement of specialized applications, standalone repositories, custom integrations, and manual processes while expanding the use of enterprise platforms, workflow automation, integrated data architectures, and standardized business processes. The approach would seek to address a larger portion of known modernization opportunities by advancing lower-priority initiatives, implementing broader process redesign activities, and consolidating technologies and information assets on a more aggressive timeline.

A significant portion of the Corporate Services technology environment is closely integrated with Hydro One's SAP ecosystem. Many Corporate Services capabilities are delivered through SAP-supported platforms, rely on SAP master data, or integrate directly with SAP-enabled business processes. Accelerating a broader set of modernization and consolidation initiatives would increase the volume of concurrent technology and process

changes occurring alongside the SAP S/4HANA OneCore program described in GSP Section 4.11, G-GP-29. This could increase implementation complexity, create competing demands on business and technology resources, and increase the likelihood of solution redesign, rework, integration conflicts, and overlapping implementation activities.

While this alternative would provide earlier access to consolidated platforms, automated workflows, improved information management capabilities, and reduced technology complexity across Corporate Services functions, it would require materially higher expenditures and exceed Hydro One's practical capacity to successfully deliver, adopt, and sustain the volume of change within the rate period. Accelerating modernization across multiple Corporate Services functions would increase demands on solution design, data migration, integration development, testing, training, deployment, and business readiness activities while increasing organizational disruption and implementation risk.

Hydro One rejected this alternative because the incremental benefits associated with accelerating broader modernization and consolidation activities did not justify the additional expenditure, resource requirements, organizational disruption, and execution risk. Under the recommended alternative, Hydro One focuses investment on the highest-priority business needs and technology constraints while advancing modernization and consolidation activities at a pace that aligns with business readiness, available organizational capacity, and dependencies on broader enterprise technology initiatives. This approach enables Hydro One to achieve the most significant benefits while prudently deferring lower-priority modernization opportunities beyond 2032.

ALTERNATIVE 3: PRIORITIZED AND SEQUENCED CORPORATE SERVICES ENABLEMENT INVESTMENTS (RECOMMENDED)

Under this alternative, Hydro One will proceed with the prioritized, sequenced portfolio of Corporate Services Enablement investments. The portfolio focuses on addressing identified business problems, technology constraints, fragmented information environments, lifecycle risks, and operational challenges during the 2028–2032 period, while balancing investment levels with business readiness, delivery capacity, organizational change impacts, project dependencies, and prudent cost management.

The recommended plan includes initiatives that address the most significant needs across Facilities and Real Estate, Health and Safety, Supply Chain, Human Resources, Finance, and Corporate Services Delivery Excellence. These investments were selected because they address material constraints across Corporate Services functions, including fragmented technologies, manual interfaces, disconnected information environments, aging applications, workflow limitations, and gaps in enterprise testing, quality assurance and delivery capabilities.

The portfolio is highly integrated with Hydro One's SAP environment. Certain capabilities are implemented within SAP, while others rely on SAP data, integrate with SAP-supported processes, or provide the technologies used to manage, test, and sustain those processes. Where investments are SAP-related or interdependent with SAP-supported business processes, they will be coordinated with the OneCore program and sequenced to build upon relevant foundational capabilities as they become available. These investments do not duplicate the implementation of SAP business modules within G-GP-29; rather, they establish or enhance the surrounding technologies, integrations, workflows, information-management capabilities, and enterprise delivery toolsets required to support Corporate Services functions within Hydro One's broader SAP-enabled environment.

The recommended plan prioritizes the highest-value and highest-need initiatives while deferring lower-priority opportunities beyond the current planning period. Investments are sequenced so that foundational platforms, integrations, information structures, and delivery technologies are established before dependent enhancements and broader deployments. This approach allows Hydro One to address the most significant business challenges first while reducing delivery risk, minimizing organizational disruption, aligning with enterprise program dependencies, and preserving flexibility to evaluate future opportunities as business requirements and technology capabilities continue to evolve.

This alternative is recommended as it provides an appropriate balance between addressing real and existing Corporate Services technology challenges and Hydro One's ability to fund, deliver, and adopt the proposed changes. Rather than pursuing broader technology transformation or accelerated consolidation across all Corporate Services functions, the recommended plan focuses on a prioritized set of initiatives that address

the most significant business needs, technology constraints, lifecycle risks, and information-management challenges identified across Corporate Services functions. This approach enables Hydro One to achieve meaningful business improvements while maintaining prudent expenditure levels, manageable organizational change, and acceptable implementation risk.

7.0 EXECUTION RISK AND MITIGATION

The execution of the recommended investment plan presents delivery risks due to the breadth, complexity, and interdependent nature of Hydro One's Corporate Services technology environment. The investments proposed in this exhibit span multiple lines of business (including Finance, Supply Chain, Fleet, Regulatory, and Asset Management) and involve both incremental enhancements and multi-year enablement initiatives delivered in parallel. Many of the underlying systems rely on shared data, common enterprise platforms, and integrated business processes, increasing the potential for unforeseen dependencies, integration challenges, and extended testing requirements as change is introduced. Schedule and sequencing risks may arise where foundational platforms, shared services, or data structures are required to enable downstream initiatives, particularly where work must be coordinated across multiple stakeholders and delivery teams. Execution is also subject to resource availability constraints, as specialized technical and business expertise is required across concurrent initiatives, creating the potential for bottlenecks at key design, integration, and deployment stages. In addition, cost and schedule pressure may arise from evolving business requirements, vendor lifecycle considerations, and the effort required to integrate modern cloud-based solutions with existing enterprise systems where applicable.

These risks are managed and mitigated through Hydro One's established project delivery, governance, and financial management framework. Investments are planned and executed using a phased delivery approach, with scope, cost, and schedule estimates progressively refined as initiatives advance through discovery, design, and execution in accordance with the DTS Technology Delivery Governance framework (see GSP Section 4.10.4.1). Formal stage-gate reviews are used to confirm readiness, validate assumptions, and assess integration and dependency impacts before proceeding to subsequent

phases. Delivery sequencing is intentionally structured so that foundational upgrades and enabling capabilities are implemented ahead of dependent initiatives, reducing the likelihood of rework, disruption, or stranded investment. Ongoing financial and delivery monitoring supports early identification of variances or emerging risks, enabling timely corrective action and informed reprioritization where required.

In parallel, Hydro One embeds cross-functional coordination and organizational change management practices throughout delivery to support operational readiness and adoption. Business stakeholders are engaged early to align on requirements, deployment timing, and transition planning, particularly where changes affect core corporate processes or reporting workflows. Structured communications, training, and readiness assessments support integration into day-to-day operations and reduce adoption risk. Together, these practices reduce execution and cost risk, support effective sequencing across a diverse portfolio of initiatives, and enable the successful delivery, adoption, and sustained value realization of the investments proposed in this exhibit.

G-GP-07	CUSTOMER SERVICE TECHNOLOGY ENABLEMENT
Primary Trigger:	Business Support Sustainment
OEB RRF Outcomes:	Customer Focus, Operational Effectiveness, Public Policy Responsiveness, Financial Performance

Net Capital Expenditures:

($M)	2028	2029	2030	2031	2032	Total
Hydro One	7.5	2.0	2.9	3.6	3.7	19.7

Prepaid Expenditures Related to Cloud:

($M)	2028	2029	2030	2031	2032	Total
Hydro One	16.8	47.3	37.3	31.3	45.4	178.0

Summary:

This exhibit addresses investments required to sustain and enhance the technologies that support customer interactions, customer service operations, and meter-to-bill processes. These technologies enable Hydro One to deliver digital and assisted customer service, manage customer communications, support billing and collections activities, and meet ongoing regulatory and market obligations.

The investments are organized into three categories: Digital Customer Experience Enablement, Meter-to-Bill Sustainment and Enhancement, and Contact Centre Operations Enablement. Together, they maintain critical customer service capabilities, address technology lifecycle and supportability requirements, support regulatory and market obligations, and enable Hydro One to continue providing reliable and accessible service to customers.

1.0 OVERVIEW

The Customer Service Technology portfolio provides digital platforms, customer service systems, and meter-to-bill technologies that enable Hydro One to provide customer service, manage customer interactions, and support core customer transactions. These capabilities support digital self-service channels, contact centre operations, customer communications, metering, billing, collections, and related regulatory and market obligations. They enable Hydro One to deliver reliable, accessible, and compliant customer service while supporting the efficient operation of customer-facing business processes.

The Customer Service Technology investments are required to sustain and enhance these technologies over the 2028-2032 period. These technologies operate together as an integrated customer service environment supporting customer interactions, communications, billing, collections, and related regulatory and market obligations. The need for these investments is driven by customer service applications reaching end of life, increasing customer interaction volumes and service complexity, evolving regulatory and market settlement requirements, changing business needs, and the growing complexity of the integrated technology environment required to support them.

Customer service capabilities are supported by a growing number of interconnected systems spanning customer-facing channels, application programming interfaces (APIs), customer relationship management platforms, billing and payment systems, data platforms, and analytics solutions. As these dependencies expand, changes to a single component can have cascading impacts across multiple systems, increasing the effort required to maintain reliability, security, and service continuity. Together, the proposed investments sustain core customer service capabilities, maintain billing accuracy and service reliability, address technology supportability risks, and enable Hydro One to efficiently deliver customer service across digital and assisted channels.

The Customer Service Technology Enablement portfolio consists of investments organized into three categories:

- **Digital Customer Experience Enablement:** includes customer-facing digital platforms, customer relationship management capabilities, and supporting

technologies that enable customers to interact with Hydro One through digital channels.

- **Meter-to-Bill Sustainment and Enhancements:** addresses the systems that support meter data collection, billing, settlements, collections, and related customer transactions.
- **Contact Centre Operations Enablement:** focuses on the technologies that support agent-led customer interactions, including workforce management, call routing, analytics, and customer service operations.

Over the 2028-2032 period, Hydro One plans to invest approximately $197.7M in Customer Service Technology Enablement, consisting of $19.7M in Capital expenditures and $178.0M in Prepaid expenditures. Together, these investments address technology lifecycle and supportability requirements, maintain regulatory and market compliance, support efficient customer service operations, and enable Hydro One to continue providing reliable and accessible service to customers.

2.0 INVESTMENT NEED

The Customer Service Technology portfolio provides digital platforms, customer service systems, and meter-to-bill technologies that enable Hydro One to deliver customer service, manage customer interactions, and support core customer transactions. Collectively, they are essential to maintaining reliable, secure, and compliant customer service operations.

Continued investment in the Customer Service Technology portfolio is required to address lifecycle upgrades, fragmented customer service technology environments, increasing operational complexity, and ongoing supportability and cybersecurity risks. Across the portfolio, these investments sustain critical customer service, billing, and communication capabilities, maintain compliance with regulatory and market obligations, and reduce operational risks associated with aging technologies and complex system dependencies. Together, these investments establish a more supportable and integrated technology foundation capable of supporting Hydro One's evolving customer service requirements and future technology environment. This need for investment is amplified by the growth of Hydro One's customer base from approximately 1.3 million customers in 2019 to over 1.5

million customers in 2025, increasing the scale of customer interactions, communications, billing activities, and service transactions supported by the portfolio.

The key drivers and intended outcomes of each Customer Service Technology Enablement investment category are summarized below.

2.1 DIGITAL CUSTOMER EXPERIENCE ENABLEMENT

Digital Customer Experience Enablement investments are required to sustain and enhance the technologies that support Hydro One's customer-facing digital channels, customer relationship management capabilities, and customer communication platforms. These technologies enable customers to manage their accounts, complete service requests and transactions, receive communications, and access billing, usage, and other account information through digital channels.

Hydro One’s customer-facing technology environment has evolved over more than a decade through the implementation of multiple platforms, customer relationship management solutions, communication technologies, portals, interfaces, and supporting applications. These technologies were implemented at different times to address specific business needs and using varying technology architectures. As a result, customer information and interactions are distributed across multiple repositories, interfaces, integration points, and operational processes. This fragmentation increases technology complexity and creates dependencies that increase the effort, cost, and risk associated with maintaining, securing, scaling, and enhancing customer-facing services. It also limits Hydro One’s ability to introduce new capabilities efficiently and can increase reliance on assisted-service channels when customers are unable to access information or complete transactions digitally.

The need for investment is amplified by continued growth in Hydro One’s customers’ use of digital services. As of 2025, Hydro One supports approximately 915,000 MyAccount users, has more than 1.0 million customers enrolled in paperless billing, and delivers customer communications to approximately 1.2 million email addresses and 1.0 million mobile contact records. Customer enrolment in text and email alerts has increased by 20% over the preceding three years. Hydro One's customer base also grew, from

approximately 1.3 million customers in 2019 to more than 1.5 million customers in 2025. This growth increases the volume of account activity, service requests, digital transactions, communications, and access to billing and usage information that Hydro One's customer-facing technologies must reliably support.

Existing platforms are increasingly challenged to accommodate this growth. Following deployment of Hydro One's web chat service in 2025, customer demand exceeded forecast volumes and the service had to be temporarily suspended while operating capacity was reassessed. This experience demonstrates the need for customer-facing technologies and supporting operating processes that can scale with increasing digital engagement.

The planned investments over the 2028-2032 period are therefore required to simplify and consolidate customer-facing technology environment, improve integration and customer information management, address lifecycle supportability and cybersecurity risks, and maintain reliable and accessible digital services. The intended outcomes are a more integrated and supportable technology landscape, more consistent customer interactions, and an increased ability to complete transactions through self-service channels.

2.2 METER-TO-BILL SUSTAINMENT AND ENHANCEMENTS

Meter-to-Bill Sustainment and Enhancement investments are required to maintain and enhance the systems that support meter data collection, billing, settlements, collections, revenue management, and related customer transactions. The need for investment is driven by the complexity and criticality of Hydro One's meter-to-bill environment, which relies on multiple head-end systems, meter data management platforms, billing applications, settlement interfaces, and supporting technologies working together to enable accurate and timely customer billing. As these systems age, Hydro One faces increasing lifecycle, supportability, cybersecurity, and operational risks that could impact billing accuracy, settlement processes, regulatory compliance, and customer service. Ongoing investment is required to maintain vendor-supported software versions, sustain critical billing and settlement capabilities, and reduce the growing effort and risk associated with supporting a complex interconnected technology landscape. Investment is also necessary to operationalize and sustain new capabilities introduced through major

enterprise programs such as Advanced Metering Infrastructure (AMI) 2.0 and SAP S/4HANA. Given that billing-related inquiries continue to represent a significant portion of customer contacts, reliable meter-to-bill processes remain fundamental to customer trust and service delivery. Together, these investments reduce operational risk, maintain regulatory and market obligations, and ensure the continued delivery of accurate, reliable, and trusted billing services.

2.3 CONTACT CENTRE OPERATIONS ENABLEMENT

Contact Centre Operations Enablement investments are required to sustain and enhance the technologies that support agent-led customer interactions, including workforce management, interaction routing, analytics, and customer service operations. The need for investment is driven by Hydro One's continued reliance on assisted service channels, increasing customer interaction volumes, growing inquiry complexity, and lifecycle and supportability requirements across the contact centre technology environment. In 2025, Hydro One managed more than 2.1 million customer calls, with approximately 48% requiring live agent support, demonstrating that assisted service remains a critical component of customer service delivery despite continued growth in digital channels. As customer interactions become more complex, particularly for billing, collections, and other account-related inquiries, Hydro One requires enhanced workforce management, analytics, and operational insight capabilities to support efficient issue resolution and service delivery. Several foundational contact centre technologies are approaching end of support creating increasing supportability, reliability, cybersecurity, and compliance risks. Investment is required to maintain vendor-supported platforms, sustain reliable contact centre operations, improve visibility into customer needs and service drivers, and enable Hydro One to adapt to evolving customer interaction patterns. Together, these investments maintain service continuity, strengthen operational resilience, reduce operational risk, and support the efficient delivery of high-quality assisted customer service.

3.0 INVESTMENT DESCRIPTION

The investments included in this ISD include technologies that support customer interactions across digital channels, assisted service channels, and the meter-to-bill process. These technologies are described within three investment categories, but

operate as an integrated customer service environment, with information, transactions, and customer interactions flowing across multiple platforms and business processes. While each investment category addresses distinct operational and technology requirements, together these investments are required to maintain a reliable, secure, and integrated customer service technology environment.

Over the 2028-2032 period, Hydro One plans to invest approximately $197.7M in Customer Service Technology Enablement, consisting of $19.7M in Capital expenditures and $178.0M in Prepaid expenditures. The investment portfolio includes a combination of platform consolidation activities, lifecycle renewals, vendor-mandated upgrades, regulatory and compliance-related changes, process enablement investments, and targeted capability enhancements required to sustain and improve customer service operations throughout the planning period.

3.1 DIGITAL CUSTOMER EXPERIENCE ENABLEMENT

The Digital Customer Experience Enablement portfolio addresses the customer-facing technology environment through four complementary areas of investment. The Customer Digital Experience Journey will establish the target architecture and consolidate customer relationship management platforms, customer-facing applications, integrations, and communication capabilities onto a smaller number of strategically managed platforms. Digital service and customer communication investments will expand self-service, virtual assistance, multimedia communications, and customer analytics capabilities. Lifecycle and infrastructure investments will replace or renew the identity, document management, and supporting technologies required to maintain secure and reliable digital services. Commercial and Industrial customer investments will improve portal, case management, billing information, and relationship management capabilities for customers with more complex service and information needs. Together, these investments will simplify and strengthen the customer technology environment while maintaining service continuity and enabling more integrated, scalable, and accessible digital customer services.

Over the 2028-2032 period, Hydro One plans to invest approximately $95.2M, consisting of approximately $2.2M in Capital expenditures and $93.0M in Prepaid expenditures. Investments include customer platform consolidation, customer relationship management

enhancements, customer communication and engagement technologies, lifecycle replacements of critical platforms, and improvements that strengthen the reliability, security, and effectiveness of digital customer services.

3.1.1 CUSTOMER DIGITAL EXPERIENCE JOURNEY (CDX)

The CDX investments will simplify, consolidate, and strengthen Hydro One's customer-facing technology environment by consolidating several customer-facing technologies onto a smaller number of strategically managed platforms. Today, customer information and interactions are managed across multiple customer relationship management, case management, and customer service platforms that were implemented by different business functions over time, with different integrations and workflows to address specific operational requirements. CDX addresses these through a phased consolidation of customer-facing technologies, establishing a more integrated customer information foundation and a consistent view of customer interactions.

The CDX investments will be delivered across four sequential phases:

- **Phase 1: Customer Experience Foundation and Architecture** - establishes the target-state architecture, technology roadmap, governance model, and foundational platforms required to support the program.
- **Phase 2: Enterprise CRM Consolidation -** implements a common customer relationship management platform and consolidates capabilities currently distributed across multiple systems to improve customer information accessibility and reduce platform complexity.
- **Phase 3: Customer Platform Consolidation** - rationalizes customer-facing applications, communications technologies, integrations, and supporting digital services to reduce duplication and simplify platform dependencies.
- **Phase 4: Customer Communication and Service Enhancements** - introduces enhanced communications, proactive notifications, service request visibility, status tracking, and expanded digital self-service capabilities enabled by the consolidated technology foundation.

Upon completion, the CDX investments will provide Hydro One with a more integrated, secure, and supportable customer technology environment, reduce technology complexity and operational effort, strengthen customer information management capabilities, and establish a scalable foundation capable of supporting future customer service requirements over the long term.

3.1.2 DIGITAL SERVICE AND CUSTOMER COMMUNICATION ENABLEMENT

Digital Service and Customer Communication Enablement investments enhance the technologies used to communicate with customers, support digital service delivery, expand self-service capabilities, and improve Hydro One's ability to understand customer needs and interaction patterns. During the 2028-2032 period, Hydro One will make investments to improve customer communication technology, add virtual customer assistance capabilities, and enhance customer analytics:

- **Customer Communications Technologies:** These investments enhance the platforms used to communicate with customers through email, text messaging, digital notifications, and other communication channels. They include replacement of existing communication tools, implementation of multimedia customer communication capabilities, and enhancements that improve communication management and consistency across channels. For example, the Multi-Media Customer Communications investment will enable customers to submit photos and videos as part of service requests, improving the information available to support issue assessment and field response activities.

- **Customer Service Automation and Digital Assistance**: These investments include virtual customer assistance capabilities and enhanced digital interaction tools that improve customer access to information and services through self-service channels. This includes implementation of Virtual AI Agent capabilities to support routine inquiries, provide additional self-service options, and reduce reliance on assisted-service channels for common requests.

- **Customer Insights and Analytics**: These investments strengthen Hydro One's ability to understand customer behaviour, service needs, and interaction trends. Investments include replacement of the existing Bidgely home energy management platform, implementation of customer analytics capabilities, and introduction of social media monitoring and analysis tools. Together, these capabilities improve Hydro One's ability to analyze customer interactions, identify recurring service issues, monitor customer sentiment, and support data-driven service improvements across customer-facing operations.

3.1.3 LIFECYCLE REPLACEMENTS AND DIGITAL INFRASTRUCTURE SUSTAINMENT

Lifecycle Replacements and Digital Infrastructure Sustainment investments maintain the foundational technologies that support Hydro One's customer-facing digital environment. These investments include replacement and renewal of identity management, document management, customer communication, and supporting digital infrastructure technologies required to sustain secure and reliable customer-facing operations.

- **Tivoli Identity and Access Management Replacement:** This investment will upgrade or replace Hydro One's existing customer authentication and access management platform. Tivoli currently provides foundational identity services supporting customer authentication, secure system access, and integration with numerous customer-facing technologies, including MyAccount and other digital services. As these systems become increasingly interconnected, maintaining a secure, supported and compatible identity management platform is essential to ongoing customer service operations. This investment establishes a modern authentication capability, reduces cybersecurity and supportability risks, and maintains compatibility with dependent customer technologies and regulatory requirements.

- **OpenText Upgrade and Replacement:** This investment addresses lifecycle and supportability requirements for the technologies used to manage customer documents, customer communications, records retention, and supporting

customer information assets. These technologies support the creation, storage, retrieval, and retention of customer bills, correspondence, account records, and related customer documentation. Maintaining a supported and secure document management platform is essential to ongoing customer service delivery, information management obligations, and regulatory compliance requirements. The investment ensures these capabilities remain secure, vendor-supported, and capable of supporting future customer service needs.

- **Other Lifecycle Investments:** These investments will address supporting technologies used within HydroOne.com, MyAccount, and related customer-facing applications, including application frameworks and digital infrastructure components. These investments maintain vendor supportability, cybersecurity posture, application stability, and compatibility across the broader customer service technology environment.

3.1.4 COMMERCIAL AND INDUSTRIAL CUSTOMER ENHANCEMENTS

The Commercial and Industrial (C&I) Customer Enhancements investments consist of a series of customer-facing digital capabilities and supporting systems designed to serve Hydro One's commercial, industrial, and distributed energy resource customers. These investments build upon Hydro One's existing C&I Portal and related customer management technologies to provide expanded access to customer information, operational data, and service interactions.

The investments include enhancements to the C&I Portal, including new functionality that provides customers with access to billing information, interval usage data, account details, service requests, operational information, and other customer-specific data through a single digital platform. The scope also includes expanded digital self-service capabilities and the introduction of features tailored to the needs of Hydro One's larger and more complex customer segments. These enhancements will provide C&I customers with a digital experience that more closely aligns with the capabilities available through Hydro One's broader customer service ecosystem.

In addition, the investments include enhancements to the technologies and processes used to manage customer inquiries, requests, and account-related activities. Today, large customer cases and inquiries are managed across a combination of ServiceNow workflows, standalone applications, Excel-based processes, and other supporting technologies, resulting in fragmented information, manual coordination, and limited visibility into customer interactions. The proposed investments will enhance customer case management capabilities, improve integration between these technologies, and consolidate customer interaction information to support a more unified customer management environment.

The investments also include enhancements to the technologies supporting commercial and industrial customer relationship management activities, including the extension of ServiceNow-based capabilities, consolidation or replacement of standalone applications where appropriate, and implementation of new workflows, tracking, reporting, and customer interaction management functionality. These capabilities will support the management of customer accounts, service requests, inquiries, billing-related interactions, and distributed energy resource customer activities through a more integrated platform and a more consistent view of customer relationships across Hydro One.

3.2 METER-TO-BILL SUSTAINMENT AND ENHANCEMENTS

The Meter-to-Bill Sustainment and Enhancements portfolio includes the technologies and processes required to collect meter data, validate and manage consumption information, calculate customer charges, issue bills, support settlements, manage collections activities, and meet regulatory and market obligations. These capabilities are enabled through an integrated ecosystem of metering, billing, settlement, collections, and supporting applications that underpin Hydro One's ability to accurately bill customers, collect revenues, and support customer service operations. Investments within this portfolio are organized into four categories: Lifecycle Renewal and Platform Sustainment, Meter-to-Bill Process Enablement, Regulatory and Market Compliance, and Head-End System Technology Transition.

Over the 2028-2032 period, Hydro One plans to invest approximately $72.7M in Meter-to-Bill Sustainment and Enhancements, consisting of approximately $12.1M in Capital expenditures and $60.6M in Prepaid expenditures.

3.2.1 LIFECYCLE RENEWAL AND PLATFORM SUSTAINMENT

Lifecycle Renewal and Platform Sustainment investments maintain the technology platforms that support meter data collection, validation, billing production, settlement processing, operational monitoring, and metering activities across Hydro One's meter-to-bill environment. These technologies form an integrated technology environment that enables the flow of information from customer meters through to billing, settlements, customer communications, and related operational processes. As AMI 2.0 progresses, portions of the metering technology landscape will be consolidated; however, ongoing lifecycle investments remain necessary to maintain vendor support, reliability, cybersecurity, and billing continuity during the transition.

- **Meter Data Collection and Management Systems** These investments will sustain the core technologies used to collect, validate, manage, and exchange customer consumption information. This includes lifecycle renewals and upgrades for Hydro One's head-end systems, meter data management platforms, wholesale metering applications, and supporting integration services that underpin the accurate processing of meter data for billing and market activities. Maintaining these platforms ensures continued vendor support, compatibility, and reliable operation of Hydro One's metering environment.

- **ExStream Billing Production Upgrade** These investments sustain the technologies used to generate customer bills and billing correspondence. Lifecycle renewals ensure Hydro One can continue to deliver accurate, timely, and reliable billing information using supported technology, maintaining a critical customer-facing component of the meter-to-bill process.

- **Metering Operations and Monitoring Systems:** These investments sustain the technologies used to support metering field operations, monitor network and meter performance, and provide operational visibility into Hydro One's metering

environment. Maintaining these capabilities supports effective management of metering assets, operational performance monitoring, and the field activities required to ensure accurate customer metering information.

3.2.2 METER-TO-BILL PROCESS ENABLEMENT

Meter-to-Bill Process Enablement investments enhance the processes, workflows, and technologies that support customer billing, collections, payment services, and related customer transactions. These investments build on capabilities introduced through Hydro One's modernized metering and enterprise platforms to improve operational effectiveness, increase customer flexibility, reduce manual activities, and strengthen the delivery of customer-facing services.

- **Customer Information and Billing Process Enablement**: As the CIS Transformation described in G-GP-29 is placed into service, Hydro One will assess customer, metering, billing, and related digital processes to identify targeted refinements arising from operational use of the modernized platforms. These refinements may address process gaps, system connections, manual activities, or other issues affecting accurate and timely billing, regulatory compliance, operational efficiency, and digital customer service.

  This investment is limited to follow-on improvements outside the scope of G-GP-29 and does not fund the core SAP S/4HANA Utilities modernization, replacement of SAP CRM 7.0, migration of legacy SAP integrations, or modernization of associated reporting and data integration platforms. Eligible work may include targeted configuration, workflow, automation, reporting, data, and integration changes within SAP and connected meter-to-bill or digital systems. Proposed improvements will be based on demonstrated operational need and reviewed through Hydro One’s technology governance process to confirm scope and avoid duplicate funding.

- **Collections Process Enablement** This investment establishes new collections capabilities that leverage functionality introduced through Hydro One's AMI 2.0,

SAP, and integrated meter-to-bill technologies. Existing collections processes were designed prior to the introduction of advanced metering capabilities and have remained largely unchanged since 2011. As Hydro One's metering and customer information platforms evolve, investment is required to implement the integrations, workflows, business rules, and operational controls needed to update these capabilities within collections operations.

The investment includes the build and implementation of new collections processes, enhanced dunning and customer account management capabilities, system integrations, and supporting functionality across SAP, head-end systems, and related meter-to-bill technologies. This work will operationalize advanced metering-enabled functionality, improve management of payment arrangements and collections activities, and support earlier customer intervention.

Together, these investments establish new operational and technology capabilities that update and improve how Hydro One manages collections activities within its evolving meter-to-bill environment.

- **Prepaid Customer Payment Capabilities** These investments introduce prepaid payment options into the customer-facing MyAccount service, integrated through SAP to allow customers to manage electricity costs through a pay-as-you-go model. The capability expands customer choice, provides greater control over energy expenditures, and supports improved payment management while reducing the likelihood of unpaid balances and service disconnections.

- **Commercial and Industrial Billing Digitization** This investment will enhance the digital billing capabilities available to Commercial and Industrial (C&I) customers by replacing and expanding components of Hydro One's existing C&I billing experience. While existing meter-to-bill systems provide accurate billing information, the current C&I customer experience relies on legacy billing formats and limited digital functionality that do not fully support the operational and information needs of large commercial and industrial customers. The investment

will implement modern billing and bill-presentment capabilities that leverage information available through SAP and supporting meter-to-bill technologies, providing customers with improved access to billing, account, and consumption information through a more integrated digital experience that more closely aligns with the capabilities available to Hydro One's residential customers. The work includes enhancements to customer-facing billing technologies and supporting meter-to-bill systems, including the implementation of new digital billing functionality, system integrations, and customer interaction capabilities. These investments introduce modern tools for accessing and managing billing information while supporting the continued digitization of billing processes for Commercial and Industrial customers.

3.2.3 REGULATORY AND MARKET COMPLIANCE

Regulatory and Market Compliance investments maintain Hydro One's ability to implement evolving regulatory, market, and industry requirements that affect customer metering, billing, settlement activities, and related customer transactions. These investments address externally driven changes introduced by organizations such as the Ontario Energy Board (OEB), the Independent Electricity System Operator (IESO), market operators, and other industry participants and ensure Hydro One can continue meeting its obligations while maintaining reliable billing, settlement, and customer service operations.

- **Market Settlement System Enhancements**: These investments sustain Hydro One's ability to support evolving IESO market rules, settlement requirements, and associated business processes. Enhancements are required within Hydro One's SAP-based settlement environment and supporting meter-to-bill interfaces, and include updates to settlement calculations, data exchanges, reporting capabilities, configuration, and other market-related functions required to maintain compliance and support accurate processing of market transactions. The work is largely non-discretionary, reflecting externally mandated changes that must be implemented within Hydro One's meter-to-bill environment.

- **Meter-to-Bill Regulatory Initiatives:** These investments are required to implement regulatory and industry-driven changes that emerge throughout the planning period. Changes may affect billing rules, metering requirements, customer programs, payment processes, customer communications, reporting obligations, and other customer-facing capabilities. This funding supports Hydro One's ongoing ability to respond to evolving requirements as they arise. An example of these initiatives is the recurring changes required to support Ontario electricity rate updates, which typically require billing and system configuration changes multiple times each year. Funding for these types of changes is required to address regulatory and industry-driven changes that emerge throughout the planning period.

3.2.4 HEAD-END SYSTEM TECHNOLOGY TRANSITION

The Head-End System Technology Transition investment will implement the next generation of head-end technology required to support Hydro One's long-term metering environment. Head-end systems serve as the primary interface between smart meters and downstream meter-to-bill systems, enabling the collection of meter data and supporting billing, settlements, customer transactions, and operational processes.

Ongoing advancements in metering technologies, communications platforms, market requirements, and vendor solutions necessitate the transition to a next-generation head-end platform that can support Hydro One’s future metering environment. This investment will establish a modern head-end technology solution that supports evolving operational, customer, regulatory, and market requirements while maintaining reliable integration with Hydro One's metering and billing ecosystem.

The scope of work includes technology selection and detailed solution design, architecture development, implementation planning, integration development, system configuration, data migration, testing, and deployment activities required to implement and transition to the future head-end technology platform. The investment is planned to deliver the capabilities necessary to migrate from the existing head-end system and establish a long-term solution that supports Hydro One's future metering and communications requirements.

3.3 CONTACT CENTRE OPERATIONS ENABLEMENT

The Contact Centre Operations Enablement portfolio includes the technologies that support assisted customer service operations across Hydro One's contact centre environment. These technologies support workforce planning, interaction routing, customer self-service capabilities, customer interaction analytics, operational reporting, quality monitoring, and continuous improvement of customer service processes. Investments within this portfolio are organized into three categories: Workforce Management Technology Replacement, Customer Analytics and Natural Language Services, and Contact Centre Technology Enhancements. Together, these investments sustain foundational contact centre technologies, enhance customer service capabilities, and enable Hydro One to continue evolving its contact centre operations in response to changing business needs, customer interaction patterns, and technology opportunities.

Over the 2028-2032 period, Hydro One plans to invest approximately $29.8M in Contact Centre Operations Enablement consisting of approximately $5.4M in Capital expenditures and $24.4M in Prepaid expenditures.

3.3.1 CONTACT CENTRE WORKFORCE MANAGEMENT TECHNOLOGY REPLACEMENT

The Workforce Management Technology Sustainment investment replaces the platform used to schedule, forecast, and manage contact centre resources. Workforce management capabilities are critical to customer service operations, enabling Hydro One to align staffing levels and skillsets with customer demand, support service level objectives, and efficiently manage day-to-day contact centre activities.

Hydro One's existing workforce management platform is approaching the end of its support lifecycle and will no longer be maintained through standard vendor support arrangements, which creates increasing supportability and operational risks. Maintaining a supported and reliable workforce management capability is essential to sustaining effective resource planning, scheduling, forecasting, and operational oversight across the contact centre environment.

The investment includes platform selection, configuration, integration, migration, testing, and deployment activities required to establish a replacement workforce management solution. The new platform will provide a sustainable foundation for workforce planning and service management, helping ensure the continued delivery of efficient and reliable customer service operations.

3.3.2 CUSTOMER ANALYTICS AND NATURAL LANGUAGE SERVICES

Customer Analytics and Natural Language Services investments enhance Hydro One's ability to analyze customer interactions, generate operational insight from contact centre activities, and improve customer self-service capabilities. These investments strengthen visibility into customer needs and service drivers while improving how customers access information and support through automated channels.

- **Customer Analytics Tool Replacement:** This investment implements enhancements to Hydro One's customer interaction analytics platform, which is used to evaluate service quality, analyze customer contacts, review call recordings, and identify opportunities for service improvement. The solution will provide advanced interaction analytics, automated transcription, quality monitoring, reporting, and customer insight capabilities, improving Hydro One's ability to understand why customers contact the organization, identify recurring issues, and support data-driven improvements to customer service operations.

- **Natural Language Interactive Voice Response (IVR):** This investment enhances Hydro One's customer self-service capabilities through implementation of Natural Language IVR. Traditional IVR technologies rely on predefined menu structures and customer selection of predetermined response options. As customer inquiries become more varied and service channels continue to evolve, these approaches can make it more difficult to efficiently route customers to the most appropriate information or support resource. The investment includes the implementation, configuration, integration, testing, and deployment of natural language capabilities within Hydro One's IVR environment. These capabilities allow customer requests to be interpreted using conversational language,

improving call routing effectiveness, strengthening self-service functionality, and helping customers access information and support more efficiently.

3.3.3 CONTACT CENTRE TECHNOLOGY ENHANCEMENTS

Contact Centre Technology Enhancements investments provide funding to implement contact centre technology capabilities, functionality, integrations, and platform enhancements that support evolving operational requirements, and business needs throughout the planning period. Hydro One's contact centre environment is increasingly supported by cloud-based platforms, which regularly introduce new functionality that can enhance customer service delivery, automation, analytics, workforce effectiveness, and operational insight.

Given the pace of technology change and the continuous evolution of vendor platforms, not all enhancement opportunities can be fully defined at the time investment plans are developed. These investments enable Hydro One to evaluate, implement, and operationalize new capabilities introduced through vendor product roadmaps, platform updates, regulatory requirements, and changing business needs. The work may include the implementation of new platform modules, system integrations, routing capabilities, self-service functions, reporting tools, and supporting technology components.

Recent examples of similar investments include upgrades to contact centre technologies such as Apache, Notepad++, and Wireshark to address newly identified security vulnerabilities and maintain alignment with Hydro One's cybersecurity standards, as well as the implementation of a dedicated Genesys call-routing and Interactive Voice Response (IVR) capability to support Hydro One’s Woodstock Specialty Team's Vacant Premise service. These initiatives represent the types of targeted technology enhancements that may be required throughout the planning period to maintain supported and secure platforms, address emerging operational requirements, and improve customer service operations.

These investments are expected to include the design, development, configuration, integration, testing, and deployment of contact centre technology enhancements throughout the planning period. Activities may include implementation of new platform

functionality, integration enhancements, automation capabilities, reporting and analytics improvements, customer self-service enhancements, and other technology investments that improve contact centre operations and customer service delivery. Maintaining this funding enables Hydro One to continue evolving its contact centre technology environment alongside vendor roadmaps, emerging business requirements, and advancements in cloud-based customer service platforms.

4.0 OUTCOMES

Planned investments to enhance, sustain, and integrate Hydro One's customer service technologies will support improved customer experiences, more reliable and effective operations, and strengthened financial and regulatory performance. Across the investment categories described in this Exhibit, the planned investments support the delivery of secure, consistent, and accessible customer services across digital channels, assisted service, and core customer transactions, while ensuring that critical systems remain vendor-supported, compliant, and resilient as customer expectations, service complexity, and regulatory obligations continue to increase.

4.1 OEB RRF OUTCOMES

Table 1 presents anticipated benefits as a result of the proposed investment in accordance with the Ontario Energy Board's (OEB) Renewed Regulatory Framework (RRF).

Table 1 - Outcome Summary

Customer Focus	• Improved access to reliable, secure, and accessible customer services across digital, assisted-service, and billing channels through sustained investment in customer-facing technologies. • More consistent customer interactions through consolidation of customer platforms, customer information, and service processes across Hydro One. • Enhanced customer flexibility and transparency through improved digital services, communications, billing capabilities, and customer self-service options.
Operational Effectiveness	• Sustained reliability and supportability of critical customer service, billing, settlement, and contact centre technologies through lifecycle renewal and vendor-supported platforms. • Reduced technology complexity and improved operational efficiency through platform consolidation, integration, and standardization of customer service technologies.

	• Improved operational insight and decision-making through enhanced customer analytics, workforce management, and interaction reporting capabilities. • Greater organizational agility to respond to evolving business, regulatory, and customer service requirements through configurable and supportable technology platforms.
Public Policy Responsiveness	• Continued compliance with Ontario Energy Board (OEB), Independent Electricity System Operator (IESO), and other regulatory and market requirements affecting customer service, billing, settlement, and reporting activities. • Timely implementation of evolving regulatory, pricing, market, and customer program requirements through adaptable customer service and meter-to-bill technologies. • Sustained ability to meet customer service, billing accuracy, market settlement, and customer data obligations through secure and supportable technology platforms.
Financial Performance	• Protection of revenue integrity through continued billing accuracy, settlement reliability, and support for customer revenue management processes. • Reduced operational and financial risk associated with unsupported technologies, cybersecurity vulnerabilities, billing disruptions, and regulatory non-compliance. • More predictable technology sustainment costs through lifecycle management, platform consolidation, and alignment with vendor support roadmaps.

5.0 EXPENDITURE PLAN

Table 2 below summarizes Hydro One's forecast net capital and prepaid expenditures for the 2028-2032 period.

Table 2 - Hydro One - Investment Expenditures[1]

($M)	2028	2029	2030	2031	2032	Total
Gross Investment Expenditures	7.5	2.0	2.9	3.6	3.7	19.7
Less Removals	0.0	0.0	0.0	0.0	0.0	0.0
Less Capital Contributions	0.0	0.0	0.0	0.0	0.0	0.0
Net Investment Expenditures	**7.5**	**2.0**	**2.9**	**3.6**	**3.7**	**19.7**
Prepaid Expenditures Related to Cloud	**16.8**	**47.3**	**37.3**	**31.3**	**45.4**	**178.0**

The expenditure profile reflects a combination of lifecycle renewals, platform consolidation activities, regulatory and market compliance investments, customer service enablement initiatives, and ongoing technology enhancements required to sustain Hydro One's

[1] Figures presented in the tables may not sum to the totals shown due to rounding.

customer service technology environment. Expenditures are phased throughout the 2028-2032 period to align with technology lifecycle requirements, vendor support timelines, implementation sequencing, and business readiness considerations.

A significant portion of the investment plan is delivered through cloud-based solutions and is therefore reflected as prepaid expenditures rather than capital expenditures. This reflects both the increasing availability of cloud-based customer service technologies and Hydro One's selection of solutions that best meet business, operational, supportability, and security requirements.

Table 3 below summarizes Hydro One's net capital and prepaid expenditures, including planned and forecast expenditures for the 2023-2027 rate period and planned expenditures for the 2028-2032 rate period. These expenditures are presented according to the investment categories described in Section 3.0 Investment Description.

Table 3 - Hydro One - Expenditures Continuity Over Rate Periods ($M)[2]

Description	Capital Expenditures			Prepaid Expenditures		
	Plan[3] 23-27	Act/Fcst[4] 23-27	Total 28-32	Plan 23-27	Act/Fcst[4] 23-27	Total 28-32
Digital Customer Experience Enablement	36.5	1.6	2.2	0.0	5.3	93.0
Meter-to-Bill Sustainment and Enhancements	28.1	24.3	12.1	0.0	5.7	60.6
Contact Centre Operations Enablement	3.8	12.9	5.4	0.0	27.1	24.4
Total	**68.3**	**38.8**	**19.7**	**0.0**	**38.1**	**178.0**

2023-2027 EXPENDITURES

During the 2023-2027 rate period, Customer Service Technology Enablement investments are $29.5M lower than plan in Capital and $38.1M higher than plan in prepaid. This variance is mostly attributable to:

[2] Figures presented in the tables may not sum to the totals shown due to rounding.
[3] "Plan" refers to Hydro One's revised capital expenditure and ISA forecast to implement the OEB-approved Settlement Proposal in EB-2021-0110. Plan includes expenditures previously mapped to different ISDs in EB-2021-0110, as further discussed in GSP Section 4.11.
[4] "Act/Fcst" refers to actual (2023-2025) and forecast (2026-2027) expenditures.

- **Digital Customer Experience Enablement:** decreased capital expenditures of $34.9M primarily due to the cancellation of the External Website Replacement ($17.9M), the reprioritization of Customer Digital Experience Journey (CDX) activities ($11.8M), and the reprioritization of other smaller investments such as customer communications improvements initiatives ($4.4M). These cancellations and deferrals were completed in response to increased investment in enterprise programs such as SAP S/4HANA.
- **Meter-to-Bill Sustainment and Enhancements:** decreased capital expenditures of $3.8M primarily due to the deferral of the Commercial and Industrial Billing Digitization project ($1.6M), cancellation of the Customer Load Disaggregation Tool ($1.1M), and other non-material investments.

Offset by:

- **Digital Customer Experience Enablement:** increased prepaid expenditures of $5.3M primarily due to OpenText Upgrade ($2.5M), Tivoli Identity and Access Management Upgrade ($1.3M), and other non-material investments.
- **Meter-to-Bill Sustainment and Enhancements:** increased prepaid expenditures of $5.7M primarily due to the Itron IEE Upgrade ($3.0M), StreamServe Upgrade ($1.0M), and Symcor project ($0.9M).
- **Contact Centre Operations Enablement:** increased prepaid expenditures of $27.1M primarily due to Genesys Cloud Implementation ($25.0M). Also, increased capital expenditures of $9.1M primarily due to a solution change that aligns with the enterprise telephony standard for the planned Integrated Voice Control Telephony Upgrade ($4.4M) and refined scope and business requirements for the Customer Interaction Analytics ($1.1M) project.

2028-2032 EXPENDITURES

Compared with actual and forecast expenditures for the 2023-2027 period, planned Customer Service Technology Enablement investments for 2028-2032 are $139.9M higher in prepaid expenditures and $19.1M lower in capital expenditures. These variances reflect Hydro One's increasing adoption of vendor-hosted and software-as-a-service solutions, which shifts spending from capital to prepaid expenditures, as well as increased

investment required to modernize and sustain critical customer service technologies supporting a growing customer base and evolving operational requirements.

These variances are primarily attributable to:

- **Digital Customer Experience Enablement** is forecast to be $87.7M higher in prepaid expenditures and $0.6M higher in capital expenditures. The increase reflects investment in the CDX to simplify and consolidate Hydro One's customer-facing technology environment, reduce reliance on fragmented customer service platforms, improve integration and customer information management capabilities, and establish a scalable and supportable technology foundation capable of supporting growing digital customer engagement.
- **Meter-to-Bill Sustainment and Enhancements** investments are forecast to be $54.9M higher than forecast in prepaid, and $12.2M lower than forecast in capital expenditures. The variance is primarily driven by the ongoing transition of meter-to-bill technologies toward cloud-based vendor solutions, resulting in a greater proportion of expenditures being treated as prepaid rather than capital. Investments during the period focus on sustaining critical metering, billing, settlements, collections, and revenue management capabilities, addressing lifecycle and supportability requirements, supporting new capabilities introduced through major enterprise programs, and reducing operational risks associated with an increasingly complex and interconnected technology environment.
- **Contact Centre Operations Enablement** investments are expected to be $2.7M lower than forecast in prepaid expenditures and $7.5M lower in capital expenditures. The decrease is primarily attributable to the implementation of the Genesys Cloud platform during the 2023-2027 period ($25.0M), a significant one-time modernization investment that does not continue into 2028-2032. Excluding this investment, prepaid expenditures are $22.3M higher than forecast. The increase reflects ongoing investment required to sustain and enhance the technologies that support agent-led customer interactions, address lifecycle and supportability requirements, improve workforce management and operational insights, and maintain reliable and efficient assisted-service operations as customer interaction volumes and complexity continue to grow.

6.0 ALTERNATIVES

Hydro One considered the following alternatives before selecting the preferred undertaking.

6.1 DIGITAL CUSTOMER EXPERIENCE ENABLEMENT

ALTERNATIVE 1: MAINTAIN EXISTING CUSTOMER PLATFORMS AND APPLICATIONS (STATUS QUO)

Under this alternative, Hydro One would continue operating the existing portfolio of customer-facing platforms, customer relationship management systems, customer communications technologies, portals, integrations, and supporting digital services with only minimal lifecycle and break-fix maintenance. Customer information, customer interactions, and case management activities would continue to be distributed across multiple technologies, including SAP CRM, Microsoft Dynamics 365 solutions, Salesforce workflows, ServiceNow-based capabilities, and other supporting applications. Existing integration dependencies, duplicated functionality, and fragmented customer information repositories would remain in place, requiring Hydro One to continue maintaining multiple overlapping technologies to support similar customer interaction activities.

This alternative was rejected because it would leave Hydro One dependent on a fragmented customer-facing technology environment consisting of multiple customer relationship management systems, customer platforms, interfaces, and supporting technologies. The alternative would not address the growing operational complexity, technology interdependencies, cybersecurity risks, and lifecycle supportability risks associated with maintaining numerous overlapping systems used to support customer interactions and customer information management. Maintaining the current environment would require continued investment in overlapping technologies and prolong Hydro One's reliance on fragmented customer information, duplicated processes, and numerous interconnected systems required to support customer-facing operations. Sustainment costs would also be expected to increase over time as Hydro One continues supporting multiple overlapping platforms, addresses vendor end of support requirements, and manages growing cybersecurity and technology supportability risks associated with

legacy customer-facing technologies. It would also increase the effort required to maintain, secure, and enhance customer-facing services over time.

ALTERNATIVE 2: ENTERPRISE CRM CONSOLIDATION ONLY

Under this alternative, Hydro One would proceed with the foundational architecture and planning activities (Phase 1) and the implementation of a consolidated enterprise customer relationship management platform (Phase 2), while deferring Customer Platform Consolidation (Phase 3) and Customer Communication and Service Enhancements (Phase 4). This approach would establish a common customer relationship management capability and improve access to customer information across business functions. However, the broader customer-facing technology environment would remain largely unchanged, with customer portals, communication technologies, integrations, supporting applications, and customer interaction workflows continuing to operate across multiple existing platforms. Customer information, service requests, and customer communications would therefore continue to rely on many of the existing interfaces, dependencies, and supporting technologies currently in place.

This alternative was rejected because it would address only one component of Hydro One's broader customer service technology challenges. While CRM consolidation would improve customer information management and reduce duplication across customer relationship management platforms, Hydro One would continue to rely on multiple customer-facing platforms, communication technologies, integrations, and supporting applications to deliver customer services. Deferring Phase 3 Customer Platform Consolidation would require Hydro One to continue operating multiple customer-facing portals, applications, and integrations, limiting its ability to establish a simplified and integrated customer service environment. Customers would continue to experience varying service experiences across channels, while employees would continue to rely on multiple systems to access customer information and manage service requests. Deferring Phase 4 Customer Communication and Service Enhancements would also postpone capabilities such as proactive customer communications, enhanced service request visibility, status tracking, and expanded digital self-service functionality. As a result, Hydro One would achieve improvements in customer information management but would realize

only a portion of the operational efficiencies and customer experience improvements enabled by the full CDX program.

ALTERNATIVE 3: PROCEED WITH THE FULL CUSTOMER DIGITAL EXPERIENCE JOURNEY (RECOMMENDED)

The preferred alternative is to proceed with the full Customer Digital Experience Journey (CDX), including customer experience architecture and planning activities, enterprise CRM consolidation, customer platform consolidation, and customer communication and service enhancements. This approach addresses the fragmented nature of Hydro One's current customer-facing technology environment by reducing reliance on multiple overlapping customer relationship management systems, consolidating customer-facing platforms and integrations, and establishing a more supportable and secure customer service technology landscape. The proposed investment also incorporates lifecycle and supportability considerations for technologies that underpin digital customer interactions and customer information management.

This alternative is recommended because it directly addresses the operational, technology, and supportability issues identified within Hydro One's current customer-facing environment. The investment reduces technology fragmentation, simplifies platform interdependencies, improves management of customer information across business functions, and reduces reliance on multiple overlapping customer relationship management technologies currently used to support similar customer interaction activities. It also addresses growing supportability, cybersecurity, and lifecycle risks associated with maintaining a diverse collection of interconnected customer-facing systems. Finally, completion of the full CDX program enables Hydro One to realize the operational benefits of customer platform consolidation and integrated customer information management while supporting capabilities such as improved service request visibility, customer communications, and digital self-service functionality that depend on the consolidated technology environment established through the earlier phases of the program.

6.2 METER-TO-BILL SUSTAINMENT AND ENHANCEMENTS

ALTERNATIVE 1: OPERATING THE EXISTING METER-TO-BILL ENVIRONMENT AS-IS (STATUS QUO)

Under this alternative, Hydro One would continue operating the existing meter-to-bill environment and perform only the reactive maintenance, corrective fixes, and operational support activities required to sustain day-to-day operations. Planned lifecycle renewals, process enablement initiatives, regulatory and market enhancement investments, and long-term technology transition activities would be deferred. Existing metering, billing, settlement, collections, and customer transaction processes would continue to operate largely as they do today.

This alternative was rejected because it would not adequately address technology lifecycle requirements, vendor supportability obligations, evolving regulatory and market requirements, or operational risks associated with Hydro One's highly interconnected meter-to-bill environment. Continued reliance on aging technologies would increase supportability and cybersecurity risks and require increasing operational effort to maintain reliable billing, settlement, collections, and customer transaction processes. Over time, this approach would reduce Hydro One's ability to sustain reliable meter-to-bill operations and respond effectively to changing business, regulatory, and technology requirements.

ALTERNATIVE 2: LIFECYCLE AND COMPLIANCE INVESTMENTS ONLY

Under this alternative, Hydro One would proceed only with investments required to maintain existing meter-to-bill technologies, address vendor lifecycle requirements, sustain billing and settlement operations, implement regulatory and market changes, and maintain support for the current metering and billing environment. Investments focused on meter-to-bill process enablement would be deferred, including Customer Information and Billing Process Enablement, Collections Process Enablement, Prepaid Customer Payment Capabilities, and Commercial and Industrial Billing Digitization. This approach would maintain the existing meter-to-bill technology environment and associated business processes while limiting investment in new operational capabilities, customer payment options, and process improvements.

This alternative was rejected because it would maintain the existing meter-to-bill technology environment but would not address several operational limitations within Hydro One's billing, collections, and customer transaction processes. Under this alternative, Hydro One would maintain compliant and supported meter-to-bill technologies but would defer investments intended to modernize customer, billing, collections, and payment management processes. Existing manual activities, process inefficiencies, and operational workarounds would remain in place, limiting Hydro One's ability to fully leverage capabilities introduced through major technology programs such as AMI 2.0 and SAP S/4HANA. Deferring Collections Process Enablement would prolong reliance on collections processes that were established more than a decade ago and were not designed to support Hydro One's current operational requirements, customer engagement approach, or evolving collections practices. Opportunities to improve payment management processes, support earlier customer intervention, reduce manual effort, and improve the effectiveness of collections activities would be deferred. Customers would also lose access to additional payment flexibility through prepaid payment options, while commercial and industrial customers would continue to rely on legacy billing formats and more limited digital access to billing and account information. Overall, Hydro One would maintain reliable meter-to-bill operations but would forgo opportunities to improve customer payment flexibility, collections effectiveness, billing transparency, and operational efficiency, while continuing to rely on legacy processes across key areas of the meter-to-bill lifecycle.

ALTERNATIVE 3: PROCEED WITH THE FULL METER-TO-BILL SUSTAINMENT AND ENHANCEMENTS PORTFOLIO (RECOMMENDED)

The preferred alternative is to proceed with the full Meter-to-Bill Sustainment and Enhancements portfolio, including lifecycle renewals, regulatory and market compliance investments, meter-to-bill process enablement initiatives, and head-end technology transition planning activities. This approach maintains the reliability, supportability, security, and regulatory compliance of Hydro One's meter-to-bill environment while also ensuring that the associated business processes, operational controls, and customer transaction capabilities continue to evolve alongside the underlying technology platforms.

This alternative is recommended because it addresses both the technology and operational requirements necessary to sustain Hydro One's end-to-end meter-to-bill environment. The investment maintains supported and secure technologies, preserves billing accuracy and settlement reliability, supports compliance with evolving regulatory and market obligations, and reduces operational risks associated with maintaining a highly integrated meter-to-bill technology landscape. In addition, the process enablement investments help ensure Hydro One can effectively utilize the capabilities available within its evolving meter-to-bill environment, improve key customer and business processes, and support the continued delivery of reliable billing, collections, payment management, and customer transaction services throughout the planning period.

6.3 CONTACT CENTRE OPERATIONS ENABLEMENT

ALTERNATIVE 1: CONTINUE OPERATING EXISTING CONTACT CENTRE TECHNOLOGIES (STATUS QUO)

Under this alternative, Hydro One would continue operating the existing contact centre technology environment and perform only the reactive maintenance activities required to sustain day-to-day operations. Replacement of the workforce management platform, customer analytics capabilities, natural language IVR capabilities, and other planned contact centre enhancements would be deferred. Existing workforce planning, scheduling, forecasting, interaction analytics, and customer self-service capabilities would continue to rely on the current technology environment.

This alternative was rejected because several foundational contact centre technologies are approaching end of support and would become increasingly difficult to sustain over the planning period. Continued reliance on aging and unsupported technologies would increase supportability and operational risks, creating a growing risk of service degradation as Hydro One becomes less able to reliably support the systems used to forecast contact volumes, schedule resources, manage staffing levels, and monitor service performance. Deferring replacement of customer analytics capabilities would also reduce Hydro One's ability to analyze customer interactions, identify recurring customer issues, understand the drivers of customer contacts, and support evidence-based improvements to customer service operations. Over time, Hydro One would face

increasing challenges maintaining reliable contact centre operations and sustaining supported technologies that underpin workforce planning, service level management, and customer interaction analytics.

ALTERNATIVE 2: WORKFORCE MANAGEMENT REPLACEMENT ONLY

Under this alternative, Hydro One would proceed with replacement of the workforce management platform required to maintain workforce scheduling, forecasting, and service level planning capabilities, while deferring investments in customer analytics, natural language IVR, and broader contact centre enhancements. This approach would sustain the core technology required to operate the contact centre while limiting investment in customer insight, self-service, analytical, and operational improvement capabilities.

This alternative was rejected because it would address only the workforce management platform required to sustain day-to-day contact centre operations while leaving other operational capabilities largely unchanged. While Hydro One would maintain supported scheduling, forecasting, and resource management capabilities, it would continue to rely on aging analytics, routing, and customer interaction technologies that provide limited visibility into customer service performance and interaction drivers. The contact centre would retain its ability to operate effectively on a day-to-day basis; however, Hydro One would have limited ability to improve customer interaction insights, identify emerging service issues, optimize call routing, or expand self-service capabilities. As customer inquiries become increasingly complex, this would constrain Hydro One's ability to improve service efficiency and customer experience using modern analytics and automation capabilities. As customer self-service capabilities continue to support routine customer activities, contact centre representatives are increasingly required to manage more complex customer inquiries involving billing, collections, outage-related issues, and specialized services. Deferring customer analytics, natural language IVR, and contact centre enhancement investments would limit Hydro One's ability to understand customer interaction drivers, identify emerging service issues, improve routing effectiveness, and make informed operational improvements. As a result, Hydro One would maintain the core operational capabilities required to operate the contact centre but would defer investments that improve operational insight, customer self-service, interaction analytics, and service optimization.

ALTERNATIVE 3: PROCEED WITH THE FULL CONTACT CENTRE OPERATIONS ENABLEMENT (RECOMMENDED)

The preferred alternative is to proceed with the full Contact Centre Operations Enablement portfolio, including workforce management technology replacement, customer analytics enhancements, natural language IVR capabilities, and ongoing contact centre technology improvements. This approach maintains the supported technologies required to operate Hydro One's contact centre while strengthening workforce management, operational visibility, customer interaction analytics, and customer self-service capabilities.

This alternative is recommended because it addresses both the foundational technology requirements and operational capabilities necessary to sustain effective contact centre operations. The investment replaces technologies approaching end of support, maintains workforce planning and scheduling capabilities, improves Hydro One's ability to understand customer interaction patterns and recurring service issues, and enhances customer access to information through improved self-service and call routing capabilities. Together, these investments maintain service continuity, strengthen operational insight, reduce supportability risks, and support the efficient delivery of assisted customer service throughout the planning period.

7.0 EXECUTION RISK AND MITIGATION

The execution of the recommended investment plan presents delivery risks due to the complexity and interdependent nature of Hydro One’s customer service technology environment. Customer service operations, billing, digital engagement, and regulatory systems are tightly integrated and must remain operational as upgrades and enhancements are delivered. As multiple initiatives progress in parallel over the investment period, there is an inherent risk of unforeseen dependencies, integration challenges, extended testing requirements, and schedule pressures—particularly where foundational platforms or shared services are required to support downstream enhancements. Execution risk is further influenced by the need to coordinate work across specialized technical and business resources, which can create sequencing constraints or temporary bottlenecks if not carefully managed.

These risks are managed and mitigated through Hydro One's established project delivery, governance, and financial management framework. Investments are planned and executed using a phased approach that emphasizes early design validation, dependency planning, and progressive refinement of scope, cost, and schedule assumptions as initiatives advance through project initiation, through execution and closing (see GSP Section 4.10 for more detail on the DTS Technology Delivery Governance and five-stage governance framework). Formal stage-gate reviews are used to confirm readiness before proceeding to subsequent phases, ensuring that integration impacts, operational considerations, and delivery risks are appropriately addressed. Sequencing is intentionally designed so that foundational upgrades are completed ahead of dependent initiatives, reducing the likelihood of rework or disruption to customer-facing services.

Hydro One also embeds cross-functional coordination and change management practices throughout delivery to support operational readiness and adoption. Business and operational stakeholders are engaged early to align on deployment timing, required process changes, and transition planning, while structured communications, training, and readiness assessments support smooth integration into day-to-day operations. Ongoing financial and delivery monitoring enables early identification of variances or emerging risks, allowing for timely corrective action. Together, these practices reduce execution risk and support the effective delivery, adoption, and sustained value realization of the investments proposed in this Exhibit.

G-GP-08	WORK AND ASSET MANAGEMENT ENABLEMENT
Primary Trigger:	Business Support Sustainment
OEB RRF Outcomes:	Customer Focus, Operational Effectiveness, Financial Performance

Net Capital Expenditures:

($M)	2028	2029	2030	2031	2032	Total
Hydro One	4.6	6.7	5.4	6.1	6.2	**29.0**

Prepaid Expenditures Related to Cloud[1]:

($M)	2028	2029	2030	2031	2032	Total
Hydro One	21.2	39.9	43.5	43.5	36.3	**184.3**

Summary:

The Work and Asset Management (WAM) portfolio comprises the foundational digital tools and systems that support Hydro One's capital project delivery, engineering, planning, and field operations. Investments in this portfolio are required to maintain critical operational capabilities, address technology lifecycle, cybersecurity, regulatory, and compliance requirements, and improve workforce productivity and effectiveness. Across project delivery, engineering, field execution, and planning functions, these investments will enhance integration, automation, visibility, and decision-making capabilities, enabling Hydro One to safely and efficiently deliver an expanding capital and operations work program while maintaining reliable service to customers.

[1] Figures presented in the tables may not sum to the totals shown due to rounding.

1.0 OVERVIEW

The WAM portfolio provides the foundational digital tools that enable Hydro One's capital project delivery, engineering, planning, and field workforce to safely, efficiently, and effectively perform their work and ultimately serve customers. Much like traditional field tools and equipment are essential to carrying out physical work, WAM's digital capabilities are critical to planning, designing, scheduling, executing, and managing asset-related activities across the company. From engineers and planners to line crews, forestry personnel, and station staff, these solutions support the end-to-end work management lifecycle, ensuring employees have the information, processes, and technology required to maintain, operate, and invest in the electrical network. As the business continues to evolve, sustained investment in the WAM portfolio is necessary to preserve these core capabilities, improve operational effectiveness, and support Hydro One's ability to deliver safe, reliable service to customers.

At an overarching level, the need for investments in WAM is driven by numerous factors including the aging of digital applications, opportunities to improve workforce efficiency and effectiveness, the growing capital expansion of the transmission and distribution system, and the need to maintain compliance with regulatory requirements, cybersecurity requirements, and other workplace standards.

The WAM portfolio for the 2028-2032 period comprises investments across four functional categories:

- **Capital Project Delivery** investments will maintain and enhance project governance, controls, scheduling integration, and risk management capabilities to improve project execution, cost management, and schedule predictability. These capabilities will support more effective delivery of Hydro One’s capital portfolio by improving visibility into project performance and enabling earlier identification and management of delivery risks.
- **Engineering** investments will improve engineering tools, design processes, modelling capabilities, and station technology platforms to improve design effectiveness, automation, cybersecurity, and compliance with evolving technical

requirements. These investments will support consistent engineering practices and improve the ability to plan and deliver system investments.

- **Field** investments enable standardized, mobile, and digitally integrated work execution capabilities across Transmission, Distribution, Forestry, and Stations. These improvements will reduce reliance on manual processes, enhance workforce safety, improve field visibility, and support more effective outage response and restoration activities.
- **Planning** investments will strengthen data, analytics, and coordination capabilities to support risk-informed decision-making, outage planning, and asset lifecycle management. Improved planning tools and information integration will enhance Hydro One's ability to prioritize work based on asset condition, system needs, and operational requirements

Over the 2028-2032 period, Hydro One plans to invest a total of approximately $213.3M in WAM Technology ($29.0M Capital and $184.3M in Prepaid). Together, these investments support safe, reliable, and efficient operations by improving integration across business functions, strengthening asset lifecycle management, and enabling Hydro One to deliver a larger and more complex capital and operational work program.

2.0 INVESTMENT NEED

The WAM portfolio provides the foundational digital capabilities that enable Hydro One's capital project delivery, engineering, planning, and field functions to safely, effectively, and efficiently plan, manage, and execute work in support of reliable service.

The need for continued investment in the WAM portfolio is driven by the lifecycle maturity of existing digital applications and tools, the requirement to sustain critical business capabilities, opportunities to improve workforce productivity and operational efficiency, and supporting growth in capital investments across the transmission and distribution grids. In addition, a number of these investments are required to address regulatory, compliance, cybersecurity, and governance obligations, ensuring Hydro One maintains effective operational controls, meets regulatory requirements, and supports the safe and reliable operation of the electricity system.

More specifically, the key drivers of each investment functional category are summarized below.

- **Capital Project Delivery** – As Hydro One's transmission and distribution capital portfolio continues to grow in size and complexity, effective project planning, governance, and execution are increasingly important to ensuring prudent investment management and the delivery of expected customer and system benefits. The substantial increase in size and evolving composition of Hydro One's capital plans (see Exhibit 3.1 DSP Overview and Exhibit 2.1 TSP Overview) necessitate investment in the enhancement and maintenance of digital capabilities that support capital project planning, governance, controls, oversight, and execution.
- **Engineering** – Engineering is fundamental to Hydro One's ability to safely and reliably design, maintain, and expand the electricity system while supporting prudent asset management and long-term network planning. Continued investment in engineering solutions is required to address increasing work volumes, strengthen integration across planning, design, asset management, and operations, and provide improved access to information, workflows, and decision-support capabilities. Investment is also needed to address the end of life risks associated with Hydro One's critical engineering document management platform, which will reach the end of vendor standard support in 2026. Modernization will ensure continued security, accessibility, and compliance of engineering records while establishing a sustainable foundation for future engineering and asset management capabilities.
- **Field** – Hydro One's field workforce is critical to the safe operation, maintenance, and restoration of the electricity system, and increasingly relies on digital tools that are as essential to performing work as the physical tools used in the field. Increasing asset complexity, growing electrification related demands, and more frequent severe weather events are driving the need for enhanced cross-application operational coordination, outage preparedness, and restoration capabilities. Investments in technologies supporting mobile work execution and geospatial capabilities will improve situational awareness, enhance data quality, reduce manual effort, and support safer and more efficient execution of field work.

- **Planning** – Planning capabilities provide the information and analysis required to support prudent asset management and investment decisions. Continued digital investments are needed to improve visibility into asset condition, system operations, work programs, and outage impacts, enabling more informed prioritization of capital and maintenance activities. These capabilities will strengthen asset risk management, improve outage planning and coordination, support efficient resource deployment, and help ensure Hydro One delivers reliability and customer outcomes in a cost effective manner.

3.0 INVESTMENT DESCRIPTION

Hydro One's Work and Asset Management portfolio includes four functional areas: Capital Delivery, Engineering, Field, and Planning, each delivering distinct capabilities while contributing to a more integrated, efficient, and data-driven approach to planning, executing, and managing work across the enterprise.

3.1 CAPITAL PROJECT DELIVERY

Capital Project Delivery investments will enhance the governance, oversight, and execution of Hydro One's expanding capital program through investments in estimating, scheduling, financial control, construction execution, and commissioning and asset capitalization. These investments address the growing scale of Hydro One's capital portfolio by improving quality, consistency, and timeliness of project information used to plan, execute, and monitor work. Investments in the 2028-2032 period are forecast to be $20.7M in prepaid expenditures and $5.0M in capital expenditures to fund the delivery of the following initiatives.

Capital Portfolio Controls Modernization: Hydro One's capital portfolio is managed through several scheduling, estimating, financial, and contractor systems, including Oracle Primavera P6, Oracle Primavera Cloud, SAGE Estimating, SAP, and various Engineering, Procurement and Construction (EPC) contractor platforms. Project information is housed across these tools and systems, resulting in manual consolidation and reconciliation of information to complete portfolio reporting, forecasting, contract management, and performance monitoring activities. As Hydro One's capital program continues to grow in scale and complexity, these manual processes limit enterprise wide

visibility, reduce reporting efficiency, and hinder the organization's ability to consistently monitor, govern, and optimize its expanding portfolio of capital investments.

This investment will implement an industry standard Project Controls and Portfolio Management solution that consolidates project, cost, schedule, forecast, contract, and change management data from Hydro One and EPC delivery systems into a single governance, reporting, and portfolio management framework. The solution will provide portfolio wide visibility into project performance, budgets, forecasts, schedules, contracts, risks, and changes while reducing manual data collection and reconciliation. By establishing a modern project controls capability aligned with utility industry leading practices, Hydro One will strengthen portfolio governance, improve forecast accuracy, enhance management visibility into capital delivery performance, and support data-driven investment decisions needed to efficiently plan and deliver the infrastructure required to meet Ontario's long-term electricity needs.

SAGE Estimating System and EOS Navigator and Lifecycle Upgrade: SAGE Estimating and EOS Navigator are Hydro One's primary estimating and estimate management platforms for capital planning and delivery. SAGE Estimating provides a standardized and centralized environment for developing project cost estimates, while EOS Navigator manages estimate workflows, version control, reporting, and estimate comparisons. Together, these platforms support consistent estimating, governance, and integration with project delivery processes, helping Hydro One develop, validate, and manage project cost estimates across its capital portfolio.

To maintain vendor support, software compatibility, cybersecurity compliance, and integration across Hydro One's estimating and project delivery ecosystem, both platforms require ongoing lifecycle upgrades in accordance with vendor release cycles. The vendor supports up to two major annual releases prior to the current release. Based on this, Hydro One's versions of SAGE Estimating and EOS Navigator will reach end of life in 2029 and will require upgrade. A subsequent upgrade is also expected in 2032 to maintain vendor support. This investment will keep software versions supportable, reduce technology obsolescence risk, and support efficient estimating activities for Hydro One's growing capital investment program.

Primavera Enterprise Scheduling Modernization and Expansion: Oracle Primavera P6 provides enterprise scheduling capabilities that support the planning and delivery of Hydro One's station investments, station refurbishments, and major infrastructure programs. The platform helps coordinate complex work activities, resources, and project milestones across the station portfolio, supporting efficient capital delivery and asset renewal.

Hydro One deployed its current version of Primavera P6 in 2024. Oracle provides support for software versions for up to five years, including security updates and critical defect corrections. A lifecycle upgrade will be required during the upcoming rate period to maintain a supported and reliable platform. Failure to complete the upgrade and planned expansion initiatives would limit Hydro One's ability to effectively plan and coordinate a growing portfolio of infrastructure investments needed to support increasing electricity demand and the continued modernization of the transmission system.

This investment also funds additional integrations with the iTOA platform (described further in GSP Section 4.11 G-GP-25, Subsection 2.2) to improve coordination between capital construction schedules and operational grid availability requirements. Hydro One also plans to enable Primavera to apply to longer-term planning horizons and broaden its use beyond Stations project delivery to support additional capital programs, including greater adoption by Transmission Lines project delivery teams.

IESO Asset Registration and Compliance Management Platform: Hydro One has a regulatory obligation to register all new and modified transmission assets with the Independent Electricity System Operator (IESO). The current registration process relies on manual data collection, spreadsheet based workflows, email exchanges, and limited governance controls across multiple organizations. This approach creates administrative burden, process friction, and a higher risk of inconsistencies, delays, and audit findings while reducing visibility into the status and quality of asset registration activities. As transmission infrastructure expands and asset changes increase in volume and complexity, Hydro One requires a more robust and scalable solution to support its regulatory obligations and maintain accurate, timely, and auditable registration information.

This investment will build a tool that will enable enhanced asset registration capabilities through a centralized digital solution that supports the end-to-end management, governance, validation, approval, and submission of transmission asset registration information to the IESO. The new capability will establish a single source of record for asset registration activities, provide improved workflow management and auditability, and strengthen controls over the completeness and accuracy of regulatory data. By automating key registration activities and reducing reliance on manual processes, the investment will improve compliance, operational efficiency, and data quality while positioning Hydro One to address emerging sector challenges such as electrification, grid modernization, increased capital investment, and the integration of distributed energy resources. The solution will provide a scalable foundation capable of supporting evolving regulatory requirements and future growth of Ontario's electricity system.

Work Accomplishment Reporting Solution: This investment will create a work accomplishment reporting tool comprising new data integrations, reporting dashboards, and analytics capabilities that provide visibility into field work execution and project progress. The tool will enable the capture and reporting of completed and partially completed work, resource utilization, and work accomplishment metrics using data collected through field execution systems. The investment is closely aligned with and complements the Field Work Mobile Platform (see section 3.3 Field category investments below), enabling more timely and accurate collection of field execution data and supporting improved operational reporting and decision making.

3.2 ENGINEERING

This category of investment focuses on sustaining and enhancing numerous applications and platforms required to plan, design, model, document, and manage critical engineering work across the transmission and distribution grids. The portfolio includes applications such as Meridian, Zuken, PSSE (Power System Simulator for Engineering), Grid Scale X – APA (CAPE), PLS-CADD, Structural Analysis Program 2000, LPILE, SHAFT, and stations technology solutions used by Engineers and Technicians to ensure system reliability and safety. These investments support the efficient delivery of engineering work, improve data quality and accessibility, and enable increased automation, monitoring, and asset lifecycle management capabilities. Investments in the 2028-2032 period are forecast

to be $34.8M in prepaid expenditures and $7.5M in capital expenditures to fund the delivery of the following engineering related initiatives:

Meridian Engineering Document Management (EDM) Platform Modernization/ Replacement: Meridian is Hydro One's critical IT enterprise engineering document and drawing management platform, providing a centralized repository for the storage, control, version management, and retrieval of critical engineering records. The platform supports the management of drawings, specifications, standards, and asset documentation that are essential to the design, construction, operation, and maintenance of Hydro One's transmission and distribution assets. The platform also supports Hydro One's compliance with regulatory, reliability, and records retention obligations by providing controlled document management, version traceability, and auditable engineering records required to demonstrate compliance with applicable NERC reliability standards, IESO market and reliability requirements, and Ontario Energy Board regulatory obligations.

Hydro One's Meridian platform is currently maintained through extended vendor support arrangements following the expiry of standard vendor support. The platform will exceed ten years of age during the 2028-2032 period, at which point the associated technology risks are expected to increase, including heightened challenges related to vendor supportability, maintenance sustainability, cybersecurity resilience, and technology obsolescence.

Given the age and support trajectory of the platform, Hydro One has determined that Meridian will require replacement or substantial modernization during the 2028-2032 period to ensure continued reliability, supportability, and sustainability of critical engineering information management capabilities. While there is certainty that a long-term solution will need to be implemented within this timeframe, Hydro One is currently assessing business requirements, evaluating available technology options, including the latest Meridian release, and developing the detailed implementation strategy. Accordingly, the specific scope, architecture, and delivery approach will be informed by the outcome of this assessment.

This investment provides funding to maintain the current platform until the long-term solution is implemented and to execute the preferred solution, including platform modernization or replacement, data migration, application integration, testing, and business transition activities. Throughout the initiative, Hydro One will maintain the integrity, accessibility, and traceability of engineering records while minimizing operational risk. The investment will ensure Hydro One continues to meet applicable regulatory, records management, and engineering governance requirements, while reducing technology risk and establishing a sustainable, secure, and supportable engineering information management solution.

Aveva PI Platform: During the 2023-2027 rate period, Hydro One deployed the industry standard Aveva PI platform to improve asset condition monitoring, insights, and maintenance planning for high-value transmission assets. Investments during the 2028-2032 period will continue advancement of Hydro One's Aveva PI platform.

This Information Technology investment provides the platform capabilities needed to support Transmission Non-operational Data Management Systems. To meet those needs, Hydro One plans to add complementary cloud-hosted capabilities that support advanced analytics, predictive maintenance, forecasting, and operational insights. The implementation will use Aveva Connect (a module enabling easier data sharing between applications and environments) to integrate the existing on-premises solution with the cloud environment and Hydro One's enterprise data platform built on Snowflake for AI and analytics. Additional real-time operational insight capabilities are planned through the complementary PowerRunner toolset, which will provide operational staff with greater situational awareness and alarm management options outside the core Energy Management System (EMS) and Advanced Distribution Management System (ADMS) platforms by enabling agentic and traditional AI analytics and workflows. This will complement the investments related to these two control systems by enabling more engineering and operational study capabilities and maximize the benefit of the Snowflake data platform investments described in GSP Section 4.11 G-GP-26, Subsection 3.0, *Data Analytics and AI Enablement*.

Transient Cyber Assets (TCA): This investment is required to maintain Hydro One's compliance with North American Electric Reliability Corporation (NERC) Critical Infrastructure Protection (CIP) standards governing the use of temporary computers and devices that connect to Bulk Electric System (BES) operational environments. These devices, referred to as Transient Cyber Assets (TCAs), are used by field, protection, control, and relay engineering staff to perform maintenance, testing, and support activities on critical electricity infrastructure. To meet these regulatory requirements, Hydro One must apply cybersecurity controls, including malware protection, authorization controls, and vulnerability management, before these devices can connect to operational systems.

Hydro One currently meets these requirements using SPYRUS WorkSafe Pro USB devices, which provide a secure operating environment on corporate laptops. Vendor support for both the SPYRUS solution and the underlying Windows To Go technology is scheduled to end in 2029. Without a replacement solution, Hydro One would face increased compliance, cybersecurity, and operational risks associated with supporting an aging and unsupported platform.

The proposed investment will replace the current approach by centralizing protection, control, and relay engineering applications within a secure hosted environment. Rather than installing and maintaining specialized engineering software on individual field laptops, users will securely access these applications remotely through a standardized platform. This will simplify software management, improve consistency of engineering tools, reduce maintenance effort, and strengthen cybersecurity controls. The solution will incorporate features such as multi-factor authentication, device validation, monitored access sessions, and restrictions on peripheral devices to support ongoing compliance with regulatory requirements.

Recognizing that some field locations have limited network connectivity, the investment will also provide a limited number of hardened engineering laptops, or a replacement of the USB based secure operating environment for situations where remote access is not practical. These devices will be tightly controlled, configured specifically for operational use, and managed in accordance with applicable cybersecurity and regulatory requirements. Overall, the investment will ensure Hydro One can continue to meet its

regulatory obligations while improving the security, supportability, and operational efficiency of engineering access to critical systems.

Dynamic Time Rating / Limited Time Rating Application Replacement: This investment enables replacing an existing custom Dynamic Transformer Rating / Limited Time Rating application, developed more than 15 years ago, with a commercially supported, industry-standard transformer rating solution. The current process relies on legacy custom technology, including an Access database and a Delphi-based application, as well as manual workarounds. Hydro One engineers must manually enter technical data for power transformers and associated series components into the application and manually export results to systems of record. These manual steps create sustainability, knowledge retention, access management, and data quality risks for a business critical process used to establish transformer operating limits. A commercially supported, industry standard solution is planned to improve the long-term reliability, maintainability, and auditability of the transformer rating process. Replacing the current application will reduce reliance on aging custom databases, legacy executables, manual file handling, and specialized individual knowledge. The replacement supports prudent lifecycle management by moving this critical asset planning and operating capability to a maintainable, vendor supported platform with more consistent controls, clearer audit trails, and lower risk of process failure or data error over time.

Engineering Loading and Assessment Platform Replacement: The engineering loading and assessment platform, known internally as “Peaks and LTRs” application, is a legacy custom engineering planning tool that links historical transformer loading data, or Peaks, with transformer Limited Time Ratings (LTR), to confirm that equipment can operate within established loading limits under planned outage and contingency conditions. The underlying process is more than 20 years old and relies on specialized engineering knowledge to maintain its calculations, data integrations, and station-specific logic. As the application continues to age, reliance on a small group of knowledgeable resources increases operational and supportability risk, makes knowledge transfer and onboarding new support staff more difficult, and limits the ability to adapt to changing system architectures. This planned investment involves replacing the custom developed

legacy platform with a commercially supported solution that provides maintenance, improved integration capabilities, and enhanced reliability.

Line Condition Survey System Replacement: This investment will replace legacy custom-developed capabilities used to manage transmission line condition and clearance assessment information with modern, commercially supported engineering platforms. The investment will enable the continued execution of transmission line engineering analyses, including clearance management, line rating evaluations, and condition based assessments, while improving integration with enterprise engineering, geospatial, and asset information systems. Modernization of these capabilities will support consistent engineering processes, improve the availability and quality of engineering data, and provide a sustainable foundation for future engineering planning and asset management activities.

Zuken E3 Platform Modernization and Rationalization: The Zuken E3 platform is a specialized engineering design application used to create, maintain, and manage protection and control, telecommunications engineering drawings, and related technical documentation. These records support asset design, construction, operation, maintenance, and lifecycle management across Hydro One's electricity network. Hydro One's current software version, Zuken E3 series 2020, is no longer updated by the vendor and will need to be replaced at the beginning of the 2028-2032 period.

Zuken releases a new version of the platform each year and provides patches and bug fixes for four years. During the 2028-2032 rate period, Hydro One will either complete a further upgrade of the Zuken platform or rationalize the capability by migrating from Zuken E3 series to AutoCAD Electrical integrated with Spatial Business Systems Substation Design Suite Protection & Control. This option would leverage Hydro One's existing Autodesk infrastructure, align substation engineering with the SBS Automated Utility Design toolset already used for distribution, reduce vendor fragmentation, streamline IT administration, and support more consistent technical standards across distribution and substation assets.

Engineering Planning & Outage Coordination Platform: This investment, known internally as the iTOA (Integrated Tools for Operations Application) Interactive Tool will create a centralized outage planning and coordination platform that consolidates information on equipment availability, planned and forced outages, outage priorities, operational constraints, and system conditions into operational dashboards. The solution will also provide planners and system operators with standardized reporting, visualization, and scheduling capabilities to support transmission and distribution outage planning. It complements and extends the existing iTOA platform described in GSP Section 4.11 G-GP-25, Subsection 2.2, *Operations Projects*.

The tool is planned to improve visibility of current and future outage requirements, helping planners and system operators make informed decisions, coordinate work activities, and identify scheduling conflicts earlier in the planning cycle. By bringing operational information into a common interface, the solution would support more effective management of equipment availability, outage priorities, and system constraints, while improving alignment between planning and real-time operations.

The investment is expected to improve the efficiency and consistency of outage coordination processes by providing standardized operational information, reporting, and planning views for stakeholders involved in outage execution. The tool would support proactive decision-making, reduce reliance on manual coordination activities, and strengthen Hydro One’s ability to manage outage schedules in a manner that maintains system reliability and operational readiness. As part of the broader modernization of outage planning capabilities, the iTOA Interactive Tool would contribute to improved planning efficiency, enhanced situational awareness, and more effective coordination of transmission and distribution work programs across the organization.

Planning Intelligence Tool: Hydro One's current project planning, engineering design, and estimating processes are largely based on 2D engineering drawings, manual quantity takeoffs, spreadsheet-based calculations, and standalone estimating tools. These processes require significant manual effort to interpret designs, extract quantities, develop estimates, and maintain alignment between engineering scope and project cost information.

This investment will establish a Building Information Modelling (BIM)-enabled planning and estimating capability that uses intelligent 3D digital models as the foundation for project planning, engineering design, and cost estimating. Rather than relying on manual interpretation of 2D drawings, project scope, quantities, engineering attributes, and estimating information will be connected within an integrated digital environment, creating a single source of truth for design and estimating activities.

By linking engineering models directly to quantity and cost information, the capability will enable automated quantity extraction from digital designs, significantly reducing the manual effort required to prepare and maintain project estimates. The investment will improve the accuracy, consistency, and repeatability of estimating outcomes while strengthening traceability between engineering scope and project costs. It will also provide enhanced visibility into the impact of design changes, enabling more informed decision-making during project development and supporting earlier identification of cost and scope risks.

In addition to improving current estimating practices, the investment will establish a foundational digital capability that supports the future integration of engineering, schedule, cost, asset, and construction information within a common planning environment. This will enable Hydro One to progressively develop a more comprehensive digital view of projects from planning through execution, improving project governance, forecasting, benchmarking, and overall capital delivery effectiveness.

Without this investment, Hydro One would continue to rely on manual and fragmented estimating processes that are difficult to maintain and more susceptible to inconsistency as project volumes and complexity increase. Establishing a BIM-enabled planning and estimating capability will provide a platform that improves project planning quality, supports prudent capital investment decisions, and strengthens Hydro One's ability to deliver an expanding capital program efficiently and cost-effectively

Application Lifecycle Upgrades: This investment supports lifecycle upgrades, enhancements, replacements and rationalization of key applications used by professional

engineers to support design, planning, materials management, and operational processes including:

- **Power system analysis tools**, including Gridscale X – Advanced Protection Assessment (APA), Quick Transmission Power System Analysis (QT-PSA), and Power System Simulator for Engineering (PSSE) are specialized power system analysis applications used to model, simulate, and assess the performance, reliability, and protection of Hydro One's transmission network. The vendors for these applications provide bug-fix support for approximately three years before requiring an upgrade to the latest version. In addition, regulatory data exchange requirements with the IESO and interconnected utilities require Hydro One to upgrade these tools more frequently, generally every two years, to remain aligned with industry practices and partners. Multiple upgrades of these applications are expected within the 2028-2032 rate period.
- **Structural Analysis Program 2000** is an engineering analysis and design platform used by electric utilities to assess the structural integrity, loading, and performance of transmission, distribution, and station infrastructure, supporting the safe and reliable design of critical power system assets. CSI supports each version of Structural Analysis Program 2000 for five years from its official release. Hydro One deployed the latest release, v26, in 2026 and expects to replace it again during the 2028-2032 rate period.
- **LPILE and SHAFT** are specialized geotechnical engineering tools used to analyze and design deep foundation systems for utility infrastructure, supporting the safe and reliable design of transmission, distribution, and station assets under applicable soil, structural, and loading conditions. Ensoft releases new versions approximately every three to four years and provides bug fixes and operating system compatibility only for the latest version. Hydro One is currently using LPILE 2019 and SHAFT 2017, which are two versions behind the latest release, and plans to upgrade during the upcoming rate period to maintain compatibility with its IT infrastructure.
- **PLS-CADD** is an engineering application used to design, analyze, and maintain overhead transmission and distribution line assets. It provides utility engineers with a standardized platform for line modelling and engineering studies that support safe, reliable, and cost-effective grid infrastructure. Power Line Systems releases

new versions every 12 to 18 months and supports only the current and previous releases. Hydro One is currently using version 19, which is two versions behind the current release and no longer supported with fixes for bug and operating system compatibility. To ensure the application remains compatible with Hydro One's IT infrastructure an upgrade to the latest release is planned during the upcoming rate period.

3.3 FIELD

The Field category comprises programs that enable digitized and standardized field execution across Transmission, Distribution, Forestry, and Stations. These investments enable effective planning, scheduling, dispatch, execution, and monitoring of field work through mobile technologies, scheduling and dispatch tools, storm response capabilities, vegetation management systems, and geospatial platforms. Collectively, these investments enhance data quality and situational awareness, support safe and efficient work execution, and strengthen outage response and restoration capabilities. Investments in the 2028–2032 period are forecast at $72.5M in prepaid expenditures and $2.5M in capital to support the delivery of the following Field initiatives.

Mobile Work Execution: The SAP S/4HANA OneCore program (GSP Section 4.11 G-GP-29) establishes a common mobile work execution platform for Distribution Lines and Forestry. Building on this foundation, this investment will enable the development of enhanced mobile work execution capabilities as additional lines of business adopt the platform. The investment will deliver new functionality, integrations, workflows, and business process improvements required to support evolving operational requirements, expand platform utilization across the enterprise, and leverage advancements introduced through the vendor product roadmap.

Mobile work execution capabilities support thousands of field workers responsible for constructing, operating, maintaining, and restoring Hydro One's electricity network. Investments in enhanced field execution tools generate broad enterprise benefits by reducing administrative effort, improving access to work information, streamlining data capture, and enabling more efficient execution of field activities. By continuing to modernize and expand these capabilities, Hydro One will improve workforce productivity,

enhance data quality and operational visibility, support safer and more effective work execution, and enable better planning, reporting, and decision-making across the enterprise.

Field Scheduling Solution Upgrade: Today, scheduling of field resources across Hydro One is supported by multiple independent solutions that have evolved to meet the specific needs of individual business units. Distribution Lines and Forestry rely on PragmaCAD for dispatching and route optimization, Station Services uses Prometheus for work scheduling and planning, Transmission Lines relies primarily on Outlook-based processes, and Engineering & Construction uses Primavera P6 to manage complex capital project schedules. While these tools support local operational requirements, they do not provide an integrated view of field resource capacity, workload, priorities, and commitments across the enterprise. This fragmented landscape limits Hydro One's ability to optimize resources, coordinate work across organizations, and efficiently balance operational, maintenance, and capital program demands.

The S/4HANA program establishes the foundation for modernizing this capability through the implementation of SAP Scheduling (SAP Field Solution Management, or SAP FSM in GSP Section 4.11 G-GP-29, Subsection 2.0), which will replace the legacy PragmaCAD solution and provide a standardized platform for operational scheduling and field work execution. While the SAP investment addresses an important portion of the scheduling landscape, additional investment is required during the 2028-2032 period to extend the capability beyond Distribution and Forestry and support broader adoption across Field Services. The SAP FSM solution is an actively developed product that continues to receive significant functional, AI, scheduling features, and platform enhancements through SAP’s ongoing roadmap. Any future enhancement to enable improved work scheduling and execution efficiency in the field will be highly prioritized to support Hydro One’s increasing work program. This investment fund the enhancements, optimization activities, and ongoing improvements following the SAP S4 HANA go-live.

Continued investment in enterprise scheduling will reduce technology complexity, improve coordination between business units, strengthen resource planning capabilities, and

ensure that Hydro One can effectively manage an increasingly complex portfolio of operational and capital work using a common scheduling foundation.

Distribution and Forestry Technology: The Distribution and Forestry organizations rely on a broad portfolio of technology solutions to support engineering design, geospatial data management, contractor oversight, customer connection processes, field execution, and business reporting. Many of these processes are currently supported by aging technologies, legacy applications, and manual PDF, Word, and Excel-based forms that limit automation, integration, scalability, and data quality. This investment will design, develop, and implement a modern digital operations platform that establishes new capabilities for geospatial information management, asset and equipment information management, contractor and customer connection process administration, digital forms and records management, workflow services, and enterprise system integration. The investment includes the creation of common data structures, business rules, process controls, integration services, and information management capabilities that will replace fragmented legacy applications and manual processes with a unified and sustainable technology foundation. These initiatives will support evolving regulatory, operational, and customer service requirements.

This investment will establish streamlined digital workflows across Distribution and Forestry operations, increase automation and integration between field and enterprise systems, improve geospatial data collection and reporting, and enhance user experience and operational performance. The investment will also support ongoing refinement of machine learning capabilities used for cost estimation and forecasting. Without this investment, Hydro One would continue to rely on unsupported and inefficient legacy processes, including manual PDF and spreadsheet-based workflows, increasing the risk of errors, delays, inconsistent data quality, and higher operating costs. This would reduce the organization's ability to efficiently meet regulatory obligations, support growing operational demands, achieve productivity improvements, and deliver the level of service expected by customers.

Upgrade GIS Platform to ArcGIS 11.x: This investment is foundational to Hydro One's ability to manage, operate, and plan its transmission and distribution network. As the

authoritative source of network asset spatial information, physical topology and connectivity, GIS underpins critical asset management and operational systems, including SAP and ADMS, and supports core business processes across the enterprise. The investment will upgrade Hydro One's GIS platform to ArcGIS Enterprise 11.x, the required platform for supporting the GIS Utility Network (UN) model. The upgrade will maintain vendor support, enable Utility Network capabilities, improve integration across GIS, SAP, and ADMS, and strengthen the quality, reliability, and accessibility of asset information.

As a key enabler of Hydro One's Utility Network program, this investment will provide the modern platform required to support integrated asset, network, and work management processes while enabling future operational and business capabilities.

Stations Technology – Field: This investment will replace Hydro One's legacy, highly customized Protection, Control, and Monitoring Information System (PCMIS) with a modern, enterprise grade platform that provides a sustainable and scalable foundation for managing protection and control assets, device settings, engineering records, compliance information, and related operational workflows. PCMIS supports more than 1,000 users across engineering, operations, asset management, compliance, and Grid Technologies functions, but its reliance on extensive customization and a single vendor creates increasing sustainability, supportability, operational, and regulatory risks. During the 2023-2027 period, Hydro One completed discovery, requirements validation, and stakeholder engagement to define the replacement solution's business, technical, operational, and compliance requirements. The proposed investments support implementation and deployment during the 2028-2032 period.

The investment will deliver a centralized platform that modernizes protection and control device lifecycle management, device settings management, compliance reporting, inventory management, commissioning and maintenance records, and protection system event analysis, while strengthening integration with key enterprise systems and control room applications. The solution will improve operational efficiency through automation and workflow-driven processes, enhance data quality and asset intelligence, reduce compliance and operational risks, and support NERC CIP and NERC PRC obligations through secure information management, audit ready reporting, and controlled processes.

The investment will also position Hydro One to support future grid modernization initiatives by providing a supportable, scalable, and fully integrated platform for protection and control asset management.

Storm Manager Tool / Storm management Tool Modules: Hydro One currently relies on a near end of life emergency restoration application to coordinate field crews and restoration activities during storm events. The application's reliability, functionality, and integration limitations constrain the organization's ability to efficiently manage storm response operations. Because key workforce and stakeholder information is not integrated with enterprise systems, significant manual effort is required to prepare and maintain current data for each event. These challenges increase operational risk, reduce situational awareness, and limit Hydro One's ability to effectively coordinate restoration efforts during major outages. This investment will acquire and configure an enterprise, cloud-hosted modular platform to manage emergency events. The platform will provide capabilities to track and coordinate Hydro One, contractor, and mutual aid field crews. It will also support storm response logistics, including lodging, meals, and convoy tracking for incoming external teams, as well as mutual aid and contractor onboarding activities such as rosters and safety credentials. The platform will integrate with Hydro One’s field workforce management, procurement, and distribution management systems to reduce manual data reconciliation between systems. The proposed approach is consistent with industry best practices and leverages proven, industry-standard tools that are widely used by leading electric utilities, including Southern Company, Exelon, Consolidated Edison, National Grid, and Pacific Gas and Electric.

Long-Term Outage Scheduling: Hydro One currently relies on the Transmission System Outage Grouping (TSOG) and Distribution System Outage Grouping (DSOG) processes to optimize transmission and distribution work programs; however, the process requires significant manual effort to consolidate information, coordinate stakeholders, and negotiate outage schedules.

This investment will implement an electrical system operations optimization solution to support long-term transmission and distribution outage planning. The proposed solution will consolidate outage, asset, project, forecast, and system constraint data from key

enterprise and operational systems, including iTOA, SAP, Power System Simulator for Engineering (PSSE) study results, IESO demand forecasts, weather data, and related planning datasets. Leveraging Hydro One's Snowflake-based data platform and modern enterprise dashboarding tools such as the Microsoft Power Platform, the solution will provide a centralized environment to support the continuous optimization of equipment outage schedules over a multi-year planning horizon.

The solution will improve visibility into planned outages, asset work, future network conditions, and operational constraints across a multi-year planning horizon. Enhanced coordination among Operations, Planning, Asset Management, project delivery teams, customers, and other stakeholders will enable earlier identification of scheduling conflicts, improved assessment of reliability impacts, and more effective outage planning. By replacing manual and largely annual planning processes with a purpose-built planning and optimization tool, the investment will support more proactive decision-making, reduce planning and execution risks, improve responsiveness to changing system conditions, and optimize the delivery of capital and maintenance programs while maintaining system reliability.

Technology Lifecycle Management: These investments support the ongoing lifecycle management, vendor upgrades, modernization, and continuous improvement of critical Distribution and Forestry applications, ensuring they remain secure, supported, reliable, and aligned with evolving business, operational, and regulatory requirements. The investments include lifecycle upgrades and targeted enhancements to key platforms such as Autodesk and Autodesk Vault, Distribution Cost Estimator, NCCI (New Customer Connection Information), Underground Locates, and FieldMaps. Collectively, these investments address technology obsolescence risks, maintain vendor support and cybersecurity compliance, improve system performance and usability, and ensure the continued effectiveness and supportability of the technology ecosystem that enables Distribution and Forestry operations.

3.4 PLANNING

Planning programs focus on strengthening enterprise planning, data integration, and analytics capabilities. This includes initiatives that support asset analytics, long-term system planning, outage coordination, and integrated data platforms. These investments enhance risk-based decision-making, improve visibility across planning horizons, and enable more coordinated and efficient system planning and prioritization. During the 2028-2032 period, these investments, along with additional non-material investments, are projected to be $56.4M prepaid expenditures and $14.0M capital expenditures to fund the following initiatives:

Distribution and Transmission Digital Twin: Digital twins of Hydro One's transmission and distribution systems are required to enhance asset management, reliability planning, and grid modernization activities. As Hydro One continues to invest in an aging network while accommodating electrification, load growth, and distributed energy resources (DERs), planning and asset management decisions are becoming more complex and data intensive. Effective management of these challenges requires a comprehensive and integrated understanding of asset condition, operational performance, reliability impacts, risk exposure, utilization, system constraints, and future investment requirements.

Today, critical asset, operational, and planning information is distributed across numerous systems, including SAP, GIS, Asset Analytics, ADMS, PI Historian, reliability reporting platforms, Copperleaf, CYME, inspection systems, and planning tools. Significant manual effort is often required to consolidate and reconcile information across these systems to support asset management and investment decisions. This fragmented environment limits Hydro One's ability to consistently assess asset condition and performance, quantify risk, evaluate investment alternatives, forecast future network needs, and identify emerging system constraints.

This investment will implement a transmission and distribution digital twin - a virtual representation of physical electricity networks that brings together asset, operational, geospatial, inspection, reliability, and planning information into a single, integrated environment. The digital twin will provide planners, asset managers, engineers, and operators with a common view of asset health, risk, performance, utilization, reliability

outcomes, and future investment requirements. It will improve the consistency and transparency of planning assumptions, strengthen regulatory defensibility through evidence-based decision-making, reduce reliance on manual analysis and spreadsheets, and create the data foundation required for advanced analytics, predictive maintenance, AI-enabled insights, hosting capacity analysis, and future grid optimization capabilities.

By establishing this capability, Hydro One will improve visibility into asset condition and risk, support more consistent lifecycle management across transmission and distribution assets, strengthen risk-based investment planning, improve reliability outcomes, and position the organization to efficiently manage an increasingly complex and modern electricity system while delivering prudent value for customers.

Resource Management: Hydro One's ability to deliver capital projects, maintenance programs, engineering work, and field operations depends on effectively planning and allocating skilled resources across the organization. Today, information related to workforce capacity, resource assignments, schedules, and project demand is distributed across multiple systems, including SAP S/4HANA, Primavera P6, Meisterplan, Human Resources systems, Outlook, and departmental planning tools. As a result, employees have limited enterprise-wide visibility into resource availability, competing priorities, future workforce demands, and potential capacity constraints. Significant manual effort is often required to consolidate information, assess resource requirements, and identify scheduling conflicts, creating inefficiencies and increasing the risk of resource shortages affecting project and operational delivery.

This investment will establish an enterprise resource management capability that provides a unified view of workforce capacity, allocation, and utilization across field operations, engineering, construction, information technology, project management, and other corporate functions. The investment will fund the implementation of system integrations, data services, reporting tools, and planning capabilities that consolidate workforce information from key business systems into a common enterprise platform. This will enable Hydro One to better understand available capacity, forecast future resource requirements, identify potential bottlenecks, and optimize the allocation of resources across competing programs and priorities.

The investment will also provide enterprise reporting and analytics dashboards that support workforce planning, resource forecasting, and utilization monitoring. By improving visibility into workforce demand and capacity, Hydro One will be better positioned to proactively address resource constraints, improve planning accuracy, support efficient project delivery, and ensure critical resources are available to meet both operational and capital program requirements. Collectively, these capabilities will support more informed decision-making and improve Hydro One's ability to manage an increasingly complex portfolio of work across the enterprise.

Planning Technology Upgrades: Hydro One is required to meet regulatory obligations for reliability and performance reporting across both its transmission and distribution systems. This includes collecting, analyzing, and reporting Bulk Electric System (BES) equipment outage and reliability data to satisfy NERC requirements, including Transmission Availability Data System (TADS) reporting, as well as reporting customer delivery point performance, power quality, and customer interruption metrics to the Ontario Energy Board (OEB). These requirements support regulatory compliance, reliability assessment, asset performance management, and transparency into the impact of asset outages on customers and the electricity system.

Current asset management, outage, reliability, and performance reporting capabilities rely on several standalone applications, including the Transmission Interruption Tool (TINT), M-Class Feeder-Breaker Interruption Tool (MINT), Transmission Outage Data System (TODS), Asset Performance Reporting (APR), and Customer Performance Reporting (CPR) solutions. However, they are built on aging technologies that are approaching end-of-support and present increasing risks related to maintainability, scalability, cybersecurity, integration, and long-term sustainability. Data is currently dispersed across multiple systems with limited integration, resulting in significant manual effort to collect, reconcile, validate, and transform information required for reliability analysis, performance management, regulatory reporting, and asset investment planning.

This investment will modernize and consolidate these legacy applications onto scalable, supportable platforms while establishing an integrated foundation for asset management, outage management, reliability analysis, and performance reporting. The initiative will

improve system integration, strengthen data governance, automate key data management and reporting processes, and enhance analytics capabilities across both transmission and distribution operations. These improvements will increase operational efficiency, improve the quality, consistency, and timeliness of information used for decision-making, support evolving NERC and OEB reporting obligations, and enable more effective reliability management, regulatory compliance, and asset lifecycle investment decisions across the enterprise.

DER and Load Connection Process Modernization: In the 2023-2027 rate period Hydro One adopted the Power Clerk platform as a customer facing portal for Distributed Energy Resource (DER) interconnection and load connection applications. As part of planning technology upgrades Hydro One proposes an investment to extend the platform to consolidate multiple manual, PDF- and Excel-based forms into a unified, secure, and data-driven workflow. This will improve data quality, reduce manual entry errors, and streamline regulatory compliance. The platform will integrate with existing systems of records and customer relations management (CRM) systems. By automating application tracking and providing real-time status updates, Power Clerk will significantly reduce call center volumes and improve customer experience, while supporting regulatory mandates for timely responses and secure data handling.

The investment will also enable advanced integrations with Hydro One's hosting capacity map and calculator, allowing customers to assess feeder capacity and launch applications directly from the map interface. Future enhancements include linking Power Clerk to automated study tools and exploring AI-driven application checks, further optimizing the DER connection process. This platform extension aligns with industry best practices, as Power Clerk is already adopted by over 80 utilities and will position Hydro One to meet growing DER demand efficiently, securely, and transparently. The project supports Hydro One's strategic objectives for grid modernization and customer engagement.

Asset Analytics: Asset Analytics integrates asset, operational, outage, customer, and network data from multiple enterprise systems to provide risk-based insights that support evidence-based investment decisions. The platform enables Hydro One to assess asset

condition, quantify risk, evaluate customer impacts associated with asset failures and planned outages, and prioritize investments based on risk and value.

During the 2028-2032 period, Asset Analytics must be modernized and migrated to a new enterprise data and analytics platform. This investment is required because the current solution relies on custom-built architecture and legacy technology components, including SAP Business Warehouse (BW), which will be retired through the SAP S/4HANA investments in GSP Section 4.11 G-GP-29, Subsection 3.0. To maintain existing Asset Analytics functionality and avoid disruption to critical asset planning processes, modernization must be completed concurrently with the BW retirement. Without this investment, Hydro One would face increased operational risk, growing support challenges, and loss of a critical planning and decision-support capability.

The proposed investment will replace legacy dependencies while preserving and enhancing the core risk-scoring and customer impact analysis functions used in asset planning. The modernization will leverage Hydro One's Enterprise Data Platform and other modern enterprise capabilities to improve data integration, scalability, governance, maintainability, and analytical capabilities. It will also reduce reliance on custom technologies, simplify support requirements, and establish a sustainable foundation for future advanced analytics, asset intelligence, and digital twin capabilities.

Continued investment is necessary to ensure Hydro One can effectively respond to increasing asset management complexity driven by asset aging, electrification, load growth, climate-related risks, and evolving customer expectations. By maintaining and enhancing these analytics capabilities, Hydro One will improve its ability to prioritize limited capital resources, manage asset risk, and support prudent, data-driven investment decisions throughout and beyond the SAP S/4HANA transformation.

Operating Planning Data Layer / Ontario Market Summary: This investment will deliver two complementary but distinct solutions that support outage planning and operational coordination. The Operating Planning Data Layer will establish a new enterprise planning data foundation, while the Ontario Market Summary will provide a user-facing operational planning and coordination application built on that foundation.

The Operating Planning Data Layer will create a centralized enterprise planning data platform that consolidates planning, outage, asset, project, market, and system constraint information from multiple corporate and operational systems into a single governed data environment. The solution will establish common data models, integration services, data quality controls, and enterprise planning datasets that provide a consistent source of information for outage planning and operational decision-making. The platform will replace the current reliance on disconnected systems, spreadsheets, and manual data consolidation by continuously assembling planning information across a multi-year planning horizon. It will provide reusable planning datasets and APIs that can be consumed by planners, reporting tools, analytics solutions, optimization engines, and future planning applications. The Operating Planning Data Layer is the foundational capability that enables future outage optimization, capital planning optimization, distribution planning optimization, resource scheduling, predictive analytics, and other advanced planning solutions.

The Ontario Market Summary will create a centralized operational planning and coordination application that provides outage planners, system operators, and other stakeholders with a shared view of near-term system conditions, planned work activities, market impacts, equipment outages, and operational risks. Built using information provided by the Operating Planning Data Layer and integrated operational systems such as iTOA, SAP, PSDB, Historian, and enterprise analytics platforms, the solution will deliver live dashboards, outage coordination workspaces, notifications, planning recommendations, and situational awareness tools. The application will enable users to identify emerging conflicts, evaluate operational and market impacts, coordinate outage schedules, and respond to changing system conditions in near real-time. By providing a common operational picture and decision support capability, the Ontario Market Summary will improve collaboration, reduce planning risk, optimize equipment availability, and support reliable system operation.

Virtual Asset Inspection: Hydro One currently relies on labour intensive inspection programs — including Transmission Digital Helicopter Patrols, Distribution Line Inspections, and station inspection activities — to assess asset condition and identify defects across the transmission and distribution network. These programs require

significant field resources, aircraft operations, travel, and manual review processes, limiting the frequency, coverage, and efficiency of asset condition assessments.

This investment will support the acquisition and implementation of virtual inspection technologies that improve the efficiency, consistency, and scalability of collecting asset condition information. Potential solutions include drone (RPAS) inspection platforms, fixed visual and thermal cameras, remote monitoring equipment, image and video capture technologies, communications infrastructure, and supporting software required to collect, manage, and process inspection data. These technologies will supplement existing inspection programs by enabling more frequent and targeted inspections while reducing reliance on manual field assessments.

The investment is focused on capturing physical asset condition information that is not available through traditional sensor-based monitoring systems. This includes identifying observable asset defects such as equipment deterioration, corrosion, oil leaks, damaged structures, leaning poles, broken cross arms, missing guy wires, vegetation encroachments, and other visible asset conditions. These capabilities complement, but do not replace, existing operational monitoring solutions that collect real time telemetry and performance data from installed asset sensors.

In addition to deploying inspection technologies, the investment will establish the workflows, condition assessment processes, and system integrations required to synchronize inspection results with SAP Asset Management. Inspection observations will be converted into structured asset condition records, measurements, notifications, and maintenance triggers that can be leveraged by maintenance planning, defect remediation programs, and downstream asset analytics initiatives. While this investment will provide a new source of digital inspection data, it does not include the implementation of an enterprise asset analytics platform.

By digitizing and automating the collection of inspection information, Hydro One will improve the effectiveness of its transmission, distribution, and station inspection programs, increase inspection coverage, enhance defect detection capabilities, and reduce manual processing effort. The investment will provide higher quality asset condition information to

support maintenance planning, maintenance cycle optimization, and defect prioritization, while establishing a scalable foundation for future asset management and analytics capabilities.

Advanced Imaging: Hydro One relies on geospatial data to support vegetation management, transmission forestry programs, property encroachment monitoring, right-of-way management, compliance activities, and infrastructure planning across its transmission and distribution networks. The volume, complexity, and strategic value of imagery and LiDAR data continue to grow, creating a need for enterprise capabilities to acquire, manage, store, and leverage these datasets in support of operational and asset management programs.

This investment will establish Hydro One's enterprise Advanced Imaging capability through the acquisition and management of high value geospatial data assets, including LiDAR, orthophotography, aerial imagery, drone imagery, and other remotely sensed datasets. These data assets will support vegetation risk identification, hazardous tree assessments, property encroachment detection, transmission corridor monitoring, compliance reporting, engineering analysis, and future geospatial initiatives.

The investment will also support the implementation of Hydro One owned imagery management and storage capabilities to ensure long-term retention, accessibility, and governance of enterprise imaging datasets. This includes investment in technologies such as Esri ArcGIS Image Server and associated infrastructure to store, manage, publish, process, and provide access to large-scale LiDAR and imagery datasets across the organization. ArcGIS Image Server provides enterprise scale image hosting, image management, and raster analytics capabilities for aerial, satellite, drone, and LiDAR-derived datasets.

While Distribution vegetation management will leverage AiDash Integrated Vegetation Management capabilities as part of the ADMS roadmap, this investment is focused on enabling the underlying imagery, LiDAR, and geospatial data assets required to support transmission business requirements. The investment may also support the development or acquisition of imagery classification, vegetation assessment, and encroachment

detection models capable of converting imagery and LiDAR datasets into actionable information for forestry and right-of-way management programs.

Capital expenditures may include:

- Acquisition of LiDAR, aerial imagery, orthophotography, and drone-based datasets where Hydro One retains ownership rights.
- ArcGIS Image Server licensing, implementation, and supporting infrastructure.
- Enterprise imagery repositories and LiDAR storage capabilities.
- Geospatial data processing and management platforms.
- Development or acquisition of image classification, vegetation assessment, and encroachment detection models.
- GIS integration and enterprise geospatial enablement capabilities.
- Data governance, retention, and lifecycle management solutions.
- Implementation, configuration, and technology deployment services.

By establishing an enterprise Advanced Imaging capability, Hydro One will improve vegetation management planning, enhance transmission forestry programs, strengthen property encroachment monitoring, support regulatory compliance, and create a long-term geospatial data foundation that can be leveraged by GIS, AiDash, Snowflake, engineering, asset management, and future analytics initiatives. This investment ensures Hydro One owns, manages, and retains critical geospatial data assets while enabling broader use of imagery and LiDAR across the organization**.**

CYME Upgrade – System Modeling: CYME is a critical power system modelling and analysis platform used by Distribution Planning to assess power flow, fault conditions, network performance, and system expansion requirements. To maintain vendor support, cybersecurity compliance, and compatibility with Hydro One's evolving technology environment, ongoing investments are required to keep the platform current through regular lifecycle upgrades and enhancements. These investments will ensure planners continue to have access to reliable, industry standard modelling capabilities that support increasingly complex distribution system planning, grid modernization initiatives, and data-driven investment decisions.

Other Grid Technology Enhancements: Hydro One maintains a flexible capital investment envelope within the Grid Technologies WAM portfolio to address emerging regulatory, compliance, cybersecurity, and operational risk requirements that cannot be fully anticipated at the time the investment plan is prepared. This funding enables the organization to respond to new regulatory obligations, audit findings, cybersecurity threats, and other priority risk mitigation activities within required timelines. The investment also supports targeted remediation initiatives for key systems identified through ongoing risk assessments, security reviews, and compliance activities, helping to maintain the security, reliability, and effectiveness of critical business systems. All investments funded through this envelope are subject to Hydro One's established governance, prioritization, and approval processes, including business case justification, to ensure prudent capital management and value for customers.

4.0 OUTCOMES

4.1 OEB RRF OUTCOMES

Table 1 presents anticipated benefits as a result of the proposed investment in accordance with the Ontario Energy Board's (OEB) Renewed Regulatory Framework (RRF).

Table 1 - Outcome Summary

Customer Focus	• Improved outage preparedness and restoration performance through the use of Mobile Execution Tools will enable faster, more efficient response times during both planned and unplanned events. • Enhanced visibility and coordination of work and outages across Planning and Transmission through integrated field scheduling and upgraded Distribution and Forestry tools will support improved communications and help reduce customer impacts from planned outages. • Modernized customer connection processes will improve data quality, streamline application tracking, provide real-time status updates, and improve the customer experience.
Operational Effectiveness	• Integrated visibility across Capital Project Delivery platforms will reduce reliance on manual processes and improve coordination, data quality, and decision-making to support more effective planning, governance, and execution of Hydro One's capital portfolio. • Digitized field execution and modernized engineering and operations tools will improve workforce productivity, system visibility, data quality, and operational resilience.

Financial Performance	• Improved cost and schedule predictability through enhanced controls, benchmarking, and execution discipline in Capital Project Delivery. • Improved resource utilization and operational efficiency through enhance resource optimization and coordination across Field, Planning, and Transmission capabilities. • Lower long-term lifecycle costs through modernization of legacy systems and adoption of scalable, integrated solutions across all categories, reducing rework and technical debt.

5.0 EXPENDITURE PLAN

The investments identified in this ISD are needed to enable integrated work from the planning phase through the execution phase. These investments will reduce operational and delivery risk while improving outage preparedness, restoration performance, and overall customer outcomes. Hydro One has planned investments to deliver enhancements to planning, outage management, and work execution capabilities over the plan period, leveraging cloud-sensible solutions to support scalable, secure, and data-driven operations.

Table 2 below summarizes Hydro One's forecast net capital and prepaid expenditures for the 2028-2032 period.

Table 2 - Hydro One - Investment Expenditures[2]

($M)	2028	2029	2030	2031	2032	Total 28-32
Gross Capital Expenditures	**4.6**	**6.7**	**5.4**	**6.1**	**6.2**	**29.0**
Less Removals	0.0	0.0	0.0	0.0	0.0	0.0
Less Capital Contributions	0.0	0.0	0.0	0.0	0.0	0.0
Net Capital Expenditures	**4.6**	**6.7**	**5.4**	**6.1**	**6.2**	**29.0**
Prepaid Expenditures Related to Cloud	**21.2**	**39.9**	**43.5**	**43.5**	**36.3**	**184.3**

Table 3 below summarizes Hydro One's net capital and prepaid expenditures, including planned and forecast expenditures for the 2023-2027 rate period and planned expenditures for the 2028-2032 rate period. It also summarizes Hydro One's planned and

[2] Figures presented in the tables may not sum to the totals shown due to rounding.

forecast prepaid expenditure. These expenditures are presented according to the investments comprising this investment, as described in Section 3.0 Investment Description.

Table 3 - Hydro One - Expenditures Continuity Over Rate Periods ($M)[3]

	Capital Expenditures			Prepaid Expenditures		
Description	**Plan[4] 23-27**	**Act/Fcst[5] 23-27**	**Total 28-32**	**Plan 23-27**	**Act/Fcst[5] 23-27**	**Total 28-32**
Capital Project Delivery	11.4	0.0	5.0	0.0	0.3	20.7
Engineering	4.9	3.7	7.5	0.0	0.0	34.8
Field	41.4	36.1	2.5	0.0	11.7	72.5
Planning	14.0	1.3	14.0	0.0	1.2	56.4
Total	**71.6**	**41.1**	**29.0**	**0.0**	**13.2**	**184.3**

2023-2027 EXPENDITURES

During the 2023-2027 rate period, WAM forecast expenditures are $30.5M lower than plan in Capital and $13.2M higher than plan in prepaid. This variance is mostly attributable to:

- **Planning:** Decreased capital expenditures of $12.7M primarily due to the postponement of the Virtual Asset Inspection investment until the SAP S/4HANA platform was in place.
- **Capital Project Delivery:** Decreased capital expenditures of $11.4M primarily due to postponing the Work Accomplishment Report to align with the SAP S/4HANA project schedule and support integration with SAP S/4HANA systems.

Offset by:

- **Field**: Increased prepaid expenditures of $11.7M primarily due to implementation of a cloud-based SAP Service and Asset Manager for Forestry and Distribution Lines, to replace the SAP Work Manager on-premise tool which lost vendor support in June 2024.

[3] Figures presented in the tables may not sum to the totals shown due to rounding.
[4] "Plan" refers to Hydro One's revised capital expenditure and ISA forecast to implement the OEB-approved Settlement Proposal in EB-2021-0110. Plan includes expenditures previously mapped to different ISDs in EB-2021-0110, as further discussed in GSP Section 4.11
[5] "Act/Fcst" refers to actual (2023-2025) and forecast (2026-2027) expenditures.

2028-2032 EXPENDITURES

Over the 2028-2032 rate period, WAM investments are forecast to include $29.0M in capital expenditures, $12.1M lower than capital expenditures in the 2023-2027 period, and $184.3M in prepaid expenditures, $171.1M higher than prepaid expenditures in the 2023-2027 period. The net increase across capital and prepaid expenditures is required to achieve two primary business outcomes: (i) improved grid reliability and resilience and (ii) workforce enablement and safety. These investments respond to increasing system complexity, growing work volumes, heightened expectations for outage response and restoration, and the need to sustain and replace aging operational technology capabilities. Specifically, the variances are attributable to:

- **Field** investments are planned to be $60.8M higher in prepaid expenditures, and $33.6M lower in capital expenditures than the corresponding 2023-2027 amounts. Hydro One is increasing investment in field technologies to ensure the necessary field technology tools and systems are in place to respond to growing asset complexity, increasing electrification, and the rising frequency and severity of extreme weather events. Field technology investments are expected to increasingly shift toward cloud-based solutions as software vendors continue to transition their product offerings and innovation roadmaps away from on-premise platforms, providing improved scalability, integration, security, and ongoing access to new capabilities.
- **Planning** investments are planned to be $55.2M higher in prepaid expenditures, and $12.7M higher in capital expenditures than the corresponding 2023-2027 amounts, as the proposed investments include new capabilities that are not currently available within Hydro One's planning environment. These investments will enhance internal analytics, planning, and decision-support capabilities, reducing reliance on third-party vendors and enabling Hydro One to derive greater value from its own operational and asset data.
- **Engineering** investments are planned to be $34.8M higher in prepaid expenditures and $3.8M higher in capital expenditures than the corresponding 2023-2027 amounts, primarily due to investments in new and enhanced engineering capabilities, including the upgrade or replacement of the Meridian document management platform to establish a single source of truth for

engineering documentation. The investments also address several engineering applications that are currently siloed, custom-built, or approaching end-of-support, improving integration, information management, system sustainability, and the efficiency of engineering design and delivery processes.

- **Capital Project Delivery** investments are planned to be $20.4M higher in prepaid expenditures and $5.0M higher in capital expenditures than the corresponding 2023-2027 amounts to improve the planning, governance, controls, oversight, and execution of Transmission and Distribution capital projects. As Hydro One's capital program continues to grow in size and complexity, these investments will provide enhanced digital capabilities to improve project visibility, decision-making, risk management, schedule performance, and cost control, supporting the efficient delivery of an expanding capital portfolio.

6.0 ALTERNATIVES

Hydro One considered the following alternatives before selecting the preferred undertaking, accounting for the scope of the WAM portfolio.

ALTERNATIVE 1: STATUS QUO

Maintaining the status quo would require Hydro One to continue relying on a fragmented landscape of aging applications, custom developed solutions, manual processes, and disconnected data sources to support the planning, design, delivery, operation, and management of work across the enterprise. While many of these systems continue to provide critical business functionality, a significant number are approaching or have exceeded vendor support lifecycles, increasing operational, cybersecurity, compliance, and technology sustainment risks.

Maintaining existing systems would also increase Hydro One's exposure to evolving cybersecurity threats, regulatory requirements, and operational resilience challenges. Several proposed investments are required to address vendor support expiries, aging infrastructure, and evolving NERC-CIP and other compliance obligations. Deferring these investments would necessitate the continued operation of unsupported or increasingly difficult-to-maintain technologies, resulting in higher sustainment costs, reduced reliability, and an increased risk of service disruption.

Maintaining the status quo would perpetuate existing inefficiencies and technical debt while limiting Hydro One's ability to integrate information and processes across Capital Project Delivery, Engineering, Field, and Planning functions. This would reduce workforce productivity, constrain Hydro One's ability to support a growing and increasingly complex capital program, and increase long-term operational, reliability, cybersecurity, and delivery risks, ultimately reducing the organization's ability to meet evolving customer, regulatory, and business requirements in a cost-effective manner.

Capital Project Delivery: Project information would remain distributed across multiple internal and external applications, limiting portfolio wide visibility into project performance, costs, schedules, contract changes, and delivery risks. As Hydro One's capital portfolio continues to grow in scale and complexity, reliance on manual consolidation and reporting processes would reduce the timeliness and quality of decision-making and increase the risk of schedule delays, cost overruns, and inefficient deployment of capital resources.

Engineering: Hydro One would continue to rely on aging engineering platforms, custom-built applications, and unsupported technologies that support critical activities such as engineering document management, transformer rating analysis, outage coordination, system modelling, and engineering design. Several of these systems depend on specialized knowledge, manual workarounds, legacy databases, and aging software platforms, increasing the risk of knowledge loss, cybersecurity exposure, data quality issues, and process disruption. Deferring investment would also increase the likelihood of engineering records management, asset modelling, and compliance related capabilities becoming increasingly difficult and costly to maintain.

Field Operations: Maintaining current capabilities would perpetuate reliance on multiple disconnected work execution, scheduling, outage coordination, storm response, and asset management tools. Field crews, planners, and supervisors would continue to experience inconsistent workflows, duplicate data entry, and limited real-time visibility into work progress and resource availability. Without modernization, Hydro One would be less able to support increasing work volumes, growing asset complexity, electrification demands, and more frequent severe weather events.

Planning: Hydro One would continue to rely on fragmented asset, reliability, outage, and performance information distributed across numerous independent systems and spreadsheets. This would limit the organization's ability to develop an integrated view of asset condition, risk, reliability performance, resource utilization, and future investment requirements. As a result, significant manual effort would continue to be required to support asset planning, reliability analysis, outage coordination, regulatory reporting, and investment prioritization. Opportunities to leverage advanced analytics, digital twin capabilities, virtual inspections, predictive maintenance, and AI-enabled decision support would be constrained, reducing Hydro One's ability to optimize investments and proactively manage asset risk.

ALTERNATIVE 2: ACCELERATED MODERNIZATION AND PLATFORM TRANSFORMATION (NOT RECOMMENDED)

Under this alternative, Hydro One would maintain applications at their latest vendor releases, accelerate replacement and modernization of legacy platforms, and deploy advanced analytics, automation, and integration capabilities sooner than proposed under the recommended alternative. This alternative would provide earlier access to modern technology capabilities, reduce technical debt, and accelerate business benefits across Capital Project Delivery, Engineering, Field Operations, and Planning.

Hydro One rejected this alternative because it would require materially higher expenditures and exceed the organization's practical capacity to successfully deliver, adopt, and sustain the volume of change over the rate period. Accelerating modernization across multiple business functions would increase implementation complexity, resource requirements, integration efforts, testing, training, and business readiness activities, while also increasing execution risk. The approach would require a larger number of concurrent transformation initiatives, placing additional demands on both business and technology resources and reducing Hydro One's ability to focus on the successful delivery of the highest priority investments that provide the greatest value to customers.

Hydro One also determined that maintaining applications at the latest vendor release levels is not necessary to meet its operational, security, or business requirements. Most enterprise software platforms support multiple versions concurrently, allowing

organizations to remain within vendor supported lifecycles while adopting new functionality when justified by business need. Under the recommended alternative, Hydro One upgrades and modernizes applications as they approach the end of vendor support or when there is a clear business, operational, security, or technology lifecycle need to do so.

ALTERNATIVE 3: PRIORITIZED WAM INVESTMENTS (RECOMMENDED)

Under this alternative, Hydro One will deliver a prioritized portfolio of WAM investments focused on addressing the highest priority lifecycle, regulatory, cybersecurity, operational, and business capability needs over the 2028-2032 period. The proposed portfolio balances the need to sustain critical business capabilities, improve operational effectiveness, support an expanding capital program, and enable future modernization, while aligning investments with organizational delivery capacity.

The recommended alternative prioritizes investments that:

- address applications approaching end of vendor support or presenting material operational, cybersecurity, or supportability risks;
- support regulatory, compliance, and governance obligations;
- enable the safe and efficient execution of field, engineering, planning, and capital delivery activities;
- improve Hydro One's ability to manage growing asset, workload, and system complexity resulting from electrification, capital expansion, and increasing customer expectations; and
- establish foundational capabilities that support future modernization initiatives, including enhanced analytics, digital planning, asset intelligence, and integrated work management

Unlike Alternative 2, Hydro One has not proposed accelerating all modernization opportunities or maintaining all applications at the latest vendor releases. Instead, investments have been sequenced based on business risk, technology lifecycle requirements, interdependencies with enterprise programs, expected customer and operational benefits, resource availability, and organizational readiness. This prioritized

approach enables Hydro One to address the highest priority lifecycle, operational, cybersecurity, and compliance needs while maintaining manageable levels of organizational change and investment. It also addresses the most significant risks and capability gaps while avoiding unnecessary expenditures, excessive organizational change, and increased delivery risk.

Capital Project Delivery: Investments are prioritized to support the governance, oversight, and execution of Hydro One's growing and increasingly complex capital portfolio. These investments improve project controls, estimating, scheduling, reporting, and regulatory asset registration capabilities, enabling stronger cost management, schedule performance, risk management, and portfolio visibility.

Engineering: investments are prioritized to address aging and unsupported engineering platforms, maintain compliance and cybersecurity requirements, improve engineering information management, and strengthen integration across planning, design, asset management, and operations. These investments establish a sustainable foundation for engineering activities while improving workforce effectiveness and access to critical information.

Field: investments focus on improving work execution, outage preparedness, restoration capabilities, workforce safety, and operational coordination across Transmission, Distribution, Forestry, and Stations. These investments enable a more standardized and digitally integrated field environment that supports increasing work volumes, growing asset complexity, electrification-related demands, and more frequent severe weather events.

Planning: investments are prioritized to strengthen asset intelligence, reliability planning, outage coordination, resource planning, and risk-informed investment decision-making. These investments improve Hydro One's ability to integrate asset, operational, and planning information, support evidence based decisions, and establish the foundation for future capabilities such as digital twins, advanced analytics, predictive maintenance, and AI-enabled planning tools.

7.0 EXECUTION RISK AND MITIGATION

Table 4 below summarizes execution risks and mitigations for these investments.

Table 4 - Execution Risks and Mitigations

Execution Risk	Mitigating Action
Project Execution	Hydro One will apply established project governance, including stage-gate reviews, architecture and cybersecurity assessments, executive oversight, and portfolio management controls. Projects will be delivered using formal project, risk, and change management methodologies, with regular performance monitoring to identify and address schedule, scope, cost, and delivery risks early in the project lifecycle.
Resourcing Skillset Availability	Hydro One will proactively manage resource requirements through integrated workforce planning, strategic sourcing, knowledge transfer activities, and selective use of qualified external resources where required. Investments have been sequenced to align with resource availability and reduce competition for critical business and technical subject matter expertise across concurrent enterprise initiatives.
On-Premise vs. Cloud Solution Availability	Hydro One will continually assess vendor product roadmaps, technology trends, and deployment models to inform solution selection decisions. Architecture reviews and governance processes will ensure chosen solutions remain supportable, secure, scalable, and aligned with enterprise technology standards while maintaining flexibility to adapt to evolving vendor strategies.
Dependency on SAP S/4HANA and Other Enterprise Programs	Hydro One will actively manage cross-program dependencies through integrated planning, governance, and roadmap coordination. Project schedules and solution designs will be aligned with key enterprise initiatives to minimize rework, optimize integration opportunities, and ensure foundational capabilities are available when required.
Legacy System Retirement and Technology Obsolescence	Comprehensive transition, migration, and retirement plans will be developed for each affected platform. Existing systems will remain operational until replacement capabilities have been fully implemented, validated, and stabilized, ensuring continuity of critical business operations while reducing lifecycle and supportability risks.
Data Migration and Data Quality Risk	Data governance, validation, cleansing, and reconciliation activities will be incorporated into project delivery plans. Business owners will participate in data quality reviews and acceptance activities to ensure the integrity of migrated asset, engineering, operational, and planning information.
Integration Complexity	Hydro One will leverage enterprise architecture standards, common integration patterns, API-based services, and standardized data management practices to support interoperability across systems. Integration risks will be managed through detailed solution design,

Execution Risk	Mitigating Action
	end-to-end testing, and coordinated deployment planning across affected applications and business processes.
Business Change and User Adoption Risk	Formal organizational change management activities, including stakeholder engagement, communications, training, user readiness assessments, and post-implementation support, will be employed to support successful adoption. Where appropriate, phased deployment approaches will be used to reduce disruption and allow users to transition effectively to new processes and capabilities.
Cybersecurity and Regulatory Compliance Risk	Security and compliance requirements will be incorporated into solution design, procurement, architecture review, and implementation activities. Ongoing monitoring and periodic assessments will be conducted to ensure compliance with NERC-CIP, privacy, and corporate cybersecurity standards.
Vendor Dependence and Product Roadmap Changes	Hydro One will leverage commercially supported platforms with established vendor support models and monitor product roadmaps as part of lifecycle planning. Commercial agreements, vendor management practices, lifecycle planning, and periodic technology reviews will be used to proactively identify and mitigate risks associated with vendor product changes, support models, or end of life announcements.
Operational Continuity During Transition	Hydro One will utilize phased implementations, comprehensive testing, business continuity planning, contingency procedures, and parallel operations where appropriate to ensure critical engineering, planning, field, and outage management capabilities remain available throughout the transition period.
Asset Analytics and SAP BW Retirement Risk	The retirement of SAP Business Warehouse as part of the S/4HANA transformation creates a dependency for Asset Analytics and related planning capabilities. Early planning, phased migration activities, and alignment with Enterprise Data Platform initiatives will ensure continuity of critical asset risk scoring and investment-planning functions.
Organizational Capacity and Concurrent Change Risk	Hydro One is executing multiple large-scale business and technology transformations simultaneously. The paced implementation approach, portfolio prioritization, and cross-program governance are designed to manage organizational capacity and reduce delivery risk associated with concurrent initiatives.

G-GP-10	**PHYSICAL SECURITY UPGRADES**
Primary Trigger:	Business Support Sustainment
OEB RRF Outcomes:	Customer Focus, Operational Effectiveness, Public Policy Responsiveness

Net Capital Expenditures:

($M)	**2028**	**2029**	**2030**	**2031**	**2032**	**Total**
Hydro One	31.8	34.6	34.4	35.9	36.7	173.3

Summary:

This investment addresses two physical security needs: (i) perimeter security upgrades at transmission facilities identified as requiring enhanced physical security controls, and (ii) lifecycle replacement of end of life physical security assets. The perimeter program and end of life replacement program represent an expanded scope from the prior rate period. The primary trigger of the investment is Business Support Sustainment.

A confidential version of this Investment Summary Document is attached as GSP Section 4.11 G-GP-10 Attachment 1 and contains detailed facility assessments, technical specifications, and other security-sensitive information. Hydro One has requested confidential treatment of these materials pursuant to the OEB's Practice Direction on Confidential Filings.

1.0 OVERVIEW

This investment addresses two complementary programs: (i) perimeter security upgrades at critical facilities, and (ii) end of life physical security device replacements. Together, these programs support Hydro One's continued ability to maintain effective physical security at its transmission facilities over the 2028–2032 period.

Hydro One operates physical security systems at 196 facilities across Ontario, subject to differing regulatory and operational security requirements based on facility classification. Of these, 122 are Bulk Electric System (BES) transmission stations and control centres required to meet North American Electric Reliability Corporation (NERC) Critical Infrastructure Protection (CIP) standards, including CIP-003, CIP-006, and CIP-014, which establish requirements for monitoring, alarming, access control, and other protections for BES Cyber Systems. The remaining facilities, including administrative, logistics, and operational locations as well as select non-NERC transmission sites, are secured and monitored to support operational needs and internal risk management requirements. All 196 facilities are subject to monitoring, however, monitoring at BES facilities is compliant with NERC CIP requirements, while monitoring at non-BES facilities is based on operational needs and internal risk management considerations. Hydro One is also a restoration participant under the Ontario Power System Restoration Plan issued by the Independent Electricity System Operator (IESO) pursuant to Market Manual 7. Facilities that support the Basic Minimum Power System must remain secure and operational under a wide range of conditions. Public versions of the restoration,[1] including restoration participant criteria, are available through the IESO, while certain details remain confidential for security reasons.

GSP Section 4.11 G-GP-10 Attachment 1 contains detailed facility assessments, technical specifications, and other security-sensitive information. Hydro One has requested confidential treatment of these materials pursuant to the OEB's Practice Direction on Confidential Filings.

[1] Independent Electricity System Operator (IESO), "Ontario Power System Restoration Plan – Public Version", (December 3, 2025), (https://www.ieso.ca/-/media/Files/IESO/Document-Library/Renewed-Market-Rules-and-Manuals/market-manuals/system-operations/ieso-so-ontario-power-system-restoration-plan.pdf)

2.0 INVESTMENT NEED

With respect to the threat environment, Hydro One experienced 176 break-and-enter incidents in 2022 and 309 incidents in 2025, an increase of approximately 76% over the past four years. The sustained growth in intrusion activity indicates that unauthorized access attempts are a persistent security challenge. Such incidents present material risks to critical infrastructure, operational assets, and the safety of employees and the public. This trend is consistent with broader increases in critical infrastructure trespass and theft observed in Canada and across North America.[2]

Perimeter security upgrades are required to establish, strengthen, or expand physical security controls at high-criticality transmission stations and facilities where existing perimeter and access controls are not commensurate with assessed criticality, applicable NERC CIP requirements, and site-specific risk assessments.

Hydro One operates approximately 11,600 individual physical security hardware assets across its system. These assets provide essential monitoring, access control, intrusion detection, and security management at Hydro One facilities and include access control hardware, cameras, thermal and radar systems, security lighting, automated gates, intercoms, alarms, servers, networking devices, power supplies, cabling, and other specialized security technologies. Failure of these assets can have high consequences because they support the core protective functions required to secure Hydro One facilities, maintain access control integrity, and ensure continuous monitoring of critical infrastructure.

[2] Canadian Telecommunications Association, Opening Statement of Eric Smith, Senior Vice President, to the Standing Senate Committee on Transport and Communications, (December 11, 2024) (noting that theft and vandalism incidents increased by approximately 200% between 2022 and early 2024); Standing Senate Committee on Transport and Communications, Stolen Signal: The Costly Consequences of Copper Theft in Canada, April 2026 (noting more than 1,300 theft incidents recorded since 2022 affecting telecommunications and electricity infrastructure); BC Hydro, BC Hydro Warns of Risk as Copper Thefts Surge, News Release, (December 11, 2025) (noting a greater than 300% increase in copper theft incidents over an 18-month period); North American Electric Reliability Corporation (NERC), Electricity Information Sharing and Analysis Center (E-ISAC), 2023 E-ISAC End of Year Report (describing increased physical security threats targeting electricity infrastructure, including theft, vandalism, intrusions, and other evolving threats).

The need for end of life physical security device upgrades is primarily driven by asset age, condition, supportability, and failure risk. Physical security equipment typically has shorter lifecycle duration because it often operates continuously, is installed outdoors in harsh environmental conditions, and relies on vendor-supported software, firmware, and replacement components. As equipment ages, it becomes more susceptible to performance deterioration, unplanned failures, and operational obsolescence. A growing number of devices are also reaching end of manufacturer support, which limits the availability of security patches, firmware updates, replacement parts, and integration with modern security monitoring systems.

Detailed information regarding the investment need, including facility-specific assessments and security control specifications, is set out in GSP Section 4.11 G-GP-10 Attachment 1.

3.0 INVESTMENT DESCRIPTION

Hydro One proposes two investment programs over the 2028–2032 rate period:

1. **Perimeter Security Upgrades ($147.9M).** This program delivers enhancements to perimeter and access controls at transmission facilities.
2. **End of Life Physical Security Device Upgrades ($25.4M).** This program provides for the planned lifecycle renewal of physical security technologies to maintain equipment operability, vendor supportability, and regulatory compliance.

The scope, technical specifications, and facility-specific details for each program are set out in GSP Section 4.11 G-GP-10 Attachment 1.

4.0 OUTCOMES

4.1 OEB RRF OUTCOMES

Table 1 presents anticipated benefits as a result of the proposed investment in accordance with the Ontario Energy Board's (OEB) Renewed Regulatory Framework (RRF).

Table 1 - Outcome Summary

Customer Focus	• Maintain system reliability and continuity of supply through effective physical security at transmission facilities.
Operational Effectiveness	• Maintain operational effectiveness by replacing end of life and obsolete physical security systems, reducing failure rates, and minimizing reactive maintenance.
Public Policy Responsiveness	• Support compliance with applicable NERC CIP physical security and security management requirements.

5.0 EXPENDITURE PLAN

Specific physical security improvements will vary by location depending on site-by-site factors, existing risks and controls. The replacement of end of life and obsolete equipment will be scheduled based on assessed risk while also considering geographical location, resource efficiencies and other planned station upgrades. Table 2 below summarizes Hydro One's forecast net capital expenditures for the 2028-2032 period.

Table 2 - Hydro One - Investment Expenditures

($M)	2028	2029	2030	2031	2032	Total
Gross Capital Expenditures	31.8	34.6	34.4	35.9	36.7	173.3
Less Removals	0.0	0.0	0.0	0.0	0.0	0.0
Less Capital Contributions	0.0	0.0	0.0	0.0	0.0	0.0
Net Capital Expenditures	**31.8**	**34.6**	**34.4**	**35.9**	**36.7**	**173.3**

Table 3 below summarizes Hydro One's net capital expenditures, including planned and forecast expenditures for the 2023-2027 rate period and planned expenditures for the 2028-2032 rate period. These expenditures are presented according to the investments described in Section 3.0 Investment Description.

Table 3 - Hydro One - Expenditure Continuity Over Rate Periods ($M)

Description	Plan[3] 23-27	Act/Fcst[4] 23-27	Total 28-32
Perimeter Security Upgrades	41.1	38.9	147.9
End of Life Physical Security Device Upgrades	9.7	6.8	25.4
Total	**50.8**	**45.7**	**173.3**

2023-2027 EXPENDITURES

Over the prior rate period, Hydro One expects Forecast expenditures to be $5.1M lower than Plan due to reprioritization to other higher priority security initiatives.

2028-2032 EXPENDITURES

In the planning period, Hydro One expects expenditures to be $127.6M higher than the forecast for the last rate period. On a comparable basis, this increase is driven primarily by the expansion of the perimeter security program. The increase reflects a material step-change in physical security investment relative to the prior rate period and is further driven by a larger volume of end of life replacements of physical security assets, growth in NERC CIP applicability, broader investment needs identified through Hydro One's facility criticality methodology, and the need to respond to an increasingly active physical security threat environment across the system. Further details of the perimeter security program and end of life physical security assets lifecycle replacement program are set out in GSP Section 4.11 G-GP-10 Attachment 1.

6.0 ALTERNATIVES

Hydro One evaluated alternatives for each investment program, including deferral and alternative investment approaches. The detailed alternatives analysis, including the evaluation criteria and basis for the recommended approach, is set out in GSP Section 4.11 G-GP-10 Attachment 1.

[3] “Plan” refers to Hydro One’s revised capital expenditure and ISA forecast to implement the OEB-approved Settlement Proposal in EB-2021-0110. Plan includes expenditures previously mapped to different ISDs in EB-2021-0110, as further discussed in GSP Section 4.11.
[4] “Act/Fcst” refers to actual (2023-2025) and forecast (2026-2027) expenditures.

7.0 EXECUTION RISK AND MITIGATION

The execution risks associated with this investment relate primarily to the scale, complexity, and coordination of work required to deliver physical security upgrades across a geographically dispersed portfolio of facilities over the planning period. Key risks include resource availability, supply chain constraints for specialized security equipment, site access limitations at operational transmission facilities, and the need to coordinate security upgrades with other capital programs and planned station outages.

Hydro One mitigates these risks through established delivery practices, including multi-year execution planning, coordination with other capital programs and station outage schedules, and centralized program governance.

Additional execution risk and mitigation measures are discussed in GSP Section 4.11 G-GP-10 Attachment 1.

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G-GP-11	CYBERSECURITY AND DIGITAL PROTECTION
Primary Trigger:	System Reliability
OEB RRF Outcomes:	Customer Focus, Operational Effectiveness, Public Policy Responsiveness

Net Capital Expenditures:

($M)	2028	2029	2030	2031	2032	Total
Hydro One	11.4	13.7	9.7	6.5	3.8	45.1

Prepaid Expenditures related to Cloud:

($M)	2028	2029	2030	2031	2032	Total
Hydro One	0.0	0.0	0.0	0.0	0.0	0.0

Summary:

This investment is required to maintain the secure, reliable, and compliant operation of Hydro One's critical infrastructure across IT and OT environments. Aging security platforms, increasing cyber threats, and evolving North American Electric Reliability (NERC) Critical Infrastructure Protection (CIP)[1], and the OEB's Ontario Cyber Security Framework (OCSF)[2] obligations require Hydro One to replace, update, and sustain core cybersecurity capabilities to avoid reduced control effectiveness, increased operational risk, and compliance exposure. The primary trigger of the investment is System Reliability. The investment is expected to reduce operational risk, strengthen protection of customer and corporate data, and improve maturity across core cybersecurity functions (identify, protect, detect, respond, and recover), supporting reliable and resilient protection of critical grid assets over the 2028–2032 period.

[1] NERC CIP standards referenced include CIP-002-5.1a BES Cyber System Categorization; CIP-007-6 Cyber Security - System Security Management; CIP-010-4 Cyber Security - Configuration Change Management and Vulnerability Assessments; CIP-015-1 and CIP-015-2 Internal Network Security Monitoring.

[2] Ontario Cyber Security Framework (OCSF) is the OEB's mandated cyber security assessment and reporting framework for electricity distributors and transmitters. It is based on the NIST Cybersecurity Framework and incorporates controls from standards such as ISO 27001/27002, NERC CIP and direction from the Communications Security Establishment (CSE). Licensees are required to perform annual OCSF self-assessments and report maturity levels to the OEB through the Cyber Security Scorecard.

A confidential version of this ISD is attached as GSP Section 4.11 G-GP-11 Attachment 1 and contains detailed technical specifications, implementation approaches, and other security-sensitive information. Hydro One has requested confidential treatment of these materials pursuant to the OEB's Practice Direction on Confidential Filings.

1.0 OVERVIEW

The investments included in this ISD are required to maintain Hydro One's cybersecurity and digital protection capabilities at a level necessary to support the secure, reliable, and compliant operation of critical infrastructure over the planning period. These initiatives are necessary to address emerging cybersecurity threats, align with the OEB's OCSF and comply with evolving NERC CIP standards, and to support the resiliency and integrity of Hydro One's IT and OT environments. This investment consolidates multiple cybersecurity projects under a single investment portfolio to provide a cohesive, enterprise-wide approach to threat detection, monitoring, and compliance. GSP Section 4.11 G-GP-11 Attachment 1 contains detailed technical specifications and security-sensitive information regarding the investments described in this ISD.

Hydro One operates large and complex distributed cybersecurity systems that support the protection of its business and the reliability of its grid operations. These systems provide continuous protection to ensure ongoing availability, integrity, and security of the technology environments that underpin operational systems and critical grid assets. They provide continuous oversight of multiple facilities and sites across the province, protecting critical infrastructure from cyber threats that could disrupt operations or compromise reliability. The continual operation and monitoring of cyber systems associated with medium and high-impact Bulk Electric Systems (BES) is required under current NERC CIP standards.

Over the 2028-2032 planning period, Hydro One must complete several targeted cybersecurity investments to maintain effective threat detection, access control, monitoring, analytics, and data protection capabilities across its IT and OT environments. These investments focus on strengthening enterprise cyber threat detection and response, enhancing operational technology network monitoring and malware prevention, modernizing identity-based access control, expanding cybersecurity analytics and intelligence capabilities, and updating cryptography and data protection technologies to address evolving cyber risks and regulatory requirements.

2.0 INVESTMENT NEED

Cybersecurity investments are non-discretionary and are required to ensure the safe, reliable, and compliant operation of Hydro One's IT and OT environments. Maintaining legacy or unsupported systems would result in reduced visibility, diminished control effectiveness, and increased exposure to evolving threat vectors. In addition, failure to modernize cybersecurity capabilities in line with regulatory expectations could result in compliance risk, audit findings, or enforcement actions, as well as increased operational risk.

The investments outlined in this ISD respond directly to these conditions by:

- strengthening detection and response capabilities across IT and OT environments;
- improving internal visibility and monitoring, particularly within OT networks;
- enhancing identity-based access control to reduce unauthorized access risk;
- expanding analytics and reporting to support governance, oversight, and audit readiness; and
- modernizing cryptographic and data protection capabilities to address emerging risks.

In parallel, regulatory expectations for cybersecurity continue to evolve. Requirements under NERC CIP standards and the OCSF increasingly emphasize continuous monitoring, internal visibility, access control, evidence-based compliance, and demonstrable internal control effectiveness. New and emerging requirements, including those related to internal network monitoring, identity governance, and data protection, require that cybersecurity capabilities remain current, integrated, and auditable.

Hydro One operates in a rapidly evolving cyber threat environment in which electricity utilities and other critical infrastructure operators are increasingly targeted by organized, persistent, and highly capable threat actors. Across the energy sector, cyber activity has increased in both frequency and sophistication, including targeted intrusion campaigns, exploitation of supply-chain vulnerabilities, credential compromise, and attempts to gain unauthorized access to operational environments and control systems.

These threats are not limited to traditional IT environments and increasingly extend into OT systems, where malicious activity could disrupt system monitoring, control, and reliability. The convergence of IT and OT environments, growing use of cloud services, increased third-party connectivity, and broader digital integration have expanded Hydro One's attack surface and increased the complexity of detecting and responding to potential threats.

Cybersecurity risk is no longer limited to isolated system impacts. A successful cyber incident may result in loss of system visibility, disruption of operational processes, degradation of reliability, and compromise of sensitive information, with potential consequences for customers, grid operations, and public confidence. The potential financial and operational impacts of such events have increased materially, including costs associated with response, remediation, regulatory non-compliance penalties, and restoration of affected systems.

Effective cybersecurity controls are critical to ensuring the secure, reliable, and compliant operation of Hydro One's IT and OT environments. As system interconnectivity, cloud adoption, and third-party access continues to expand, Hydro One's monitoring, access control, analytics, and data protection capabilities must keep pace with evolving threats and regulatory expectations under NERC CIP and the OCSF.

Collectively, these investments are required to ensure that Hydro One's cybersecurity controls remain effective, support regulatory compliance, and mitigate the evolving risks associated with operating critical electricity infrastructure over the planning period. Detailed information regarding investment needs for the proposed investment programs listed below, including technical specifications and identified risks, is set out in GSP Section 4.11 G-GP-11 Attachment 1.

2.1 SECURITY EVENT MONITORING

Hydro One's existing Security Information and Event Management (SIEM) platform must be replaced to maintain effective enterprise-wide cybersecurity monitoring and sustained compliance with NERC CIP continuous-monitoring requirements.

2.2 INTERNAL NETWORK SECURITY MONITORING (OT)

Hydro One must continue to expand its operational technology visibility, vulnerability management, and internal network security monitoring capabilities to address evolving cyber threats and support compliance with recently approved NERC Reliability Standard CIP-015-1 and CIP-015-2, Cyber Security - Internal Network Security Monitoring (referred to ongoing as CIP-015). These capabilities provide improved visibility into OT-connected assets and communications, helping Hydro One identify vulnerabilities, detect anomalous activity, and reduce exposure to cyber threats that could impact grid operations and reliability.

2.3 ACCESS CONTROL AND IDENTITY ENFORCEMENT

Hydro One must continue to modernize its Network Access Control (NAC) environment, providing identity-based access enforcement capabilities to support evolving cybersecurity risks, expanding digital connectivity, increasing third-party access requirements, and the growing convergence of IT and OT environments. NAC is a control that validates the identity and security posture of devices before permitting access to network resources, strengthening access enforcement across corporate and operational networks. Existing access control technologies remain an important component of Hydro One's security architecture; however, maintaining effective access governance requires ongoing enhancement of identity validation, device assurance, network access enforcement, and policy-based access control across corporate and operational environments.

2.4 SECURITY ANALYTICS AND REPORTING

Hydro One’s cybersecurity analytics and reporting capability must be upgraded to maintain audit-ready compliance evidence and effective governance of cybersecurity risk under evolving NERC CIP and OCSF requirements. As regulatory and governance expectations continue to evolve, including requirements to demonstrate ongoing compliance, control performance, and risk awareness, Hydro One must ensure that its analytics capabilities remain current, integrated, and capable of supporting oversight and reporting obligations.

Without ongoing refresh, insights can become outdated or incomplete, increasing reliance on manual reporting workarounds, adding analyst effort, and reducing the timeliness and

usefulness of information used for governance and oversight. These limitations may impair Hydro One's ability to provide consistent, audit-ready evidence of control performance and to support regulatory oversight and internal governance processes.

This reduces the effectiveness of decision-making, increases operational overhead, and limits Hydro One's ability to identify emerging risk trends or demonstrate control effectiveness in a timely and consistent manner.

2.5 CRYPTOGRAPHY AND DATA PROTECTION

Hydro One must upgrade its cryptographic infrastructure to maintain control over encryption keys protecting sensitive data across IT and OT environments, particularly as reliance on cloud services continues to expand.

3.0 INVESTMENT DESCRIPTION

Hydro One proposes the following investment programs over the planning period. The scope, technical specifications, implementation and risk mitigation capabilities of each program are set out in the GSP Section 4.11 G-GP-11 Attachment 1.

3.1 SECURITY EVENT MONITORING

This investment replaces Hydro One's legacy SIEM platform with a modernized security event monitoring capability that supports hybrid (on premise and multi-cloud) environments; scalable data ingestion, enhanced event correlation, and improved detection across IT, OT, and cloud environments.

Over the planning period, Hydro One plans to invest approximately $4.6M to implement this solution.

3.2 INTERNAL NETWORK SECURITY MONITORING (INSM)

This investment expands Hydro One's INSM capabilities and enhanced malware detection and containment controls across applicable OT environments, including control centres and stations containing high impact BES Cyber Systems and medium impact BES Cyber Systems with external routable connectivity. INSM refers to monitoring internal OT network communications (i.e., network activity between OT-connected devices inside

protected OT environments) to detect anomalous or unauthorized activity that may not be visible from perimeter controls.

Over the planning period, Hydro One intends to invest $21.2M to implement this solution.

3.3 ACCESS CONTROL AND IDENTITY ENFORCEMENT

This investment enhances Hydro One's network access control and identity enforcement capabilities across IT and OT environments through investments in the NAC solution. The investment supports ongoing modernization of access governance technologies, including device and user authentication, network access enforcement, visibility of connected assets, and policy-based access control. These capabilities help ensure that only authorized users, devices, and third-parties are permitted access to Hydro One systems and information, reducing cybersecurity risk while supporting evolving operational and regulatory requirements.

Over the planning period, Hydro One plans to invest $4.7M to implement this solution.

3.4 SECURITY ANALYTICS AND REPORTING

This investment enhances Hydro One’s cybersecurity analytics and reporting platform by improving data integration across key security domains, expanding risk metrics and dashboards, and increasing automation of reporting outputs. Cybersecurity information is derived from multiple monitoring, identity, and control systems. The enhanced platform would strengthen integration and automation to reduce reliance on manual effort and improve timeliness and consistency of reporting. These enhancements are anticipated to provide more timely, consistent, and actionable insights to support operational decision-making, executive oversight, and regulatory reporting. These improvements would strengthen visibility into cybersecurity performance and emerging trends, increase the availability of customizable and automated reporting outputs, and support sustained engagement and adoption by key stakeholders.

Implementation of this platform enhancement would include configuration and deployment of updated analytics and reporting capabilities, integration with existing data sources, and the testing and validation activities required to place the enhanced platform into service.

These activities would be executed to ensure reporting operates reliably, consistently, and in a manner that supports effective cybersecurity governance and regulatory oversight.

Over the planning period, Hydro One proposes to invest $7.3M to implement the platform and automation enhancements.

3.5 CRYPTOGRAPHY AND DATA PROTECTION

This investment upgrades Hydro One's enterprise cryptography and data protection solution set by replacing outdated encryption components.

Over the planning period, Hydro One intends to invest $7.3M to implement this solution.

4.0 OUTCOMES

4.1 OEB RRF OUTCOMES

Table 1 presents anticipated benefits as a result of the proposed investment in accordance with the Ontario Energy Board's (OEB) Renewed Regulatory Framework (RRF). The table summarizes the operational, reliability, and compliance outcomes expected from Hydro One's required cybersecurity and digital protection investments for the planning period. These outcomes are framed in accordance with the OEB RRF and demonstrate how the planned investments advance customer reliability, operational resilience, and ongoing compliance with evolving regulatory and industry cybersecurity standards.

Table 1 - Outcome Summary

Customer Focus	• Faster detection, analysis, and response to cybersecurity threats. • Improved reliability and protection of grid operations by reducing downtime and preventing cyber-related service disruptions. • Enhanced transparency and confidence in Hydro One's ability to safeguard customer data and system data integrity.
Operational Effectiveness	• Increased automation and intelligence across cyber event monitoring, analytics, and response functions, enabling more efficient operations and reduced manual effort. • Centralized network access management and identity enforcement aligned with Zero-Trust principles, improving asset visibility and control. • Data-driven insights from enhanced cybersecurity analytics capabilities supporting proactive risk management, governance, and regulatory reporting. • Readiness for quantum-computing resilient cryptography ensuring long-term protection of operational and information technology systems.
Public Policy Responsiveness	• Sustained compliance with updated NERC CIP cybersecurity standards, including the newly published NERC CIP-015 and emerging data protection requirements. • Continuous monitoring and audit readiness across IT and OT environments, meeting evolving regulatory expectations. • Alignment with the OEB's OCSF objectives for critical infrastructure resilience and public safety assurance.

5.0 EXPENDITURE PLAN

Over the 2028-2032 period, Hydro One has forecast net capital expenditures for the five cybersecurity and digital protection initiatives described above. Annual spending is expected to vary based on project timing and implementation sequencing. Higher expenditures are forecast in the initial years (2028-2030) to expand INSM deployment to additional sites and replace the current OT SIEM solution. Subsequent years (2031-2032) will focus on continued analytics expansion, implementation of cryptographic and data protection capabilities, and incremental technology refreshes required to maintain long-term performance and continued compliance with evolving NERC CIP standards.

Table 2 below summarizes Hydro One's forecast net capital and prepaid expenditures for the 2028-2032 planning period.

Table 2 - Hydro One - Investment Expenditures

($M)	2028	2029	2030	2031	2032	Total
Gross Investment Expenditures	11.4	13.7	9.7	6.5	3.8	45.1
Less Removals	0.0	0.0	0.0	0.0	0.0	0.0
Less Capital Contributions	0.0	0.0	0.0	0.0	0.0	0.0
Net Investment Expenditures	**11.4**	**13.7**	**9.7**	**6.5**	**3.8**	**45.1**
Prepaid Expenditures Related to Cloud	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**

Table 3 below summarizes Hydro One's net capital and prepaid expenditures, including planned and forecast expenditures for the 2023-2027 rate period and planned expenditures for the 2028-2032 rate period. These expenditures are presented according to the investments described in Section 3.0 Investment Description.

Table 3 - Hydro One - Expenditure Continuity Over Rate Periods ($M)[3]

Description	Capital Expenditures			Prepaid Expenditures		
	Plan[4] 23-27	Act/Fcst[5] 23-27	Total 28-32	Plan 23-27	Act/Fcst[5] 23-27	Total 28-32
Security Event Monitoring	5.7	7.1	4.6	0.0	1.1	0.0
Internal Network Security Monitoring (OT)	3.1	6.3	21.2	0.0	0.0	0.0
Access Control and Identity Enforcement	13.0	14.5	4.7	0.0	0.0	0.0
Security Analytics and Reporting	2.7	5.8	7.3	0.0	0.0	0.0
Cryptography and Data Protection	6.8	2.1	7.3	0.0	0.0	0.0
Total	**31.3**	**35.9**	**45.1**	**0.0**	**1.1**	**0.0**

2023-2027 EXPENDITURES

During the prior rate period, forecast capital expenditures are $4.6M higher than Plan primarily due to the advancement of the INSM initiative beyond the originally planned discovery activities. The original plan included approximately $0.5 million for discovery and assessment work to evaluate vulnerability management capabilities within Hydro

[3] Figures presented in the tables may not sum to the totals shown due to rounding.
[4] "Plan" refers to Hydro One's revised capital expenditure and ISA forecast to implement the OEB-approved Settlement Proposal in EB-2021-0110. Plan includes expenditures previously mapped to different ISDs in EB-2021-0110, as further discussed in GSP Section 4.11.
[5] "Act/Fcst" refers to actual (2023-2025) and forecast (2026-2027) expenditures.

One's OT environment. Following the successful completion of the discovery phase, the initiative progressed to a proof-of-concept and pilot implementation, culminating in the deployment of vulnerability management capabilities at foundational aggregation sites. These expenditures support the foundation for future expansion of OT vulnerability management capabilities across transmission and distribution stations.

Forecast prepaid expenditures are $1.1M higher than Plan due to the implementation of a cloud-based Microsoft SIEM solution for enterprise IT security monitoring that was not contemplated in the approved 2023-2027 plan. The original plan assumed continued use of the former on-premise platform, while the cloud-based solution was subsequently approved to replace the end of support system and enhance cybersecurity capabilities. The cloud-based implementation primarily addressed enterprise IT security monitoring requirements. Continued investment during the planning period is required to modernize security event monitoring capabilities supporting OT environments and evolving regulatory requirements.

2028-2032 EXPENDITURES

Over the planning period, expenditures are $9.2M higher than the prior rate period, primarily due to implementation of advanced cryptographic solutions and quantum-resistant encryption technologies, expanded deployment of INSM and enhanced anti-virus capabilities to support CIP-015 requirements, and enhancement of the cybersecurity analytics platform to improve enterprise-wide security monitoring, reporting, and risk oversight.

6.0 ALTERNATIVES

Hydro One evaluated alternatives for the investment programs. The detailed alternatives analysis, including the evaluation criteria and basis for the recommended approach, is set out GSP Section 4.11 G-GP-11 Attachment 1.

7.0 EXECUTION RISK AND MITIGATION

The primary execution risks associated with this ISD relate to the coordinated scheduling of skilled resources, vendor delivery dependencies, and the integration of new cybersecurity technologies within complex and highly regulated IT and OT environments.

The portfolio includes multiple concurrent initiatives that must be sequenced carefully to avoid operational disruption, ensure continued compliance with NERC CIP requirements, and maintain uninterrupted protection of critical systems.

These risks are mitigated through integrated program planning, phased implementation, and established governance and delivery controls. Cybersecurity initiatives within this ISD would be executed using Hydro One's standard capital delivery and change-management frameworks, including defined milestones, stage-gate reviews, and coordination across IT, OT, cybersecurity, and operations teams. Where applicable, projects would be implemented in controlled phases to minimize operational risk and allow for testing, validation, and regulatory alignment before full deployment.

Vendor and technology delivery risks are mitigated through early procurement planning, use of proven technologies aligned with industry standards, and leveraging Hydro One's existing enterprise vendor relationships. Regulatory and compliance risks are managed through ongoing alignment with emerging NERC CIP requirements, including proactive planning for NERC CIP-015-1 implementation and continued engagement with internal compliance and audit teams.

Overall, Hydro One considers the execution risk for this ISD to be manageable and appropriate given the criticality of the investments. The implemented mitigation strategies are expected to support timely delivery, cost control, and achievement of the intended cybersecurity, reliability, and compliance outcomes across the 2028–2032 rate period.

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G-GP-12	COMMON OPERATIONS TECHNOLOGY INFRASTRUCTURE
Primary Trigger:	Business Support Sustainment
OEB RRF Outcomes:	Customer Focus, Operational Effectiveness, Public Policy Responsiveness

Net Capital Expenditures[1]:

($M)	2028	2029	2030	2031	2032	Total
Hydro One	29.1	23.6	23.3	20.1	24.1	120.3

Summary:

This investment involves the planned lifecycle replacement and modernization of Hydro One's Common Operations Technology Infrastructure (COTI) which is used to support critical systems for monitoring and control of the Bulk Electric System (BES).

The primary trigger is business support sustainment, driven by the need to maintain vendor support, address end of life conditions, and sustain cybersecurity protections and service levels for mission-critical operational technology (OT) systems that support reliable grid operations. The planned scope is organized into two categories: (i) COTI platform foundations and renewal, and (ii) OT cyber technology lifecycle refresh ensuring compliance with North American Electric Reliability Corporation (NERC) Critical Infrastructure Protection (CIP) requirements. Across these categories, the investments support continued availability 24/7 and operational effectiveness for grid operations.

Over the planning period, Hydro One plans to invest $120.3M in capital-related implementation costs.

[1] Figures presented in the tables may not sum to the totals shown due to rounding.

1.0 OVERVIEW

This Investment Summary Document (ISD) involves the planned lifecycle replacement and sustainment of Hydro One's COTI, which is relied on by critical network operating systems to support safe and reliable operation of the transmission and distribution network. This ISD includes Hydro One's core COTI renewal program as well as additional related OT infrastructure. The COTI environment consists of shared network and compute infrastructure, virtualization platforms, operating systems, secure remote access technologies, and cybersecurity and monitoring tools that collectively support OT workloads across Hydro One's transmission and distribution operations.

The investments included in this ISD fall into two primary categories:

- **COTI platform foundations and renewal:** COTI investments renew and modernize the foundational OT infrastructure that supports day-to-day grid operations, ensuring ongoing reliability, resiliency, and supportability. These investments include lifecycle replacements to renew the core network, compute and storage foundations and supporting platforms that enable reliable OT operations, as well as additional enhancements to maintain performance, resiliency, and vendor support for OT environments that support grid operations.
- **OT cyber lifecycle refresh (NERC CIP Sustainment)**: OT cyber investments renew and modernize the cybersecurity capabilities that safeguard the OT platform, ensuring security, compliance, and operational resilience. These investments include lifecycle replacements of OT cyber infrastructure to sustain a vendor-supported environment capable of receiving security updates and maintaining secure system management practices. This supports Hydro One's ongoing obligations under NERC reliability standards, including CIP expectations, by reducing cyber and operational risk as infrastructure approaches end-of-support conditions.

2.0 INVESTMENT NEED

Hydro One's planned investments in this ISD are required to maintain a reliable, secure, and vendor-supported OT infrastructure environment to enable grid operations. These investments address lifecycle and end-of-life conditions, maintain cybersecurity supportability and compliance obligations, and preserve the performance and service levels required for continuous (24/7) OT operations supporting real-time grid monitoring, control, and outage response.

2.1 COTI PLATFORM FOUNDATIONS AND RENEWAL

COTI is a shared OT platform with infrastructure that supports the critical systems used to safely and reliably operate Hydro One's transmission and distribution networks. It provides the underlying infrastructure for several core operational applications including:

- **Energy Management System (EMS):** Hydro One's 24/7 real-time platform for monitoring and controlling the transmission system, including the Ontario BES.
- **Integrated Tools for Operations Application (ITOA):** Supports outage planning, scheduling, operational assessments, and coordination of system work.
- **Advance Distribution Management System (ADMS):** Enables monitoring, control, analysis, and management of the distribution grid, including outage and trouble response activities.

These systems depend on COTI infrastructure for reliable computing, network connectivity, system availability, and secure operations necessary to support real-time grid operations and outage response. Supporting multiple discrete applications through a common, standardized platform is more efficient from a technical perspective and contributes to a lower total cost of ownership over time. The COTI infrastructure includes the following components:

- Data centre
- Microsoft operating system
- Netscaler
- Storage archive & storage area network (SAN) Switches
- Control room equipment
- Data centre infrastructure management (DCIM)

- Virtualization

The need for investment in COTI is driven by the requirement to maintain a secure, reliable, and vendor-supported platform for these operational systems. Without ongoing renewal, aging infrastructure and software components would extend beyond end of life or end of support status, increasing the risk of equipment failure, cybersecurity vulnerabilities, reduced system performance, and loss of vendor support for critical grid operations applications.

The timing of these investments is informed by original equipment manufacturer (OEM) end of support timelines, vendor lifecycle roadmaps, asset age, supportability risks, operational criticality, and cybersecurity requirements. For example, operating system upgrades are aligned with vendor support windows, including the end of Windows 10 Long-Term Servicing Channel support in 2029 and subsequent refresh requirements associated with future Windows 11 support milestones. Maintaining supported software versions preserves Hydro One's ability to receive security patches, vendor support, and critical product updates necessary to support secure and reliable grid operations.

Table 1 summarizes the major COTI renewal and enhancement activities planned during the 2028-2032 period. Additional detail on the scope of work associated with each component grouping is provided in Section 3.1. Together, these investments ensure that the foundational infrastructure supporting Hydro One's operational systems remains reliable, secure, supportable, and capable of meeting future operational requirements.

Table 1 - COTI Investment Category Refresh Timeline (2028-2032)

COTI Components	2028	2029	2030	2031	2032
Data Centre Lifecycle Renewal	●	●	●	●	●
Microsoft Operating System	●		●		●
Netscaler				●	
Storage Archive & Storage Area Network (SAN) Switches	●				
Control Room Refresh	●				
Data Center Infrastructure Management (DCIM)		●			
Virtualization	●	●			

2.2 OT CYBER LIFECYCLE REFRESH (NERC CIP SUSTAINMENT)

These investments focus on the cybersecurity technologies and supporting infrastructure required to maintain a secure and compliant OT environment. Investments are required to ensure the supportability of Hydro One's OT infrastructure as key cybersecurity infrastructure, operating systems, and supporting components reach end of life and approach vendor end of support. When vendor support expires, Hydro One's ability to obtain security patches, fix defects, and remediate vulnerabilities is reduced, increasing cyber risk and creating potential compliance exposure for BES cyber systems that support grid operations.

These investments address a coordinated set of lifecycle refresh activities across OT cybersecurity infrastructure, including operating system upgrades, cybersecurity support systems, hardware replacements, and related sustainment activities required to maintain a vendor-supported environment. These investments are driven by cybersecurity supportability and compliance requirements, including maintaining patching capabilities, secure system management practices, and timely vulnerability remediation.

By renewing infrastructure before vendor support ends, Hydro One reduces the likelihood of exploitable vulnerabilities, limits operational risks associated with unsupported technology, and maintains the ability to respond to emerging cyber threats through timely patching, security updates, and vendor-supported remediation. These investments also help ensure OT environments remain secure, reliable, and capable of supporting critical grid operations.

In addition, Hydro One is required to comply with NERC reliability standards, including CIP-007-6 R1 and R2, CIP-010-4 R1, and CIP-003-9 R2, which depend on continued ability to patch and secure system management practices. Maintaining OT systems beyond vendor support can limit Hydro One's ability to apply patches and maintain secure baselines, increasing the risk of audit findings and potential non-compliance. This investment helps sustain compliance outcomes by ensuring OT infrastructure remains vendor supported and capable of receiving security updates and support needed for secure BES operations.

The investment also supports Hydro One's implementation of NERC Reliability Standard CIP-015-1 and CIP-015-2 (collectively, CIP-015) Internal Network Security Monitoring requirements, including the infrastructure needed for network data collection, anomaly detection, event analysis, monitoring data retention, and protection of monitoring records. Compliance obligations begin for applicable control centre and backup control centre environments in October 2028, with additional applicable medium impact BES cyber systems becoming subject to the requirements thereafter. As a result, the program includes incremental investments in monitoring sensors, data ingestion and analysis platforms, evidence retention capabilities, detection and alert validation processes, and audit-readiness activities. Together, these investments provide a planned, risk-based replacement approach that avoids reliance on reactive equipment failures, extended vendor support arrangements, security non-compliance exceptions, or fragmented one-time remediation projects.

Table 2 summarizes the major OT cyber lifecycle refresh activities planned during the 2028–2032 period. Additional detail on the scope of work associated with each component grouping is provided in Section 3.2.

Table 2 - OT Cyber Lifecycle Refresh Timeline (2028 - 2032)

OT Cyber Lifecycle Refresh Components	2028	2029	2030	2031	2032
Configuration and File Integrity Monitoring (Tripwire)	●				
Web Proxy Infrastructure	●				
Secure Remote Access Platform (Citrix)	●	●	●	●	●
OT Cyber Infrastructure Refresh Program	●		●	●	●
Intrusion Detection and Prevention Systems (IDS/IPS)	●	●			

Over the 2028–2032 period, these investments sustain OT infrastructure supportability and cybersecurity compliance by renewing lifecycle driven systems and components, reducing cyber and operational risk, and preserving the secure operation of OT environments that underpin critical grid operations.

3.0 INVESTMENT DESCRIPTION

The COTI investment consists of multiple asset groupings that collectively provide the shared operational technology infrastructure required to support Hydro One's network operating systems. These assets enable real-time monitoring, control, outage management and operational decision making across both Transmission and Distribution control functions at both the Integrated System Operating Centre (ISOC) and the Back Up Ontario Grid Control Centre (BU-OGCC).

3.1 COTI PLATFORM FOUNDATIONS AND RENEWAL

COTI platform foundations and renewal investments focus on sustaining the shared network, compute, and storage infrastructure that supports critical OT applications. Planned activities include replacement of aging or end of life hardware and software, refresh of network and compute infrastructure, operating system upgrades and continued support for control room environments. These investments ensure that the underlying infrastructure remains capable of supporting critical OT workloads and maintaining acceptable levels of performance and availability throughout the planning period.

Lifecycle-based renewal of the COTI environment allows infrastructure components to be replaced in a coordinated and cost-effective manner, aligning investment timing with asset condition, vendor support windows, and operational priorities. When undertaking procurements, Hydro One leverages opportunities for volume quantity discount or discounts associated with the seasonal timing of purchases (e.g., at vendor fiscal year-end to maximize potential discount and value for ratepayers).

The scope of COTI platform foundations and renewal investments include the following component groupings, which together support lifecycle renewal and ongoing supportability of the shared OT infrastructure environment:

- **Data Center Lifecycle Renewal** – This investment completes a lifecycle renewal of the core OT data centre infrastructure that supports COTI, including compute, network, storage, backup, and associated platform services. This work will be delivered through a phased, multi-year refresh of infrastructure components, aligned with their respective lifecycle, vendor support, and operational dependency requirements, to maintain a secure, reliable, and resilient OT hosting environment.

- **Microsoft Operating System** – This investment completes a lifecycle refresh of Microsoft operating systems across OT endpoints and supporting infrastructure to maintain vendor support, security patching capability, and compatibility with critical operational applications. This work will be delivered through a phased lifecycle renewal program align with vendor support windows, including the transition from Windows 10 long-term servicing channel support in 2029 and future Windows 11 release cycles.
- **NetScaler** – This investment includes the lifecycle replacement of NetScaler infrastructure that provides application delivery, load balancing, traffic management, and secure access services across the OT environment. Implementation is planned for 2031, based on the asset age and vendor support timelines of the current version of NetScaler.
- **Storage Archive & Storage Area Network (SAN) Switches** – This investment renews the storage, archive, and storage area network switching infrastructure that supports data retention, backup, recovery, and high-availability access to OT system data and application workloads. The scope includes replacing storage arrays, archival platforms, SAN switches, and related management software that underpin COTI-hosted applications such as EMS, ADMS, and ITOA. The work is planned to be completed in 2028 to maintain capacity, performance, supportability, and the continued availability and recoverability of critical operational data and services.
- **Control Room Refresh** - This investment renews and modernizes the control room technology and supporting end-user infrastructure used by operators at the ISOC and BU-OGCC. The scope includes replacement of operator workstations, display technologies, peripherals, and associated infrastructure that support real-time monitoring and control of grid operations. These investments are planned for 2028 to maintain a reliable, resilient, and vendor-supported operator environment required for continuous 24/7 operation of critical OT systems.
- **Data Centre Infrastructure Management** – This investment will upgrade the tools used to monitor and manage OT data centre infrastructure, including assets, capacity, environmental conditions, and infrastructure performance. The scope includes implementation of modernized monitoring and management capabilities,

renewal of existing platforms, and integration with supporting infrastructure systems. These capabilities provide centralized visibility and operational oversight needed to support capacity planning, lifecycle management, and the reliable operation of the OT hosting environment that underpins COTI-hosted applications and services.

- **Virtualization** – This investment renews the virtualization platforms that support the hosting and management of OT application workloads across the COTI environment. The scope includes lifecycle replacement of virtualization software, management tools, and supporting infrastructure, as well as workload migration and platform modernization activities. Investment maintains a supported, secure, and resilient hosting environment while preserving the availability, recoverability, and manageability of the shared infrastructure that underpins critical OT applications and services.

Over the planning period, Hydro One intends to invest $78.3M in COTI platform foundations and renewal, comprised of capital investments associated with on-premises infrastructure renewal.

3.2 OT CYBER LIFECYCLE REFRESH (NERC CIP SUSTAINMENT)

The investment addresses lifecycle replacement requirements to maintain vendor support and reduce operational and cybersecurity risk as key OT systems and components approach end-of-support conditions.

The scope of work includes a coordinated set of lifecycle refresh activities across core OT infrastructure layers, including operating system refreshes for Windows and Linux environments, hardware replacements for lifecycle-limited infrastructure, and security patching and activities required to keep OT environments supportable and secure. At a high level, this includes renewing the underlying compute, server, hardware, and system layers that must remain stable, vendor supported, and capable of receiving security updates to operate securely and reliably. These refresh activities are planned to maintain operational continuity while reducing the likelihood of instability, degraded performance, and avoidable vulnerabilities as unsupported systems age.

Scope is determined by identifying OT infrastructure components that are approaching end-of-life or vendor end-of-support or, where vendor end dates are not yet confirmed, applying lifecycle planning assumptions. Components are prioritized based on their role in supporting BES operations and cybersecurity obligations, and refresh work is sequenced to minimize operational disruption and cutover risk.

The scope of OT cyber lifecycle refresh investments include the following lifecycle renewal and replacement activities:

- **OT Cyber Infrastructure Refresh** – This investment provides planned lifecycle replacement and capacity expansion of cybersecurity assets used for vulnerability management, security monitoring, logging, secure administration, incident response, and compliance evidence collection. The scope also includes monitoring, analytics, and data retention infrastructure required to support evolving NERC CIP requirements, including Internal Network Security Monitoring requirements under CIP-015 and supporting infrastructure for compliance with CIP-007, CIP-010, and CIP-013. Implemented through a coordinated multi-year renewal program, the investment maintains a supported, secure, and resilient cybersecurity technology environment while enabling a risk-based approach to infrastructure lifecycle management.
- **Configuration and File Integrity Monitoring (Tripwire)** – This investment will complete a lifecycle refresh of the Tripwire cybersecurity and compliance software platform. This application is used for the configuration monitoring and file integrity monitoring capability used across the OT environment to detect, alert on, and report unauthorized or expected changes to critical systems and infrastructure. The scope of this investment includes application replacement or upgrade, migration of monitoring policies, and integration with related cybersecurity and operational monitoring tools. The renewed solution will maintain continuous monitoring, automated change detection, configuration baseline management, and audit-ready reporting capabilities required to support NERC CIP-007 and CIP-010 compliance and ongoing cybersecurity oversight.
- **Web Proxy Infrastructure** – This investment completes a lifecycle refresh of Hydro One's web proxy infrastructure used to inspect, filter, and control outbound web traffic across the OT environment. The scope includes replacement of end of

life infrastructure, migration to vendor supported platforms, and modernization of traffic inspection and policy enforcement capabilities. The renewed solution will maintain secure web access, improve visibility into encrypted and cloud-based traffic, and support ongoing cybersecurity, compliance, and operational requirements through a vendor-supported platform.

- **Secure Remote Access Platform (Citrix)** – This investment renews and modernizes the Citrix platform used to provide secure controlled access to virtual workstations, servers, and administrative environments supporting OT operations. The scope includes lifecycle replacement of infrastructure components, platform upgrades, modernization of authentication and access management capabilities, and integration with cybersecurity monitoring and logging systems. The investment maintains a vendor-supported platform that provides secure remote access, multi-factor authentication, session control, and audit capabilities required to support reliable operations and compliance obligations across the OT environment.
- **Intrusion Detection and Prevention Systems (IDS/IPS)** – This investment includes lifecycle replacement of OT intrusion detection and intrusion prevention devices used to monitor OT network activity, detect malicious or anomalous behaviour, and support timely cyber response. The refresh maintains supported threat detection and prevention capabilities, improves OT protocol coverage and monitoring accuracy, and supports integration with central security monitoring and response tools.

Together, these component renewals support Hydro One's broader NERC CIP sustainment obligations by maintaining vendor-supported, patchable, and supportable OT cybersecurity infrastructure for BES operations. This reduces the risk of cybersecurity exposure, audit findings, and non-compliance as lifecycle-limited systems approach end of support.

Implementation will be executed as a sequenced refresh effort to manage delivery risk and minimize disruption to critical OT environments. Refresh timing will be informed by vendor support windows and lifecycle planning assumptions and coordinated with operational constraints, maintenance windows, and dependency sequencing to support safe cutovers and reduce the risk of compressed execution timelines.

Over the planning period, Hydro One plans to invest $42.0M in OT Cyber Lifecycle Refresh (NERC CIP Sustainment), comprised of capital investments associated with configuration and file integrity monitoring, web proxy infrastructure, secure remote access, OT cyber infrastructure renewal, and intrusion detection and prevention capabilities.

4.0 OUTCOMES

4.1 OEB RRF OUTCOMES

Table 3 presents anticipated benefits as a result of the proposed investment in accordance with the Ontario Energy Board's (OEB) Renewed Regulatory Framework (RRF).

Table 3 - Outcome Summary

Customer Focus	• Helps to ensure 24/7 support to mission-critical applications that support emergency storm response, field and customer communications, and outage coordination and that must reliably function to minimize the impact of system outages on customers.
Operational Effectiveness	• Provides the required OT infrastructure to holistically support the functionality of critical grid operations applications and systems. • Mitigate the risk of reduced system performance (i.e., inability to effectively handle complex system operations functions) and potential adverse impacts to service levels resulting from COTI performance degradation or component failure, including risks associated with aging infrastructure.
Public Policy Responsiveness	• Ensures critical grid operations are supported with functional and vendor-supported infrastructure capable of meeting applicable NERC CIP regulatory requirements.

5.0 EXPENDITURE PLAN

The level of investment for the planning period is estimated based on forecasts of the specific lifecycle renewal, supportability, and enhancements planned during the rate period. Cost estimates reflect current scope, vendor pricing and market information, recent project experience, asset condition, operational requirements, and the timing of planned capital activities, with historical costs used where applicable to validate assumptions.

The expenditure profile is aligned with key lifecycle and supportability drivers, including vendor support windows, manufacturer recommendations, operational priorities, project dependencies, delivery constraints, and procurement considerations. Where vendor end of support dates have not yet been announced, investment timing is based on Hydro One's

lifecycle planning assumptions and will be refined as vendor information and implementation plans mature.

Table 4 below summarizes Hydro One's forecast net capital expenditures for the 2028-2032 period.

Table 4 - Hydro One - Investment Expenditures[2]

($M)	2028	2029	2030	2031	2032	Total 28-32
Gross Investment Expenditures	29.1	23.6	23.3	20.1	24.1	120.3
Less Removals	0.0	0.0	0.0	0.0	0.0	0.0
Less Capital Contributions	0.0	0.0	0.0	0.0	0.0	0.0
Net Investment Expenditures	**29.1**	**23.6**	**23.3**	**20.1**	**24.1**	**120.3**

Table 5 below summarizes Hydro One's net capital expenditures, including planned and forecast expenditures for the 2023-2027 rate period and planned expenditures for the 2028-2032 rate period. These expenditures are presented according to the investments described in Section 3.0 Investment Description.

Table 5 - Hydro One - Expenditures Continuity Over Rate Period ($M)

Description	Plan[3] 23-27	Act/Fcst[4] 23-27	Total 28-32
COTI Platform Foundations and Renewal	30.3	36.4	78.3
OT Cyber Lifecycle Refresh (NERC CIP Sustainment)	34.2	15.0	42.0
Total	**64.5**	**51.4**	**120.3**

2023-2027 EXPENDITURES

During the 2023-2027 period, forecast capital expenditures are $13.1M lower than Plan. This is primarily due to changes in scope for OT Cyber Lifecycle Refresh investments ($19.2M below Plan), which were reprioritized to ensure funding across cyber and physical

[2] Figures presented in the tables may not sum to the totals shown due to rounding.
[3] "Plan" refers to Hydro One's revised capital expenditure and ISA forecast to implement the OEB-approved Settlement Proposal in EB-2021-0110. Plan includes expenditures previously mapped to different ISDs in EB-2021-0110, as further discussed in GSP Section 4.11.
[4] "Act/Fcst" refers to actual (2023-2025) and forecast (2026-2027) expenditures.

security investments address the highest priority security, compliance, and operational risk requirements. This decrease is partially offset by a $6.1M increase relative to Plan in COTI Platform Foundations and Renewal investments. The increase is primarily driven by an additional investment identified through requirements refinement to modernize the OT backup architecture from a legacy tape-based approach to a modern backup and recovery platform, including the related compute, storage, network, integration, and implementation work required to support reliable operations.

2028-2032 EXPENDITURES

Over the 2028-2032 rate period, Common Operations Technology Infrastructure capital investments are forecast to be $68.9M higher than 2023-2027 forecast primarily due to the following:

- **COTI Platform Foundations and Renewal** capital investments are planned to be $41.9M higher than the 2023–2027 forecast, primarily due to timing of required component upgrades combined with higher market costs for compute, storage, backup, storage area network switching, and network infrastructure required to continue the COTI lifecycle renewal program. This is consistent with the market pressures described in SPF Section 1.8, Table 1. Actual increases vary by component category, ranging from approximately 9% to 90%, with the largest increases affecting infrastructure segments experiencing heightened demand from AI and data centre investments, including servers, memory, storage, and high-performance networking equipment.
- **OT Cyber Lifecycle Refresh** expenditures are forecasted to be approximately $27.0M higher during the 2028-2032 period compared to the 2023-2027 period, primarily driven by the replacement of end of life cybersecurity infrastructure supporting grid operations at the ISOC and BU-OGCC. The increase also reflects investments required to implement and maintain compliance with the evolving NERC CIP-015 standards, including the deployment of internal network security monitoring capabilities, expansion of monitoring across applicable BES Cyber Systems, validation of detection and alerting processes, and the establishment of evidence retention and audit readiness capabilities. These investments are necessary to meet the staged compliance milestones between 2028 and 2030

while ensuring the continued protection and reliability of critical operational technology systems

6.0 ALTERNATIVES

Hydro One considered the following alternatives before selecting the preferred investment approach.

ALTERNATIVE 1: STATUS QUO

Under this alternative, Hydro One would defer planned lifecycle replacements and continue operating the existing COTI infrastructure beyond its intended service life and vendor support period. This option was rejected because it would increase operational, cybersecurity, compliance, and financial risks.

As COTI components age and vendor support expires, Hydro One's ability to obtain security patches, technical support, software updates, and replacement components would diminish. This would increase the risk of equipment failures, cybersecurity vulnerabilities, reduced system reliability, and non-compliance with regulatory and cybersecurity requirements.

Failures of aging COTI infrastructure could disrupt critical OT applications, including EMS, ITOA, and ADMS, reducing system availability and operational resilience. Such disruptions could adversely affect outage coordination, field operations, emergency response activities, and grid operations.

Deferral would also increase operating costs as replacement parts become more difficult and expensive to source and may require costly extended support agreements that do not fully mitigate the risks associated with aging infrastructure.

As a result, the status quo alternative was not considered a prudent option. Planned lifecycle replacement provides the most cost-effective means of maintaining a secure, reliable, and vendor-supported OT environment that supports critical grid operations.

ALTERNATIVE 2: MAINTAIN VENDOR-SUPPORTED COMMON OT INFRASTRUCTURE (RECOMMENDED)

This alternative involves the coordinated lifecycle renewal of COTI infrastructure to maintain a vendor-supported, secure, and resilient OT environment that underpins critical grid operations. COTI provides the computing, network, storage, and supporting infrastructure required to deliver reliable system availability, cybersecurity, and operational performance for applications that support real-time grid operations and outage response.

The recommended approach renews on-premises COTI components as they reach end of life or end of support, preserving access to vendor support, security patches, replacement of components, and product updates. This reduces the likelihood and impact of infrastructure failures, while maintaining the reliability, supportability, and cybersecurity of the OT environment. Although the primary objective is lifecycle management, asset renewals may also introduce incremental improvements in performance, resiliency, supportability, and security available in current-generation technologies.

This alternative supports the following outcomes:

- Continued availability of vendor-supported infrastructure aligned with reliability and operational requirements;
- Access to vendor updates, security patches, and technical support to mitigate cybersecurity risks;
- Availability of replacement components to support timely maintenance and recovery activities;
- Maintenance of system resilience and recovery capabilities using supported infrastructure; and
- Standardized and coordinated management of shared OT infrastructure supporting critical operational applications.

Over the 2028-2032 period, Hydro One will sustain a vendor-supported and resilient COTI foundation through coordinated renewal of core network, compute, storage, and supporting infrastructure, preserving the performance, availability, and security required for the 24/7 operation of critical OT applications and reliable grid operations.

7.0 EXECUTION RISK AND MITIGATION

Potential risks related to procurement and logistical challenges may extend project delivery timelines and result in cost increases. Changes in market trends and dynamics beyond Hydro One's control may also reduce the availability of required products or services vendors. In addition, unforeseen shipping or delivery delays could affect the timing of planned investments. Delivery timing, implementation approach, and final costs may also be affected by changes to regulatory policies or cybersecurity requirements, changes in the system or architecture landscape that influence technical complexity, and variability in the scope, sequencing, or effort required for implementation activities such as configuration, integration, and testing.

To mitigate these risks, Hydro One will implement procurement planning and purchasing schedules that are coordinated well in advance with relevant vendors. Ongoing monitoring of market conditions and proactive engagement with suppliers will support timely decision making and help minimize the likelihood and impact of unforeseen delays. Hydro One will also continue to refine scope, sequencing, and implementation planning as project work advances, including coordination with cybersecurity, architecture, operations, and vendor stakeholders to manage technical dependencies, regulatory requirements, and delivery constraints.

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G-GP-13	**OPERATING TECHNOLOGY FACILITIES SUSTAINMENT**
Primary Trigger:	Reliability
OEB RRF Outcomes:	Customer Focus, Operational Effectiveness, Public Policy Responsiveness

Net Capital Expenditures:

($M)	**2028**	**2029**	**2030**	**2031**	**2032**	**Total**
Hydro One	15.4	5.5	7.3	7.3	13.5	49.0

Summary:

This investment supports the lifecycle replacement and reliability enhancement of critical operating infrastructure at Hydro One's control centres, ensuring the continued availability and resilience of facilities that support real-time operation of the electricity system. These investments address aging building infrastructure and critical back-up systems that have reached or are nearing the end of their service life. Replacing these assets reduces the risk of equipment failures that could impair the availability of essential operating technology infrastructure.

1.0 OVERVIEW

This investment supports the sustainment and operational resilience of the Integrated System Operations Centre (ISOC) and Back-Up Ontario Grid Control Centre (BU-OGCC), which are critical facilities that enable the reliable operation of the transmission system. The scope of this investment includes renewal of key facility infrastructure at the ISOC, including data centre infrastructure (power and cooling systems), replacement of uninterruptible power supply (UPS) batteries, installation of a second backup generator, roof repair, and enhanced perimeter security. It also includes the installation of a roof equipment elevator. At the BU-OGCC, the investment includes replacement of the elevator and roof, reconfiguration and replacement of the control room wallboard display, and backup generator refurbishment.

These assets are managed in accordance with Hydro One's lifecycle replacement strategy to ensure reliability of critical grid control functions (outlined in GSP Section 4.2.6.2). Continuous operation of control room and communications systems during a loss of normal power supply is dependent on the availability of reliable backup power and supporting environmental systems, making the timely renewal of these assets essential to maintaining grid operations.

The timing of each project within this investment is aligned with asset condition as well as end of life (projections based on availability of replacement parts, vendor or manufacturer support) or identified reliability needs, ensuring that replacements or upgrades occur before asset failure risks become unacceptably high. While certain components, such as backup power and physical security improvements, support compliance with applicable reliability and security requirements, other elements (including building envelope and HVAC) are driven by prudent asset management to maintain the functionality and reliability of these critical facilities. Collectively, these investments reduce the risk of equipment failure, maintain the operational readiness of primary and backup control centres, and support continued compliance with applicable reliability standards, including those requiring the availability of a functional backup control centre following the loss of the primary operating facility.

2.0 NEED AND OUTCOME

2.1 INVESTMENT NEED

This investment is required to sustain the reliability, resilience, and security of the ISOC and BU-OGCC. These facilities house critical operational technology and are required to remain continuously available to support reliable operation of the distribution and transmission system. Several building systems and supporting infrastructure have reached or are approaching the end of their useful lives, exhibit signs of deterioration, or no longer provide an appropriate level of operational resilience for facilities of this criticality. Accordingly Hydro One is proposing a combination of lifecycle replacement and targeted resiliency enhancements to maintain reliable operations, reduce operational risk, and avoid more costly reactive interventions.

ISOC Investments: The ISOC investments include a coordinated portfolio of lifecycle renewal and resilience enhancements that address three key areas: critical power resilience, facility sustainment and maintenance, and physical security.

Critical Power Resilience

The ISOC relies on a layered backup power strategy to maintain continuous operation of the control room, Supervisory Control and Data Acquisition (SCADA), and communications systems during the loss of normal electricity supply. This strategy comprises both UPS systems, which provide instantaneous short-duration power during transition events, and standby emergency generation, which provides sustained power during extended outages. Investments in both systems are required to maintain the resilience of the primary control centre, eliminate single points of failure, and ensure continuous operation during power interruption scenarios.

- **UPS Batteries:** The proposed replacement of the UPS batteries is driven by their established lifecycle, as battery performance predictably degrades over time, reducing their ability to provide reliable backup power during loss of normal supply. Maintaining reliable UPS performance is essential to ensuring uninterrupted operations of critical systems while emergency generation is initiated. The proposed replacement aligns with manufacturer recommendations (10-year lifecycle) and Hydro One's lifecycle replacement strategy for critical backup power assets. The Samsung UPS batteries currently in service were manufactured in

2021, and the manual indicates a 10-year lifecycle, meaning replacement will be needed in 2031. Given the criticality, going beyond the recommended lifecycle is not advised.

- **Standby Generator:** The installation of a second generator at the ISOC addresses a resilience gap within the current backup power configuration. [redacted]

Facility Sustainment and Maintenance

This component of ISOC investments renews and enhances building infrastructure necessary to maintain a safe, reliable, and operable environment for critical control centre functions. The investments address deterioration of building assets, increasing operational technology requirements, and maintenance constraints that, if left unaddressed, would increase operational risk, maintenance costs, and the likelihood of service disruption.

- **Air Handling Units (AHUs):** Additional AHUs and cooling capacity are required to support the ISOC data hall. The facility was originally designed with sufficient cooling capacity for its initial technology load while allowing for future expansion. Since commissioning, increasing densities of servers, communications equipment, and SCADA infrastructure have increased cooling requirements. Without additional capacity, elevated temperatures would accelerate equipment degradation, reduce asset life, and increase the risk of outages affecting critical operational technology. The proposed investment improves environmental resilience by providing both additional cooling capacity and redundancy, ensuring

acceptable operation conditions are maintained during equipment outages, maintenance activities, and future technology growth.

- **Roof Equipment Elevator:** The proposed roof equipment elevator improves the safe and efficient maintenance of rooftop mechanical equipment. Rooftop maintenance currently relies on external cranes, manual handling of equipment, temporary workarounds, and operational disruptions that increase worker safety risks when maintenance is performed. Installing a dedicated equipment elevator will improve access to rooftop assets, reduce maintenance complexity, improve worker safety, and facilitate more efficient lifecycle management of rooftop mechanical systems.
- **ISOC Roof:** The proposed ISOC roof repair is necessary to address recurring leaks. These leaks have been addressed on an interim basis through localized repairs; however, continued deterioration of the building envelope could increase the risk of water intrusion affecting critical operational spaces and equipment. Figure 1, below, shows damage to an interior wall of the ISOC from a leak.

Figure 1: Damage to Interior Wall Resulting from ISOC Roof Leak

Physical Security

As one of Hydro One's most critical operational facilities, the ISOC requires physical security measures commensurate with the consequences of unauthorized access or service disruption. [redacted]

BU-OGCC Investments: The BU-OGCC investment include the lifecycle renewal of core building infrastructure required to maintain a safe reliable, and continuously available backup control centre. This component of the program includes the replacement of the facility roof and elevator, both of which have reached or are approaching the end of their expected service lives. It also includes enhancements to the control room wallboard and backup generator refurbishment.

Roof Replacement

Replacement of the BU-OGCC roof is required because the existing roofing system has deteriorated and is no longer providing a reliable building envelope. Installed in 2001, the roof has experienced an increase in widespread and recurring leaks throughout 2026, including water intrusion near occupied workspaces and critical electrical infrastructure such as UPS equipment. Despite repeated localized repairs, many leaks continue to recur, indicating systemic deterioration rather than isolated defects. Continued reliance on reactive maintenance increases the risk of damage to critical electrical equipment, operational disruption, accelerated deterioration of interior building components, and escalating maintenance costs. Replacing the roof restores the integrity of the building envelope, protects critical operational assets, and represents the most prudent long-term lifecycle strategy.

The pictures below demonstrate some of the roof issues and resulting damage at the BU-OGCC. Figure 2 demonstrates that, because the BU-OGCC roof does not drain properly,

it must be diverted to a bucket inside the facility. Figure 3 shows water damage that occurred from a leak.

Figure 2: Interior BU-OGCC Hallway Roof Leak

Figure 3: Interior Damage From BU-OGCC Roof Leaks

Elevator Replacement

Replacement of the existing elevator is proposed because the asset will be over 25 years old during the upcoming rate period, exceeding its expected service life and increasing reliability risks associated with aging mechanical, electrical, and control systems. Reliable vertical transportation is important within a continuously staffed control facility to support routine operations, emergency response, accessibility, and business continuity. Accessibility legislation requires facilities to provide equitable access for employees, visitors, and individuals with disabilities. Planned replacement reduces the likelihood of unplanned outages, addresses equipment obsolescence, and enables modernization to current Technical Standards and Safety Authority (TSSA) requirements in a controlled and cost-effective manner. As the current elevator reaches and exceeds its expected service life, the availability of replacement parts declines. Modern equipment with committed manufacturer and vendor support is essential given the criticality in emergency and regular operations.

Control Room Wallboard Enhancements

The control room wallboard display is a critical visualization system used to support real-time operations, situational awareness, and decision-making. The existing control room wallboard display system has reached the end of its useful life and is becoming increasingly difficult to support. Projectors have accumulated approximately 26,000 operating hours and are operating at significantly reduced brightness, adversely affecting image quality and operator visibility. At the same time, aging hardware, limited software compatibility, and diminishing manufacturer support increase the risk that future failures cannot be repaired in a timely manner. The proposed modernization will replace the aging wallboard with a contemporary display environment that improves operational reliability, flexibility, and maintainability while supporting evolving control room operating practices. The proposed hybrid configuration, consisting of a central display supplemented by operator-specific displays, reduces reliance on a single visualization platform, improves resilience, and allows future technology upgrades to occur incrementally rather than through wholesale replacement.

Backup Generator Refurbishment

The refurbishment of the BU-OGCC backup generators is necessary to ensure continued reliability and availability of critical backup power systems that support essential operations. The existing generators are original to the BU-OGCC, which was constructed in 2001. As these generators age, they are experiencing increased maintenance issues in the form of service calls for repairs, reduced efficiency, and a higher risk of failure during power outages. At over 25 years old, major components such as engines, alternators, control systems, and fuel delivery mechanisms are subject to accelerated wear, increased failure rates, and reduced manufacturer support. Useful life is dependent on many factors including maintenance, usage, sizing and other factors. With the increased maintenance, and the criticality of theses systems, refurbishment ahead of end of life is prudent. Targeted refurbishment (e.g., engine overhaul, alternator servicing, and control system modernization) provides a cost-effective alternative to full replacement, extending service life while restoring reliability and performance. This approach mitigates near-term operational risk, stabilizes maintenance costs, and defers capital replacement while maintaining resilience.

Without refurbishment, there is a significant risk of unplanned downtime, potential safety impacts, and disruption to business-critical systems. Refurbishment will extend equipment life, restore operational reliability, improve performance, ensure compliance with current operational and safety standards, and reduce operational risk.

3.0 INVESTMENT DESCRIPTION

This investment addresses the lifecycle renewal and resiliency of common operating facilities at the ISOC and the BU-OGCC, which support Hydro One’s critical grid control and communication functions.

The ISOC investments include the replacement and upgrade of facility infrastructure such as the replacement of UPS batteries, the addition of a second backup generator, the installation of additional AHUs, roof refurbishment, the addition of a service elevator to the roof, and enhanced security.

The BU-OGCC investments include the replacement of the roof, the replacement of the elevator, the control room wallboard replacement and reconfiguration, and the backup generator refurbishment.

4.0 OUTCOMES

This investment will mitigate the risk of failure associated with common operating facilities that are essential to Hydro One's ability to control and monitor the electric grid via the ISOC or BU-OGCC on a 24/7 basis.

4.1 OEB RRF OUTCOMES

Table 1 presents anticipated benefits as a result of the proposed investment in accordance with the Ontario Energy Board's (OEB) Renewed Regulatory Framework (RRF).

Table 1 - Outcome Summary

Customer Focus	• Ensures reliable operation of the ISOC and BU-OGCC control centres, which in turn enables Hydro One to minimize outage durations and maintain effective communication with customers during system events. • Prevents control centre downtime (through improved backup power and infrastructure reliability), avoiding prolonged customer outages and improving service continuity and quality for customers.
Operational Effectiveness	• Provides the necessary facility infrastructure (resilient power supply, cooling, and physical building systems) to ensure the continuity and efficiency of Hydro One's real-time grid operations. • Mitigates the risk of UPS or generator failures and replaces aging equipment preemptively, reducing unplanned downtime at the control centres.
Public Policy Responsiveness	• Supports compliance with applicable reliability and security standards, thereby maintaining alignment with public policy requirements for grid reliability and security. • Enhanced backup power system (dual generators and refreshed UPS/batteries) ensures the control centre can remain functional as required by NERC EOP-008, and the improved physical security measures (e.g., access systems with reliable backup power) support compliance with NERC CIP standards for critical facilities. • Investing in these upgrades demonstrates Hydro One's commitment to prudent utility practice and the continuous improvement of infrastructure to meet or exceed regulatory obligations).

5.0 EXPENDITURE PLAN

Table 2 below summarizes Hydro One's forecast net capital expenditures for the 2028-2032 period.

Table 2 - Hydro One - Investment Expenditures

($M)	2028	2029	2030	2031	2032	Total
Gross Investment Expenditures	15.4	5.5	7.3	7.3	13.5	**49.0**
Less Removals	0.0	0.0	0.0	0.0	0.0	**0.0**
Less Capital Contributions	0.0	0.0	0.0	0.0	0.0	**0.0**
Net Investment Expenditures	**15.4**	**5.5**	**7.3**	**7.3**	**13.5**	**49.0**

The costs shown in the above table are based on estimates derived from previous replacements of common operating facilities and the anticipated technical specifications of new or upgraded common operating facilities.

Table 3 below summarizes Hydro One's net capital expenditures, including planned and forecast expenditures for the 2023-2027 rate period and planned expenditures for the 2028-2032 rate period. These expenditures are presented according to the investments described in Section 3.0 Investment Description.

Table 3 - Hydro One - Expenditures Continuity Over Rate Periods ($M)

Facility	Description	Plan[1] 23-27	Act/Fcst[2] 23-27	Total 28-32
BU-OGCC	Control room wallboard replacement and reconfiguration	0.0	0.0	10.0
	Roof replacement	0.0	0.0	6.0
	Other (elevator, refurbishment of two backup generators)	0.0	0.0	5.0
	BU-OGCC Total:	**0.0**	**0.0**	**21.0**
ISOC	Other (UPS batteries, roof repairs, lower roof elevator, enhanced perimeter security)	0.0	0.0	15.0
	Data room AHU/cooling enhancements	0.0	0.0	7.0
	Second backup generator	0.0	0.0	6.0
	ISOC Total:	**0.0**	**0.0**	**28.0**
Microgrid assessment		2.0	0.5	0.0
Total		**2.0**	**0.5**	**49.0**

2023-2027 EXPENDITURES

During the 2023-2027 rate period, Operating Technology Facilities Sustainment forecast expenditures are $1.5M lower than plan due to the cancellation of the control centre microgrid assessment.

2028-2032 EXPENDITURES

In the 2028-2032 period, Hydro One expects the expenditures to be $48.5M higher than the 2023-2027 Forecast due to investments in the ISOC (i.e., critical power resilience, facility sustainment and management, and physical security) and the BU-OGCC (i.e., replacement of the roof and elevator, control room wallboard enhancements, and backup generator refurbishment).

[1] "Plan" refers to Hydro One's revised capital expenditure and ISA forecast to implement the OEB-approved Settlement Proposal in EB-2021-0110. Plan includes expenditures previously mapped to different ISDs in EB-2021-0110, as further discussed in GSP Section 4.11.
[2] "Act/Fcst" refers to actual (2023-2025) and forecast (2026-2027) expenditures.

6.0 ALTERNATIVES

Hydro One considered the following alternatives before selecting the preferred option.

ALTERNATIVE 1: REACTIVE REPLACEMENT

Under this alternative, Hydro One would continue to operate the control centre facilities with existing equipment until failure and address issues reactively. This would avoid some near-term capital expenditures but is not prudent for critical systems. Running to failure creates a high likelihood of unplanned outages in control centre infrastructure – for example, in 2015 a UPS failure at one of Hydro One's control centres (the former Ontario Grid Control Centre) caused a fire and forced an evacuation of the control room, resulting in an eight-hour interruption of normal control centre operations and the need to transfer grid control to the backup site. Such incidents underscore that a lack of proactive replacement can directly compromise reliability and safety. Additionally, this approach would heighten the risk of non-compliance with reliability standards if a failure causes control centre downtime or loss of visibility/control of the grid. Therefore, the reactive strategy is not preferred for these critical assets.

ALTERNATIVE 2: LIFECYCLE REPLACEMENT OF COMMON OPERATING FACILITIES (RECOMMENDED)

This is the chosen alternative and forms the basis of the investment. It involves systematically replacing or upgrading the ISOC and BU-OGCC facility components as they reach end of life or exhibit declining performance and adding redundancy where necessary to eliminate single points of failure. This approach ensures that the control centres can continue to operate without interruption, even during external power outages or equipment failures. Notably, it includes installing the second ISOC backup generator to achieve N+1 redundancy in emergency power supply (greatly reducing the risk of a control centre outage) and timely replacement of UPS modules, batteries, and other building infrastructure to maintain high reliability. This proactive strategy is aligned with utility best practices and the foresight required by Hydro One's reliability and compliance commitments and is therefore the recommended option.

7.0 EXECUTION RISK AND MITIGATION

Replacing and upgrading critical infrastructure at live control centres must be carefully managed to avoid operational disruptions. Key risks include: potential for power or system interruptions during cutovers, long lead times for specialized equipment (e.g., large generators or UPS units), and integration challenges when commissioning new equipment alongside existing systems. Mitigation measures are in place to address these risks. Hydro One will undertake detailed planning and scheduling for all work: for instance, major installation and cutover activities will be scheduled during off-peak periods or when control centre functions can be temporarily transferred to the alternate site, ensuring no loss of control capability.

All new backup power equipment (e.g., generators, UPS) will be fully tested in off-line mode before being made operational, and temporary backup arrangements (such as portable generators or load banks) will be available on-site during the transition to safeguard against unforeseen issues. To manage procurement risk, Hydro One will initiate orders early for long-lead items (e.g., generator units and large batteries) to ensure timely delivery. The project team will include experienced engineers and vendors who have executed similar installations at critical facilities. By taking these precautions, Hydro One will minimize execution risks and ensure that the implementation of this investment is completed safely, on schedule, and without adversely affecting the real-time control of the grid.

G-GP-15	BU-OGCC & ISOC OFFICE REMEDIATION
Primary Trigger:	Safety
OEB RRF Outcomes:	Customer Focus, Operational Effectiveness, Public Policy Responsiveness

Net Capital Expenditures:

($M)	2028	2029	2030	2031	2032	Total
Hydro One	3.1	0.0	0.0	3.1	0.0	6.2

Summary:

Investments at the Backup Ontario Grid Control Centre (BU-OGCC) include an upgrade to the facility's main electrical equipment (original to 2003) and the replacement of aged furniture and fixtures in the backup control room and some meeting rooms. Investments in the BU-OGCC's main electrical system have been minimal since 2003 and limited to break-fix fixes; as the system ages, replacement parts are harder to find and reliability declines, risking more frequent failures and downtime at this critical backup facility. This investment will complete necessary remediation of deteriorated working space infrastructure and end of life systems (many components will be over 25 years old by the end of the planning period). Investments at the Integrated System Operations Centre (ISOC) include the installation of eight additional control room desks (workstations) to expand operating capacity. The primary driver is to mitigate operational as well as health and safety risks at these critical control facilities. By renewing the BU-OGCC's infrastructure and enhancing the ISOC's control room capacity, this investment will minimize disruptions to operations from equipment failure or workspace unavailability and ensure ongoing compliance with safety and building standards.

1.0 OVERVIEW

This investment funds several system upgrades and renovations at Hydro One's two control centre facilities – the Backup Ontario Grid Control Centre (BU-OGCC) and the Integrated System Operating Centre (ISOC). These remediations are required to address aging facility components, ensure a safe and code-compliant working environment, and provide adequate capacity for system control operations. Investments under this program include upgrading the electrical distribution system at the BU-OGCC to improve the reliability of power supply and support current loads, refurbishing or replacing furniture and fixtures (e.g., lighting) in the BU-OGCC control room that has deteriorated after decades of use, and installing eight new operator desks in the ISOC control room. These initiatives will ensure adequate health and safety performance in alignment with the latest Ontario Building Code requirements and Occupational Health and Safety Act (OHSA) standards for a 24/7 operations environment. The current cost forecast for this investment is approximately $6.2M over the 2028–2032 period.

2.0 INVESTMENT NEED

<u>BU-OGCC Facilities:</u>

The BU-OGCC is Hydro One's backup control facility for monitoring and controlling the transmission and distribution grid and has been operational 24/7 since its inception in 2003. While the facility has been maintained through routine repairs, several critical building and control room assets are approaching end of life and require replacement to maintain the facility's reliability and resilience.

Electrical System Upgrades

The BU-OGCC electrical distribution equipment will be approximately 25 years old by 2028 and is approaching the end of its useful life. Increasing equipment obsolescence, limited manufacturer support, and a growing risk of failure could affect the reliability of power supply to critical control room systems. Replacing these assets will maintain the facility's operational reliability, resilience, and safety.

Control Room Refurbishment

The BU-OGCC control room workstations are critical for operators to perform their functions when the BU-OGCC is activated. The existing workstations and furnishings, which have been in place since 2003, are showing signs of deterioration and no longer align with the configuration of Hydro One's primary control room at the ISOC. Refurbishment of the control room will replace aging infrastructure, improve workplace safety and ergonomics, and support a consistent operating environment between the primary and backup control facilities. These investments will enhance operator effectiveness and reduce operational risk during a transition of control between facilities.

ISOC Control Room Expansion

Increasing system complexity, outage coordination activities, transmission project volumes, and compliance requirements are expected to increase demands on the ISOC during the 2028-2032 period. Hydro One is therefore proposing to install eight additional control room workstations to ensure sufficient capacity and operational flexibility to support reliable and efficient grid operations as workload requirements continue to grow.

3.0 INVESTMENT DESCRIPTION

This investment will remediate and replace components at the BU-OGCC and expand the capacity of the ISOC control room, through a staged approach aligned with operational needs.

At the BU-OGCC, the project will upgrade the facility's electrical system and refurbish the control room environment. Specifically, the main electrical distribution panels and associated switchgear (installed in 2003) will be replaced or overhauled to restore like-new reliability and ensure the backup centre can run continuously without power interruptions. The backup control room consoles and furniture will be replaced or retrofitted with modern, ergonomically adjustable units (e.g. sit/stand operator desks) to reduce the risk of musculoskeletal injuries for staff working 12-hour shifts. Worn or damaged interior finishes (such as threadbare carpeting and scuffed walls) will be renewed, and any deficient fixtures (lighting, safety signage, etc.) will be brought up to current standards. These facility upgrades at the BU-OGCC will mitigate health and safety

hazards associated with an aging workplace and improve the reliability of critical support systems.

At the ISOC, the investment will deliver eight new control room desk positions complete with the necessary operator console equipment and wiring. This will involve reconfiguring a portion of the existing control room floor (which was designed to allow for future expansion) to add the additional consoles. Supporting infrastructure – such as network connections, video wall integration, and ergonomic seating – will be provided so that the new positions are fully functional and meet the standards of the original control room design. By building out these extra consoles, Hydro One will ensure the ISOC has the physical infrastructure to host all the operators required for the more complex and expanded grid operations expected as the system evolves (for example, integration of new Distributed Energy Resources, increased outage coordination with third parties, etc.).

4.0 OUTCOMES

4.1 OEB RRF OUTCOMES

Table 1 presents anticipated benefits as a result of the proposed investment in accordance with the Ontario Energy Board's (OEB) Renewed Regulatory Framework (RRF).

Table 1 - Outcome Summary

Customer Focus	• Benefits Hydro One customers by minimizing the risk of interruptions to operations at the BU-OGCC, which helps oversee the reliable operation of the transmission and distribution power systems.
Operational Effectiveness	• Ensure that electrical building infrastructure is replaced in a timely manner to minimize disruption to operations resulting from the unavailability of the office equipment or facility.
Public Policy Responsiveness	• Align with objectives set out in the Ontario Building Code that aim to minimize preventable safety risks inside and outside of Ontario buildings. • Address Occupational Health and Safety considerations to ensure staff are provided with the appropriate tools to prevent injury (i.e., accessibility)

By improving the physical condition and reliability of the BU-OGCC and expanding ISOC's capabilities, this project will enhance safety (for employees and the public), reliability of

grid operations, and compliance with regulatory standards – all of which ultimately benefit customers through more consistent and resilient service.

5.0 EXPENDITURE PLAN

Table 2 below summarizes Hydro One's forecast net capital expenditures for the 2028-2032 period.

Table 2 - Hydro One - Investment Expenditures

($M)	2028	2029	2030	2031	2032	Total
Gross Investment Expenditures	3.1	0.0	0.0	3.1	0.0	6.2
Less Removals	0.0	0.0	0.0	0.0	0.0	0.0
Less Capital Contributions	0.0	0.0	0.0	0.0	0.0	0.0
Net Investment Expenditures	**3.1**	**0.0**	**0.0**	**3.1**	**0.0**	**6.2**

The BU-OGCC electrical overhaul is scheduled for 2028, immediately after required preparatory work and once the ISOC has adequate capacity to host any displaced staff. The ISOC desk installation is planned for 2031 to align with the timing of peak growth in control room staff. BU-OGCC interior renovations will also occur in 2031. This phasing minimizes operational disruption and matches the investment to when it's needed.

Table 3 below summarizes Hydro One's net capital expenditures, including planned and forecast expenditures for the 2023-2027 rate period and planned expenditures for the 2028-2032 rate period.

Table 3 - Hydro One - Expenditures Continuity Over Rate Periods ($M)

Description	Plan[1] 23-27	Act/Fcst[2] 23-27	Total 28-32
BU-OGCC electrical upgrades	0.0	0.0	2.7
Additional ISOC work stations, replacement BU-OGCC control room work stations, and other interior office reconfigurations, repairs, modifications	0.0	0.0	3.5
BU-OGCC remediation	2.1	2.0	0.0
Total	**2.1**	**2.0**	**6.2**

2023-2027 EXPENDITURES

During the 2023-2027 rate period, Capital expenditures are $0.1M below plan, representing no material variance.

2028-2032 EXPENDITURES

In the 2028-2032 period, Capital expenditures are forecast to be $4.2M higher than the 2023-2027 Forecast, primarily due to additional control room remediation work and investments required to support projected staffing growth. The increase reflects remediation work that is separate from the support staff office improvements completed during the 2023-2027 period and includes BU-OGCC electrical and interior improvements, as well as the installation of ISOC desks in 2031 to accommodate peak control room staffing levels.

6.0 ALTERNATIVES

Hydro One considered the following alternatives before selecting the preferred option.

ALTERNATIVE 1: STATUS QUO

Under this alternative, Hydro One would defer or avoid making any major investments in the BU-OGCC and ISOC facilities at this time, continuing to address issues only on a reactive repair basis. This alternative is not recommended because it would perpetuate significant risks, and operators might be forced into makeshift arrangements that hinder efficiency.

[1] "Plan" refers to Hydro One's revised capital expenditure and ISA forecast to implement the OEB-approved Settlement Proposal in EB-2021-0110.
[2] "Act/Fcst" refers to actual (2023-2025) and forecast (2026-2027) expenditures.

The BU-OGCC's office environment, if left in its current deteriorated state, could progressively worsen – increasing the likelihood of safety incidents (for example, unsafe workstations) and equipment failures (such as power outages from aging electrical gear). The lack of planned renewal since 2003 has already led to a backlog of deficiencies; continuing with a run-to-failure approach would likely result in unplanned outages or operational limitations at the BU-OGCC. Such an outcome could jeopardize Hydro One's ability to rely on the backup control centre in an emergency, undermining the company's compliance with NERC reliability standards (e.g., EOP-008 requires a fully functional backup control center) and the overall resilience of grid operations.

Additionally, without additional operator console capacity in the ISOC, the efficiency and effectiveness of grid operations could be compromised. Not expanding the ISOC control room would mean that, as work volume and staffing increase, the facility would become overcrowded and potentially non-compliant with ergonomic and safety best practices. The do nothing option would therefore fail to address known asset end of life conditions and capacity shortfalls, and is incompatible with Hydro One's obligation to maintain safe, reliable operations.

ALTERNATIVE 2: REMEDIATE BU-OGCC BUILDING SYSTEMS AND ISOC CONTROL ROOM DESKS (RECOMMENDED)

This alternative is the proposed investment plan described in Section 3.0. It involves a targeted renewal of the BU-OGCC building systems and completing the ISOC control room desk expansion. This approach effectively mitigates the issues identified: it will modernize the electrical supply and interior conditions at the BU-OGCC to address health, safety, and reliability risks (e.g., aging equipment, worn-out work areas). It also provides a cost-effective capacity solution at the ISOC by using the existing facility's design provisions for additional desks.

By timing the BU-OGCC electrical upgrades to occur after the ISOC is fully in service, Hydro One can use the new primary control centre to temporarily host operations and personnel during renovations, avoiding the need for a costly third-party contingency site or complex workarounds. The recommended alternative not only addresses the needs but does so in a way that minimizes operational disruption and cost. With the ISOC available,

major maintenance at the BU-OGCC can be performed with staff relocated to the ISOC (or working in sections of the BU-OGCC not under construction), ensuring continuous control room coverage without renting a separate facility. Overall, this alternative is the most cost effective and lowest-risk solution to the identified problems – it rehabilitates rather than replaces the BU-OGCC (leveraging the existing asset), and it incrementally expands the ISOC instead of tolerating a future capacity shortfall.

No other alternative was identified that would meet the investment objectives. A full replacement or relocation of the BU-OGCC was not considered viable given the substantially higher cost and the planned continued use of the facility. The BU-OGCC's issues can instead be addressed through targeted remediation at a fraction of the cost of a new building. Partial measures, such as replacing only some components or further delaying work, were also deemed impractical due to the comprehensive nature of the deficiencies – patchwork fixes would not sufficiently reduce the risks. The recommended plan addresses all critical needs holistically.

7.0 EXECUTION RISK AND MITIGATION

The primary execution risks associated with the BU-OGCC and ISOC Office Remediation investment include unforeseen site conditions, operational disruptions during construction, schedule delays, and cost escalation. These risks are heightened by the need to complete work within active system operations facilities while maintaining continuous availability of control centre functions.

To mitigate these risks, Hydro One will undertake pre-engineering inspections and testing to inform project planning and identify potential site constraints. The work will be completed while the ISOC remains the primary control facility, allowing portions of the BU-OGCC to be renovated in a controlled and phased manner. Critical system cutovers will be planned and tested, and Hydro One will apply established procurement, project management, and cost-control practices to support safe, timely, and cost-effective project delivery.

G-GP-16	ENERGY MANAGEMENT SYSTEM INVESTMENTS
Primary Trigger:	Reliability
OEB RRF Outcomes:	Operational Effectiveness, Public Policy Responsiveness

Net Investment Expenditures[1]:

($M)	2028	2029	2030	2031	2032	Total
Hydro One	14.0	14.3	12.0	13.5	12.0	**65.7**

Prepaid Expenditures Related to Cloud:

($M)	2028	2029	2030	2031	2032	Total
Hydro One	2.8	1.1	2.1	0.0	0.0	**6.0**

Summary:

Hydro One's Energy Management System (EMS), formerly the Network Management System (NMS), is the mission-critical, 24/7 real-time platform that enables monitoring and control of the transmission system, including the Ontario Bulk Electric System (BES), and supports compliance with regulatory requirements, standards, and operating agreements.

This investment reflects the established lifecycle need for periodic EMS platform updates, typically undertaken on a 5- to 7-year cycle to maintain system reliability, vendor support, and cybersecurity posture. It also includes targeted enhancements to improve operator effectiveness and operational efficiency, while addressing the increasing complexity associated with Ontario's planned transmission system expansion. These enhancements include capabilities such as automated switching, intelligent alarm management, and process automation. The investment further incorporates cybersecurity improvements to address evolving threat risks and maintain alignment with current security standards and regulatory expectations.

The investment will be delivered through a structured, phased implementation over the investment period, moderating capital costs and implementation risk while supporting effective change management and maintaining continuous system reliability and alignment with vendor support and obsolescence cycles.

[1] Figures presented in the tables may not sum to the totals shown due to rounding.

1.0 OVERVIEW

Hydro One's Energy Management System (EMS) is the mission-critical, 24/7 real-time monitoring and control platform used to operate the transmission system, including the Ontario Bulk Electricity System (BES). This Investment Summary Document supports Hydro One's request for capital and prepaid cloud expenditures over the planning period to undertake the next lifecycle upgrade of the EMS, consistent with the established 5-7-year refresh cycle required to maintain system reliability, vendor support, cybersecurity, and platform currency. With the previous EMS upgrade placed in service in 2022, the platform is approaching its next planned lifecycle renewal. The investment also includes targeted enhancements to support increasing operations efficiency and effectiveness and respond to increasing operational complexity associated with significant transmission system expansion across the province. Planned capabilities, including automated switching, intelligent alarm management, and process automation, will improve operational efficiency, support system scalability, and enhance operator effectiveness. The proposed incremental modernization approach is intended to reduce delivery risk, avoids reliance on large single-phase implementations, and enable the EMS to evolve in-step with changing operational and regulatory requirements.

Hydro One's transmission grid is the backbone of Ontario's electricity system, serving 34 LDCs, 88 large direct-connected customers, and 139 generators (including nuclear and hydroelectric). The EMS provides system operators with the capabilities required to monitor grid conditions, manage power flows, execute switching operations, identify and respond to system events, and maintain compliance with applicable reliability standards, regulatory requirements, and operating agreements. The EMS integrates thousands of communication points across transmission equipment located throughout the province, enabling centralized monitoring and control from the Integrated System Operations Centre (ISOC) and the Backup Ontario Grid Control Centre (BU-OGCC). It also maintains critical external interfaces with organizations such as the Independent Electricity System Operator (IESO), Ontario Power Generation (OPG), and Local Distribution Companies (LDCs), supporting coordinated operation of the power system.

In addition, the EMS supports network applications, including state estimation, contingency analysis, and remedial action modelling. These capabilities are essential for

the safe, efficient, and reliable operation of Ontario's transmission grid and its five interconnections (Manitoba, Quebec, and three to the United States of America), which form part of the Northeast Power Coordinating Council (NPCC) region. As a result, the availability and functionality of the EMS are critical not only to Ontario's BES, but also to the reliability of the broader interconnected grid.

The EMS platform comprises software applications, supporting infrastructure, and an integrated digital model of the transmission system:

- Software applications include the Supervisory Control and Data Acquisition (SCADA) for real-time monitoring and control, as well as grid applications that provide analytical and decision support capabilities (e.g., contingency analysis, state estimation, remedial action schemes, and dynamic thermal rating), along with systems that enable communication between control centres and field devices.
- Infrastructure consists of servers and systems that host EMS applications and databases, enable secure data exchange with external entities (e.g., IESO, OPG, and LDCs), and support the transmission of SCADA data and control signals across the power system.
- The EMS is also supported by a digital twin of the transmission network, developed through a Network Model Manager (NMM) platform and associated data layers, which enables accurate system modelling for both real-time operations and planning purposes.

2.0 INVESTMENT NEED

The need for this investment is driven by the requirement to support the ongoing lifecycle management of the EMS and includes implementing periodic platform updates that are essential to maintaining system reliability, optimizing operational efficiency, enhancing cybersecurity resilience, and ensuring compliance with applicable regulatory requirements and market rules including:

- North American Electric Reliability Corporation (NERC) Reliability Standards -- NERC TOP-001-6 R10 and R13 govern the standards for monitoring and frequency of real-time assessments of the transmission system.

- IESO Market Rules Chapter 5 (Power System Reliability), including requirements related to system monitoring, dispatch, outage management, outage coordination, operating communications, emergency operations, and restoration activities, as well as Market Manuals 7.1 and 7.4 governing operational reliability and cybersecurity requirements applicable to the IESO-controlled grid.
- OEB Transmission System Code – OEB Transmission System Code Section 5.4 sets out a transmitter's performance requirements under emergency operations conditions. Section 3.B sets out reliability and integrity requirements and the need to comply with Ontario's Cyber Security Standard and Framework and protection of both system operations and personal information.

Periodic upgrades are a necessary component of lifecycle management for critical operational systems such as the EMS, ensuring ongoing compatibility with evolving technologies, and the ability to address emerging cybersecurity risks. The EMS was placed in service in 2022; planning for its next refresh in the planning period is consistent with the established 5-to-7-year lifecycle management approach required to maintain system performance and supportability. This planning horizon aligns with vendor support and product maintenance cycles, under which software updates, security patches, hardware compatibility, and technical support become progressively more constrained as systems age. Deferring these refresh cycles materially increases risks to system security, reliability, and regulatory compliance, limits the EMS's ability to adapt to and integrate with evolving system conditions, and reduces its effectiveness in supporting safe and efficient grid operations.

In addition to lifecycle management upgrades, there is an ongoing need to enhance the EMS to improve operator effectiveness, increase operational efficiency, and ensure the platform can support the evolving requirements of Ontario's transmission system. As Hydro One's primary real-time operational platform, the EMS plays a critical role in maintaining the safe and reliable operation of the transmission system by providing operators with the information and tools required to monitor, assess, and respond to system conditions. The importance of the EMS is reflected in its scale of use. In 2025, the system supported over 20,000 transmission operator activities, including worker safety-

related actions for de-energizing equipment, switching transmission assets in and out of service, responding to transient system conditions, and other real-time network reconfigurations. During the same period, the EMS generated over 300,000 Priority 1 alarms requiring immediate operator attention and assessment, providing operators with critical information to maintain situational awareness and respond to changing system conditions.

The demands placed on operators will continue to increase as Ontario's transmission system expands. As identified in Hydro One's Transmission System Plan (TSP Section 2.1, Table 1), significant transmission investments are planned across the province during the planning period, increasing the number of assets, operating configurations, and system conditions that must be monitored and managed in real time. Accordingly, continued investment in EMS enhancements is required to support operational performance and enable operators to effectively manage this evolving network. Capabilities such as more intelligent alarm management, increased automation, advanced decision-support tools, and enhanced situational awareness will improve operator effectiveness and efficiency, reduce routine administrative workload, and strengthen Hydro One's ability to operate an expanding and increasingly complex transmission system while maintaining high standards of safety and reliability.

The primary outcome of this investment is the completion of a regular lifecycle refresh of the EMS, ensuring the platform remains current, supported, and capable of reliably operating Ontario’s evolving transmission system. By maintaining alignment with vendor support cycles and modern technology standards, this investment reduces operational risk, improves system resilience, and enables a more sustainable, incremental upgrade model. This approach avoids large, single-phase implementations, supporting continuous improvement, reducing disruption to control room operations, and ensuring ongoing alignment with operational and regulatory requirements. Through this lifecycle refresh, the EMS will be positioned to support the increasing complexity of the grid, including electrification and anticipated load growth.

This lifecycle refresh investment will:

- Sustain high reliability and availability of the EMS platform supporting 24/7 grid operations;
- Enhance cybersecurity resilience through modernized infrastructure, supported software, and improved system architecture, while reducing cyber risk exposure associated with aging hardware and legacy operating systems;
- Improve operational efficiency through enhanced automation, modeling tools, and workflows;
- Increase ability to support planned large-scale transmission expansion and system complexity;
- Improve agility and scalability of EMS support functions to meet future grid demands; and
- Maintain compliance with regulatory requirements, operating agreements, and current cybersecurity standards.

In addition to maintaining platform currency and reliability, the planned investment delivers important enhancements to improve operator effectiveness and efficiency and respond to the expansion of the transmission system:

- **Enhanced system visibility:** Expanded integration of Phasor Measurement Unit (PMU) Synchrophasor data through upgraded, modular monitoring systems to improve real-time situational awareness
- **Improved flexibility and resilience:** A more modular platform architecture that reduces the cost, duration, and operational impact of future upgrades
- **Advanced state estimation:** Implementation of the latest state estimation software to improve system robustness, reduce downtime, and enhance operator awareness
- **Modernized data modelling:** Introduction of an updated data modelling framework that simplifies processes and removes bottlenecks, supporting timely in-service of new transmission assets
- **Expanded automation capabilities and improved alarming:** Increased use of automation, including enhanced automatic voltage control, to improve control room decision-making and operational efficiency

- **Automated switching and restoration support:** Deployment of automated switching capabilities to reduce potential manual errors and improve efficiency, including the ability to establish system “cranking paths” following a blackout, strengthening emergency preparedness and system restoration

3.0 INVESTMENT DESCRIPTION

3.1 APPROACH

The proposed approach to delivering this investment is based on a series of structured upgrades to the existing EMS, implemented in phases over the planning period. This structured approach moderates capital expenditures, reduces implementation risk, and supports effective organizational change management. It also enables the EMS to evolve in a controlled manner while maintaining uninterrupted operational reliability and ensuring alignment with vendor support and obsolescence management cycles. The approach includes:

- Core EMS software upgrades to maintain vendor supportability and align with current standards;
- Targeted infrastructure renewals (servers, storage, operating system, and network components) aligned with lifecycle requirements;
- Incremental data and model updates to ensure continued accuracy and performance of real-time operations;
- Controlled introduction of enhanced and new capabilities (e.g., enhanced visualization, improved alarm management, analytics, or integration points) delivered in modular increments;
- Interface and integration updates to maintain compatibility with connected operational and market systems; and
- Testing, training, and readiness activities embedded throughout to ensure operators and support teams adapt safely to changes

3.2 SCOPE

The scope of the investment includes:

Infrastructure Updates

- Building and deploying new virtualized server environments hosted on Hydro One premises to support EMS applications, communications/control auxiliaries, data modelling and interfacing data architecture; and
- Upgrading of all operating systems across all EMS components to supported secure versions.

Security Architecture Updates

- Implementing a security architecture that is micro segmented to align with modern cybersecurity best practices; and
- Integrating updated security controls compatible with modern operating systems and applications.

Core EMS Software and Application Upgrades

- Upgrading of SCADA system and analytical applications, Contingency Analysis, State Estimation, and Remedial Action Scheme;
- Rationalizing and consolidating functionality and right sizing the number of custom solutions to reduce complexity and improve maintainability;
- Adding targeted software modules in response to system expansion and complexity including alarming applications to improve operator situational awareness, automated switching modules to aid in a variety of applications with use cases ranging from automated voltage control to power restoration, and automated modeling to minimize support activities;
- Upgrading the network modelling tool along with the supporting infrastructure;
- Implementing a data integration layer that enables connecting data from various applications across Information Technology (IT) and Operating Technology (OT) and creating foundation for Artificial Intelligence (AI) and Machine Learning (ML) to drive grid automation use cases; and

- Developing of AI and predictive analytics capabilities and implementation of the predictive analytics tools

4.0 OUTCOMES

4.1 OEB RRF OUTCOMES

Table 1 presents anticipated benefits as a result of the proposed investment in accordance with the Ontario Energy Board's (OEB) Renewed Regulatory Framework (RRF).

Table 1 - Outcome Summary

Operational Effectiveness	• Sustains the currency, reliability, and availability of the EMS platform; • Improves operational situational awareness by improving alarm management and providing line-of-sight to new operating tools; • Improves operational efficiency through additional switching automation; • Enhances cybersecurity resilience through modernized infrastructure, supported software, and improved system architecture, while reducing cyber risk exposure associated with aging hardware and legacy operating systems; • Improves operational efficiency through enhanced automation, modelling tools, and workflows; • Increases ability to support transmission expansion and system complexity; and • Improves agility and scalability of EMS support functions to meet future grid demands.
Public Policy Responsiveness	• Maintains compliance with OEB Transmission System Code (Section 5); • Maintains compliance with IESO Market Rules Chapter 5 (Power System Reliability), including requirements related to system monitoring, dispatch, outage management, outage coordination, operating communications, emergency operations, and restoration activities, as well as Market Manuals 7.1 and 7.4 governing operational reliability and cybersecurity requirements applicable to the IESO-controlled grid; • Maintains compliance with NERC standards TOP-001-6 R10 and R13; and • Responds to increased transmission expansion and associated operating, scaling, and modelling demands described in Ontario's Integrated Energy Plan (2025).

5.0 EXPENDITURE PLAN

Table 2 below summarizes Hydro One's forecast net capital and prepaid expenditures for the 2028-2032 period.

Table 2 - Hydro One - Investment Expenditures[2]

($M)	2028	2029	2030	2031	2032	Total
Gross Capital Expenditures	14.0	14.3	12.0	13.5	12.0	**65.7**
Less Removals	0.0	0.0	0.0	0.0	0.0	**0.0**
Less Capital Contributions	0.0	0.0	0.0	0.0	0.0	**0.0**
Net Capital Expenditures	14.0	14.3	12.0	13.5	12.0	**65.7**
Prepaid Expenditures Related to Cloud	2.8	1.1	2.1	0.0	0.0	**6.0**

Table 3 below summarizes Hydro One's net capital and prepaid expenditures, including planned and forecast expenditures for the 2023-2027 rate period and planned expenditures for the 2028-2032 rate period. These expenditures are presented according to the investments described in Section 3.0 Investment Description.

Table 3 - Hydro One - Expenditures Continuity Over Rate Period ($M)[3]

Description	Capital Expenditures			Prepaid Expenditures		
	Plan[4] 23-27	Act/Fcst[5] 23-27	Total 28-32	Plan 23-27	Act/Fcst[5] 23-27	Total 28-32
Upgrade of core control system software	10.2	17.4	51.3	0.0	0.0	0.0
Upgrade OT system infrastructure	3.8	3.9	0.0	0.0	0.0	0.0
Addition of key strategic software modules to enable Hydro One as the grid evolves	0.0	0.5	14.4	0.0	0.0	6.0
Total	**14.0**	**21.7**	**65.7**	**0.0**	**0.0**	**6.0**

[2] Figures presented in the tables may not sum to the totals shown due to rounding.
[3] Figures presented in the tables may not sum to the totals shown due to rounding.
[4] "Plan" refers to Hydro One's revised capital expenditure and ISA forecast to implement the OEB-approved Settlement Proposal in EB-2021-0110. Plan includes expenditures previously mapped to different ISDs in EB-2021-0110, as further discussed in GSP Section 4.11.
[5] "Act/Fcst" refers to actual (2023-2025) and forecast (2026-2027) expenditures.

2023-2027 EXPENDITURES

Over the last rate period, Hydro One expects forecast expenditures to be $7.7M higher than plan due to incremental modelling improvements. Testing resources were also required to address data-related application issues for the state estimator. These two elements account for $7.6M of this prior rate period variance.

2028-2032 EXPENDITURES

While a comparison of the last rate period and the planning period indicates a variance of approximately $50M, this comparison reflects the timing of earlier upgrade cycles rather than a material escalation in program scope. Most expenditures associated with the previous NMS/EMS upgrades were incurred during the 2018-2022 rate period, with only residual activities extending into 2023. When accounting for the $50.2M in-service capital within the last rate period related to the prior initiative, the incremental investment planned for planning period represents a more moderate increase of approximately $7.5M. This adjusted comparison more accurately reflects the transition from completion of a prior upgrade cycle to the initiation of the next planned refresh.

The planning period annual net investment cost estimates presented in Table 2 and Table 3 are based on prior EMS upgrade initiatives and the addition of key strategic software modules intended to address efficiency, effectiveness, and planned transmission expansion needs, supplemented by current vendor pricing and projections. The total forecast investment represents a combination of the following cost components:

- Hardware investments required to enable updated infrastructure and meet evolving system and performance requirements;
- Software licensing costs associated with both upgraded and newly implemented EMS applications;
- External vendor and partner services, including specialized expertise in application configuration, integration, and supporting infrastructure;
- Comprehensive testing and validation activities, including system integration testing, performance and reliability testing, cybersecurity (penetration) testing, and user acceptance testing;

- Process automation and system implementation efforts designed to enhance operational workflows, improve system efficiency, and support standardization; and
- Project delivery and implementation resources.

As the project advances through the planning, design, and execution phases, actual cost outcomes may be influenced by both external and internal factors. External factors include potential changes in regulatory, compliance, and cybersecurity requirements, as well as variability in vendor pricing, software licensing models, and hardware market conditions. These factors may affect project scope, solution design, and overall cost levels. Internal factors include the ongoing refinement of scope, technical requirements, and cost estimates as initiatives mature; evolving system architecture and integration considerations within Hydro One's technology environment; and the availability, coordination, and sequencing of specialized resources required to implement changes while maintaining the reliability and continuity of mission-critical operations.

6.0 ALTERNATIVES

Hydro One considered the following alternatives before selecting the preferred undertaking.

ALTERNATIVE 1: STATUS QUO

The Status Quo alternative is not recommended. Failure to undertake a regular lifecycle investment in the EMS presents several material operational, technical, and regulatory risks, particularly given the mission critical nature of the system.

Key risks include:

- **Reduced system reliability and resilience:** Aging hardware and software components increase the likelihood of failures, degraded performance, and extended recovery times, which can directly impact real-time grid monitoring and control capabilities

- **Cybersecurity vulnerabilities:** Outdated platforms are more susceptible to evolving cyber threats, including unpatched vulnerabilities and lack of alignment with current security standards, increasing the risk of system compromise.
- **Loss of vendor support and obsolescence:** As systems age, vendor support, patches, and updates may be reduced or discontinued, limiting the ability to address defects, maintain performance, or respond to emerging requirements.
- **Regulatory non-compliance:** Outdated platforms may result in nonalignment with evolving regulatory, reliability, and cybersecurity requirements, exposing the organization to compliance risk.
- **Operational inefficiencies and increased maintenance costs:** Legacy systems require greater manual intervention, custom workarounds, and higher ongoing support costs, reducing operational efficiency over time.
- **Integration limitations and reduced scalability:** Older platforms do not effectively integrate with newer enterprise systems or support increasing data volumes and operational complexity, constraining future capabilities.
- **Increased risk of unplanned and reactive capital investments:** Deferring planned lifecycle investments increases the likelihood of forced, time sensitive replacements under adverse conditions, often at a higher cost and with greater operational risk

Not proceeding with the investment in the EMS, therefore, is not recommended.

ALTERNATIVE 2: IMPLEMENT EMS LIFECYCLE INVESTMENTS AND DEFER TARGETED ENHANCEMENTS TO A FUTURE RATE PERIOD

Under this alternative, Hydro One would proceed with the core EMS lifecycle investments required to maintain vendor support, renew critical infrastructure, and sustain the reliability and cybersecurity of the existing platform, while deferring implementation of targeted enhancements to a future rate period.

This alternative was evaluated and rejected because it would not represent a prudent approach to meeting the evolving operational needs of the transmission system. The transmission system is critical electricity infrastructure, and its reliable, secure, and

efficient operation is fundamental to serving customers and supporting economic activity across Ontario. As the primary tool used to monitor and operate the transmission system in real time, the EMS must continue to evolve to support an increasingly complex transmission network. As the system expands, the number of assets, operating configurations, and system conditions that control room staff must manage will continue to increase. In addition, advancements in EMS technology provide opportunities to enhance operational effectiveness through greater automation, improved alarm management, enhanced visualization, and strengthened decision-support capabilities. Deferring these enhancements for more than five years would postpone achievable operational benefits and increase the risk that EMS capabilities would not keep pace with evolving operational requirements. It would also forgo opportunities to improve the efficiency, consistency, and effectiveness of real-time system operations. Consequently, the deferment alternative was not considered a prudent balance of cost, operational performance, and long-term system needs. Key risks and limitations include:

- **Foregone modernization and operational efficiency benefits:** Deferring targeted enhancements would require continued reliance on decades-old EMS tools and capabilities, limiting Hydro One's ability to leverage modern technologies, enhanced automation, and evolving industry practices. As a result, opportunities to improve operator effectiveness, streamline workflows, reduce manual activities, and enhance overall control room performance would be significantly delayed.
- **Foregone situational awareness and decision support improvements:** Deferring enhancements to alarm management, visualization, and data integration capabilities would postpone opportunities to improve operator situational awareness and decision support. These enhancements are intended to help operators more efficiently assess system conditions, manage increasing volumes of operational information, and support more effective real-time decision-making.
- **Increased future implementation complexity and cost:** Deferring targeted enhancements would likely necessitate separate future implementation efforts, resulting in duplicated project activities (planning, testing, training, change management) and increased lifecycle costs. It could also reduce alignment with the EMS vendor's modular product roadmap, potentially increasing future

integration complexity, implementation risk, and the effort required to deploy new functionality.

- **Reduced readiness for future operational requirements:** Deferral would limit Hydro One's ability to proactively prepare the EMS for evolving operational needs and growing transmission system demands, increasing the risk of future capability gaps and reducing operational flexibility.

While this alternative maintains the core reliability and supportability of the EMS, it does not adequately position the EMS platform to support the operational demands of a growing and increasingly complex transmission system. Accordingly, this alternative is not recommended.

ALTERNATIVE 3: IMPLEMENT EMS LIFECYCLE INVESTMENTS AND TARGETED ENHANCEMENTS IN A PHASED MANNER OVER THE 2028-2032 INVESTMENT PERIOD (RECOMMENDED)

The recommended alternative is to proceed with a phased implementation of both the EMS lifecycle refresh and targeted enhancements over the planning period. This approach enables Hydro One to maintain a reliable, secure, and supportable EMS platform while enhancing operational capabilities needed to support ongoing operational efficiency and effectiveness, as well as the continued evolution of Ontario's electricity system. Key benefits of the recommended alternative include:

- **Maintains system reliability and vendor supportability:** Lifecycle upgrades ensure that critical EMS infrastructure, software, and supporting technologies remain current, supported, and aligned with vendor maintenance and security requirements.
- **Enhances cybersecurity resilience:** Upgraded infrastructure, operating systems, software platforms, and security architecture reduce exposure to evolving cyber threats and support alignment with current cybersecurity standards and regulatory expectations.
- **Improves operational efficiency:** Targeted enhancements such as automated switching, intelligent alarm management, and process automation reduce manual activities, support operational consistency, and improve the efficiency of control room and support functions.

- **Improves operator situational awareness:** Enhanced alarm management, analytics, visualization, and data integration capabilities support faster identification and response to system events and changing operating conditions.
- **Supports Transmission System Expansion:** The proposed enhancements will help ensure EMS capabilities evolve alongside transmission system expansion, improving Hydro One's ability to efficiently manage future growth and increasing operational demands.
- **Enables future grid modernization capabilities:** The implementation of a data integration layer and associated analytics capabilities establishes a foundation for future grid automation, predictive analytics, artificial intelligence, and other advanced operational tools.
- **Improves implementation efficiency and reduces lifecycle costs:** Delivering strategic enhancements in conjunction with the planned EMS refresh allows implementation, testing, training, and change management activities to be coordinated through a single program, reducing duplication and overall delivery risk.
- **Provides a balanced and prudent investment approach:** The phased delivery model over the investment period moderates capital expenditures, supports effective organizational change management, and reduces implementation risk while maintaining continuous operational reliability.

In summary, the recommended alternative represents a prudent and cost-effective approach that maintains the reliability, security, and supportability of Hydro One's mission-critical EMS platform while delivering targeted operational enhancements that improve operator effectiveness, operational efficiency, and future readiness. Accordingly, this alternative is recommended.

7.0 EXECUTION RISK AND MITIGATION

Table 4 below summarizes execution risks and mitigations for these investments.

Table 4 - Execution Risks and Mitigations

Execution Risk	Mitigating Action
• **Operational disruption during cutover** Risk: Transitioning from legacy EMS to the new system could impact real-time grid operations or system availability.	• Phased implementation with parallel run. • Cutover during low-risk operating windows. • Detailed roll-back procedures tested in advance. • Operator participation in system testing and simulation exercises.
• **Data Migration Errors** (Models, Telemetry, Historical Data) Risk: Incorrect or incomplete migration of network models, telemetry data, or historical data may affect system accuracy and decision-making.	• Automated data validation and reconciliation scripts. • Side-by-side comparison of state estimation and power flow results. • Model change restrictions during pre-migration freeze periods.
• **Insufficient operator readiness and adoption** Risk: Operators may not be fully comfortable with the new EMS interface, workflows, or tools, increasing operational risk post-implementation.	• Early and continuous operator engagement. • Role-based training using real operational scenarios. • Simulator-based training prior to production use. • Extended hyper-care with on-site vendor supervision.
• **Integration failures with external systems** Risk: Interfaces with external systems may not function as expected	• Early definition of interface contracts and data ownership. • End-to-end integration testing in a production-like environment.
• **Cyber security vulnerabilities introduced during transition** Risk: Temporary configurations, parallel environments, or new integrations may introduce security vulnerabilities.	• Penetration testing and vulnerability scans before going live. • Application of the principle of least privilege from initial design through implementation to ensure appropriate access control and minimize security risk • Security Office sign off as a formal go-live gate.
• **Schedule delays due to Scope Creep** Risk: Additional requirements discovered during implementation can extend timelines and increase cost.	• Clearly defined scope baseline with formal change control. • Separation of must-have features vs post-go-live enhancements. • Strong product and project management and governance.

Execution Risk	Mitigating Action
• **Vendor dependency and knowledge concentration** Risk: Over-reliance on the vendor during implementation may limit internal capabilities and long-term sustainability.	• Knowledge transfer embedded into vendor contract. • Comprehensive documentation requirements. • Internal capability development plan before project closing.
• **Performance or Scalability issues under peak conditions** Risk: The new EMS may not perform as expected under peak conditions, high telemetry volume or contingency scenarios.	• Stress and performance testing using the worst-case scenarios. • Scalability testing aligned with future grid growth assumptions. • Hardware and infrastructure sizing with growth buffers. • Clear performance acceptance criteria.
• **Vendors Resource Availability** Risk: Unforeseen vendor resource availability	• Include resource commitments, service levels, and escalation provisions within vendor agreements • Confirm key vendor resources in advance of critical project phases • Implement regular status reviews and performance monitoring to identify and address issues early.
• **Cost Risk**	• Cost risks will be mitigated through established project governance and change control processes, phased delivery, procurement practices, and regular monitoring of cost forecasts throughout the project lifecycle

G-GP-19	GRID CONTROL NETWORK SUSTAINMENT
Primary Trigger:	Reliability
OEB RRF Outcomes:	Customer Focus, Operational Effectiveness, Financial Performance

Net Capital Expenditures:

($M)	2028	2029	2030	2031	2032	Total
Hydro One	5.9	6.0	6.1	6.3	6.4	30.7

Summary:

This investment involves the migration of the Grid Control Network to a simplified Direct Supervisory Control and Data Acquisition (SCADA) network topology, and the concurrent replacement or removal (as appropriate) of obsolete Grid Control Network components and those beyond expected service life (ESL). The investment is expected to reduce the number of station equipment, improve network speed, improve network reliability, and improve operational visibility.

1.0 OVERVIEW

The Grid Control Network is a network of devices that allows Hydro One operators located at the control centers, including the Integrated System Operating Centre (ISOC) and the Ontario Grid Control Center (OGCC), to continuously monitor and control the Hydro One transmission grid. Information from the Grid Control Network, known as SCADA information, is also used by external parties, such as other utility control centers, customers, and the Independent Electricity System Operator (IESO).

This investment consists of two key parts: (i) the migration of the Grid Control Network from the existing hub site topology to a simplified “Direct SCADA” topology, and (ii) the replacement or removal of Grid Control Network components that have reached their end of vendor support.

The work planned under this investment is necessary to ensure the safe, reliable, and efficient real-time operation of the Hydro One transmission grid. The investment will also result in improved efficiency of certain transmission station maintenance, due to the elimination of equipment that will no longer be required under a Direct SCADA topology.

2.0 INVESTMENT NEED

The Grid Control Network provides monitoring capabilities and remote control of the assets at Hydro One transmission stations to the ISOC and the OGCC. It is critical to Hydro One’s real-time operation of its transmission grid and is necessary to ensure safe, reliable, and efficient power delivery. This investment is required to: (i) migrate the Grid Control Network to a new Direct SCADA network topology, and (ii) replace or remove elements of the Grid Control Network that are at the end of ESL including gateways, Local Control Computers (LCCs), Local Maintenance Computers (LMCs), and Remote Terminal Units (RTUs) where applicable.

The migration to Direct SCADA will improve network reliability by removing intermediary hub sites which are a potential point of failure, improve operational visibility by eliminating the risk of a hub site outage affecting multiple stations, and improve network performance by removing processing delays associated with the legacy topology. The new network topology also reduces the amount of equipment Hydro One must maintain. In parallel, the

replacement or removal of obsolete and unsupported components will reduce operational risk, maintain supportability of critical Grid Control Network infrastructure and avoid reliance on aging equipment.

2.1 MIGRATION TO NEW DIRECT SCADA TOPOLOGY

This investment will implement a new and simplified Direct SCADA topology for the Grid Control Network that will eliminate hub sites. The hub sites were put in place when the OGCC was originally built. Their function was to perform protocol conversion and provide a consolidation point when connecting third party telecom circuits to Hydro One stations. Figure 1 below provides a diagram of the old hub site network topology.

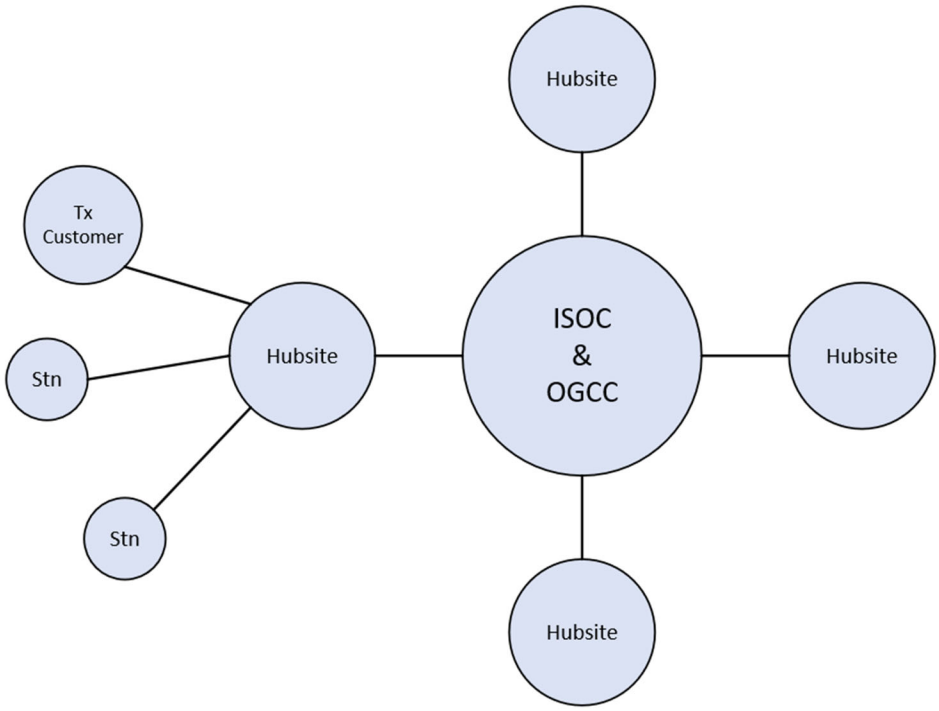

Figure 1: Existing Network Topology (Hub Site)

Hydro One stations are now equipped with their own protocol conversion capability with station gateways and the telecom circuits at transmission stations are internet protocol (IP)-based circuits. IP circuits are routable, meaning that they do not rely on a point-to-point connection. With these advancements in technology, hub sites are no longer

required. Once existing connections to these hub sites are moved to the new network architecture, hub sites no longer need to be maintained and can be removed from service.

Figure 2 below, is a diagram of the new, simplified Direct SCADA topology.

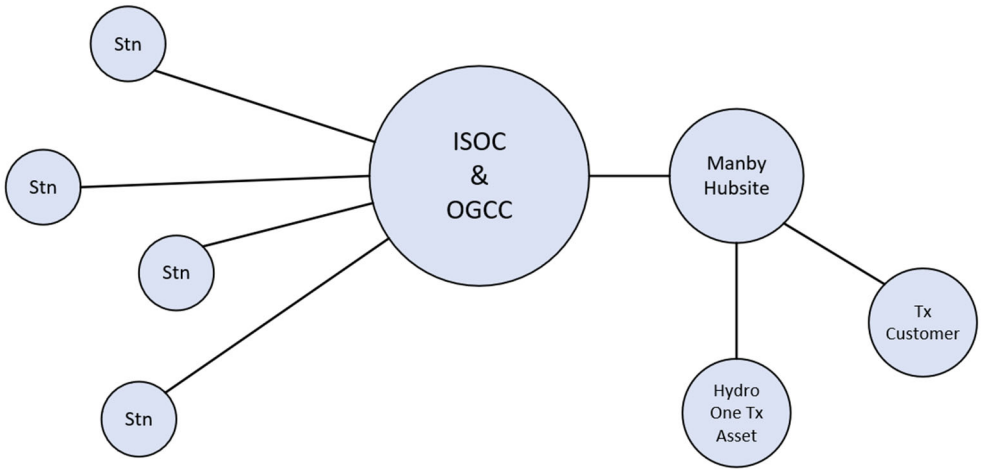

Figure 2: Simplified Network Topology (Direct SCADA)

In order to connect to this new architecture, an adequate telecom circuit is required to connect the site to the network. This required telecom infrastructure already exists for most Hydro One transmission stations, yet there are some cases where the site telecom circuit is inadequate or there is no local protocol conversion capability. The hub site at Manby TS will remain to accommodate these sites, such as transmission connected customers and smaller Hydro One sites. The Manby hub site is equipped to accept both wired connections and wireless connections for more remote sites and can perform protocol conversion.

Benefits of the Direct SCADA migration include increased network reliability and operational visibility. Under the hub site configuration, stations are consolidated at intermediary hub sites, which is a potential node of failure. Direct SCADA increases network reliability by removing the intermediary node. The removal of hub sites will also improve operational visibility. When a hub site is unavailable due to maintenance or from failure, remote visibility and operations are subsequently unavailable for all stations connected to that hub site. With each station routed directly to the control centers, there

is no cascading loss of station visibility. Under the legacy configuration, the hub sites present an extra layer of equipment along the communication path, which inherently adds processing delays to the system. Removing the hub sites will eliminate these processing delays and improve overall network speed. The Direct SCADA configuration will result in better grid visibility and improved accuracy for state estimators.

2.2 REPLACEMENT OR REMOVAL OF OBSOLETE GRID CONTROL NETWORK COMPONENTS

As part of a bundled work approach, this investment will also replace or remove obsolete Grid Control Network components including gateways, LCCs, LMCs and RTUs where applicable.

Gateways are multi-functional station devices that are key components of the Hydro One SCADA network. They function as protocol translators, data concentrators, and local control interfaces, and they communicate station SCADA to the control centers. Failure of these devices is considered high risk. Obsolete gateways no longer have vendor support, and spare parts are not readily available. Given the nature of electronic devices, it is not possible to predict when the existing gateways will fail. If the gateways are left to run until failure, operators will lose visibility of the station SCADA (e.g. status, telemetry and control) until the gateways are replaced. This puts unnecessary strain on Hydro One personnel and resources to react to these failures. Migrating to Direct SCADA already requires updates to the station gateways, and bundling obsolete gateway replacements with the migration work makes efficient use of resource mobilization.

The LCC and LMC are station computers that provide local control and maintenance functions. Both of these computer types run on obsolete Microsoft Windows operating systems and have been functionally superseded by other station devices. The LCC is a station computer that provides local control to primary yard equipment. This local station control is now integrated into the station gateway device which is equipped with a Human Machine Interface (HMI). The LMC is a station computer that interfaces with protection and control devices for maintenance and commissioning purposes. Field personnel can now interface with devices using their corporate laptops. These obsolete station

computers are no longer required and by removing them, Hydro One can avoid upkeep of these units.

RTUs interface with the primary yard equipment at a station to execute control operations initiated by the ISOC and the OGCC. The RTU accepts physical wired inputs and outputs (physical I/O) from the primary equipment and performs a digital conversion for remote usage by the control centers. Station RTU replacements will be performed outside of this investment under ISD T-SR-19. However, smaller RTU installations found outside of station fences, for example, those at remote junction stations, will be replaced under this investment as required.

3.0 INVESTMENT DESCRIPTION

This investment entails the migration of the Grid Control Network to the new Direct SCADA architecture, and the replacement or removal of related obsolete Grid Control Network equipment. Hydro One will utilize a bundling approach (i.e., perform all components of the work concurrently at a station) in order to reduce costs and shorten timelines.

Migration to Direct SCADA requires station local area network (LAN) infrastructure, such as routers, switches and gateways. This investment will install station LAN equipment if absent and will update device configurations to change routing of data to go directly to control centers, bypassing the hub sites. Once a hub site is successfully bypassed by all previously connected stations then that hub site's gateways are decommissioned.

During the 2023-2027 rate period, approximately 96 stations are expected to be migrated under this investment, which exceeds the planned level of 75 station migrations during the 2023-2027 period. However, the expected completions under complementary integrated station investments are lower than expected, leaving approximately 78 stations remaining to be converted to Direct SCADA. Over the 2028-2032 rate period, the expected pace of replacement (and removal, where appropriate) under this investment is an average of approximately 16 stations per year, which is consistent with the historical average for this investment.

The investment's replacement and removal levels for the 2023-2032 period are summarized in Table 1.

Table 1 - Grid Control Network Program Replacement and Removal Levels

Zone	Component	Plan[1] 23-27	Act/Fcst[2] 23-27	Total 28-32
Hydro One	Station (Unit)	75	96	78
	% of Fleet (%)	16	20	16

In addition to migration of the Grid Control Network to the new Direct SCADA architecture, the below materiality capital expenditures involve the migration of transmission connected customers and Hydro One assets to the Manby hub site.

4.0 OUTCOMES

This investment will migrate the Grid Control Network topology to the new and simplified Direct SCADA network topology. With the exception of Manby TS, hub sites will be decommissioned. There are various benefits of migrating to the modern, simplified network topology, including:

i. **Improve network speed**: Removing hub sites will eliminate the unnecessary processing delays associated with the hub sites, allowing stations to communicate directly with the ISOC and OGCC.

ii. **Improve network reliability**: The removal of hub sites will increase network reliability by removing a potential node of failure which is the hub site in the existing configuration.

iii. **Improve operational visibility:** In the Direct SCADA topology, a station outage will only affect that station alone, and will not affect the visibility of any other stations, in contrast to the case with the existing hub site configuration.

iv. **Eliminate the upkeep of hub site gateways**: Hydro One will no longer need to maintain and/or upgrade hub site gateways once they have been removed from the system.

[1] "Plan" refers to Hydro One's revised capital expenditure and ISA forecast to implement the OEB-approved Settlement Proposal in EB-2021-0110.
[2] "Act/Fcst" refers to actual (2023-2025) and forecast (2026-2027) amounts.

This investment will also address the replacement or removal of obsolete Grid Control Network components including gateways, LCCs, LMCs and RTUs where applicable.

- Gateway replacement will ensure reliability of the Grid Control Network by having the latest standard devices installed in Hydro One stations.
- LCCs and LMCs are no longer required, and once removed, Hydro One will no longer need to maintain these devices.
- RTU replacements will remove obsolete units from service and will replace them with the latest standard devices.

4.1 OEB RRF OUTCOMES

Table 2 presents anticipated benefits as a result of the investment in accordance with the OEB's Renewed Regulatory Framework (RRF).

Table 2 - Outcome Summary

Customer Focus	• Migrating to the new topology will reduce the total amount of equipment in the network, thereby reducing the possible points of failure and improving network reliability. This, in turn, will improve Hydro One's ability to safely and effectively operate its transmission system, with the result that customers will experience fewer and shorter service interruptions.
Operational Effectiveness	• Migration to the new Direct SCADA network topology optimizes the Grid Control Network by reducing processing delays associated with hub sites. • Removal of hub sites increases network reliability by removing an intermediary communications step and potential node of failure. It also improves operational visibility by eliminating nodes in the network that consolidate stations. • Replacing end-of-vendor-support gateways and obsolete legacy RTUs will improve system reliability by ensuring continued vendor support for these critical components and by ensuring that these units are aligned with current design standards. • Removal of LCCs and LMCs will eliminate reliance on obsolete stations computers.
Financial Performance	• Improved financial performance by avoiding costly unplanned reactive replacement of Grid Control Network components. Systematically replacing components beyond ESL will avoid the need for reactive replacement of failed units, which can result in costly, lengthy, and unplanned restoration time due to part obsolescence.

5.0 EXPENDITURE PLAN

The investment will migrate 78 stations to Direct SCADA topology and will concurrently replace or remove obsolete Grid Control Network equipment. The pacing as described in Section 3.0 is expected to complete migrations at the remaining Hydro One stations under this investment by the end of the 2028-2032 rate period.

Table 3 summarizes forecast net capital expenditures for this investment for the 2028-2032 rate period.

Table 3 - Investment Expenditures[3]

($M)	2028	2029	2030	2031	2032	Total 28-32
Gross Capital Expenditures	6.1	6.2	6.4	6.5	6.6	31.8
Less Removals	0.2	0.2	0.2	0.2	0.2	1.1
Less Capital Contributions	0.0	0.0	0.0	0.0	0.0	0.0
Net Capital Expenditures	**5.9**	**6.0**	**6.1**	**6.3**	**6.4**	**30.7**

Table 4 summarizes Hydro One's planned and forecast net capital expenditures for the 2023-2027 and 2028-2032 rate periods.

Table 4 - Hydro One - Rate Period Net Investment Expenditures

Description	Plan[4] 23-27	Fcst/Act[5] 23-27	Total 28-32
Grid Control Network Sustainment	18.7	23.4	24.1
Below Materiality	12.6	6.7	6.6
Total	**31.3**	**30.1**	**30.7**

Over the 2023-2027 rate period, Hydro One expects forecast and actual expenditures to be $1.2M lower than Plan. As described above in Section 3.0, expenditures for the Grid Control Network program increased due to the higher than planned number of completed

[3] Figures presented in the tables may not sum to the totals shown due to rounding.
[4] "Plan" refers to Hydro One's revised capital expenditure and ISA forecast to implement the OEB-approved Settlement Proposal in EB-2021-0110.
[5] "Act/Fcst" refers to actual (2023-2025) and forecast (2026-2027) expenditures.

station migrations. This increase was more than offset by scope reduction and vendor delays affecting work below materiality.

During the 2028-2032 period, Hydro One expects the expenditures for the Grid Control Network program to be $0.8M higher than the 2023-2027 forecast and actuals due to higher and sustained inflationary pressures experienced by Hydro One during the 2023-2027 period relative to the assumptions embedded in its last transmission application (EB-2021-0110), as described in SPF Section 1.8. The cost escalation experienced by Hydro One and other utilities over the 2023 to 2027 period has exceeded the inflation assumptions reflected in the prior application and has not been fully captured by OEB inflation factors.

6.0 ALTERNATIVES

Hydro One considered the following alternatives before selecting the preferred undertaking.

ALTERNATIVE 1: STATUS QUO

Alternative 1 is to continue operating with the existing hub site network topology and to maintain existing Grid Control Network equipment. With respect to network topology, this alternative is not recommended, as Hydro One will not benefit from increased network speed, network reliability or improved operational visibility that could be achieved by the optimized Direct SCADA network topology. Further, Hydro One would be required to continue maintenance of aging hub site equipment.

ALTERNATIVE 2: MIGRATION OF THE GRID CONTROL NETWORK TO THE NEW DIRECT SCADA NETWORK TOPOLOGY AND REPLACEMENT OF OBSOLETE GRID CONTROL NETWORK COMPONENTS (RECOMMENDED)

The recommended alternative is to migrate the Grid Control Network to the new Direct SCADA network topology, and to replace or remove the elements of the Grid Control Network that are obsolete and beyond ESL. Through a bundled work approach, gateways and in some cases, RTUs will be replaced with units that align with current design standards and are vendor supported, and LCCs and LMCs will be decommissioned.

By removing hub site gateways, this alternative will optimize the Grid Control Network. Overall network speed will improve because the intermediary hub sites will no longer consolidate station data, in turn improving the accuracy of system state estimators. System reliability will increase with the removal of the potential node of failure presented by the hub site equipment. Operational visibility will improve as hub site failure will no longer result in a cascading loss of visibility at the connected stations. This alternative will also minimize Hydro One's operational risk by systematically replacing Grid Control Network equipment that is obsolete. Hydro One will no longer need to maintain the equipment that will be removed. It is cost- and time-effective to perform both aspects of the investment concurrently because the equipment, engineering, and commissioning work are closely related.

7.0 EXECUTION RISK AND MITIGATION

A risk associated with the execution of this investment is the ability to obtain the project outages necessary for field commissioning. Cancellations to outages may arise due to higher priority projects or unforeseen system contingencies. Another risk is equipment production delays. Manufacturers of replacement units may encounter part sourcing issues or longer lead times for specific components like processor chips.

The strategy for risk mitigation of outages will be to apply for project outages well in advance of the planned execution of station work under this investment once the necessary details for work have been finalized. The strategy for equipment delays is to prioritize hardware requirements and place material orders as far in advance as reasonably practicable.

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G-GP-22	DISTRIBUTION CAPITAL CONTRIBUTION TO HYDRO ONE TRANSMISSION
Primary Trigger:	System Capital Investment Support
OEB RRF Outcomes:	Customer Focus, Operational Effectiveness, Public Policy Responsiveness

Capital Expenditures:

($M)	2028	2029	2030	2031	2032	Total
Hydro One	23.1	5.3	19.5	302.6	217.8	568.3
Orillia RZ	0.0	0.0	0.0	Embedded in Hydro One Networks		
Peterborough RZ	0.0	0.0	0.0			

Summary:

This investment involves non-discretionary capital contributions to Hydro One Transmission for transmission system upgrades to increase supply capacity. The primary trigger of the investment is system capital investment support. This investment is expected to increase capacity to accommodate forecasted distribution load growth in alignment with applicable Regional Planning.

1.0 INVESTMENT NEED

This investment is required for capital contributions to Hydro One transmission for transmission station or line upgrades to accommodate forecasted distribution customer load growth in alignment with applicable Regional Planning. The capital contributions are required under the Transmission System Code (TSC) in order to proceed with the associated transmission investments. Accordingly, if the related transmission projects proceed, these capital contributions are non-discretionary.

Large transmission investments are typically proposed through the Regional Planning process, a coordinated effort between Hydro One Transmission, the Independent Electricity System Operator (IESO) and the Local Distribution Companies (LDCs), including Hydro One Distribution. Hydro One Distribution participates in twenty Regional Planning regions across Ontario, aiming to identify and address regional growth needs by evaluating and recommending technically robust and cost effective alternatives. It is a cyclical and continuous process that evaluates forecasts and develops solutions over a twenty year planning horizon. The process is renewed every five years to reflect emerging developments, changing conditions and evolving system needs.

The TSC requires Hydro One Distribution to enter into cost recovery agreements with Hydro One Transmission for the expansion of transformer station or line facilities. The expenditures reflect the forecast capital contributions that Hydro One Distribution will be required to pay to Hydro One Transmission under cost recovery agreements for the transmission system investments, identified below in Appendix A.

2.0 INVESTMENT DESCRIPTION

There are four types of Transmission System investments that are necessary to service forecasted distribution customer load growth and enable economic development. These investment types are described below:

- **Transmission Line Upgrades, Extensions, and Connections** - Each transmission line has a defined loading limit that constrains the amount of power that can be reliably delivered. As system demand grows or power flow patterns change, these limits can restrict the ability of the network to service the necessary

load. To increase the loading limit of the transmission line, targeted capital investment is required.

- **New Transformer Stations** – New transformer stations are required to increase distribution capacity and enable service to additional customers. Transmission line extensions may also be required to connect the new transformer station to the transmission system.
- **Existing Transformer Station Upgrades** – Upgrades at existing transformer stations to increase station loading limits. These investments can include replacement of transformers with a higher capacity, and necessary enhancements to station bus or station layout, to safely and reliably support higher loading levels. Such investments may include additional feeder positions to allow Hydro One Distribution to access the increased station capacity.
- **New Feeder Positions** – Additional feeder positions are required at existing transformer stations to unlock available capacity for distribution customers. These investments enable the build out of new distribution feeders needed to service distribution customer demand. They are unique from investments in the previous category, as station and transformer capacity exists to deliver the additional capacity at such stations, but this excess capacity cannot be utilized without additional feeder positions to deliver that capacity to the distribution system.

There are a total of 31 projects proposed with a breakdown of categories shown in Table 1. A combination of the above investment types may further strengthen distribution network reliability by establishing additional tie points with new stations and feeders.

Table 1 - Investment Categorization

Category	Number of Investments
Transmission Line Upgrades, Extensions, and Connections	11
New Transformer Stations	9
Existing Transformer Station Upgrades	5
New Feeder Positions	6
Total	**31**

Appendix A details each of the Distribution Capital Contributions to Hydro One Transmission investments during the 2028-2032 planning period, their descriptions, and associated planning regions where applicable. Appendix A also provides evidence references for the related TSP investments to build the new transmission infrastructure, and the related DSP investments to build the distribution infrastructure required to deliver the new capacity to distribution customers.

3.0 OUTCOMES

3.1 OEB RRF OUTCOMES

Table 2 presents anticipated benefits as a result of the investment in accordance with the Ontario Energy Board's (OEB) Renewed Regulatory Framework (RRF):

Table 2 - Outcome Summary

Customer Focus	• Ensure adequate transmission system capacity to allow the distribution system to meet existing and forecast customer electricity needs.
Operational Effectiveness	• New Transmission supplies will provide additional transformation and/or line capacity in the area, enabling greater operating flexibility, reducing capacity constraints, and improving system resiliency enabled by additional tie capabilities.
Public Policy Responsiveness	• Comply with the TSC Section 6.3 Cost Responsibility for New and Modified Connections and Section 6.5 Economic Evaluation of New and Modified Connections.

4.0 EXPENDITURE PLAN

The aggregated contribution costs associated with the underlying projects in Appendix A below are presented in Table 3. The capital contributions are determined as per Hydro One's Transmission Customer Contribution Policy in accordance with the TSC. Hydro One has no Transmission Capital Contribution investments in the acquired Orillia and Peterborough rate zones in the 2028-2032 planning period.

In addition, load customers with peak demand equal to or greater than 5MW are required to pay a capital contribution to Hydro One Distribution for Upstream Transmission Connections in accordance with section 3.6.1 of the DSC and the methodology set out in

Appendix 5 of the TSC. These are referenced as Distribution Capital Contributions in Table 3 below.

Table 3 - Hydro One - Distribution Capital Contribution to Transmission[1]

($M)	Plan[2] 23-27	Act/Fcst[3] 23-27	2028	2029	2030	2031	2032	Total
Gross Capital Expenditures	6.3	34.9	23.1	5.3	34.3	427.6	237.2	727.6
Less Removals	0.0	0.9	0.0	0.0	0.0	0.0	0.0	0.0
Less Capital Contributions	0.0	2.5	0.0	0.0	14.9	125.1	19.4	159.3
Net Capital Expenditures	**6.3**	**31.5**	**23.1**	**5.3**	**19.5**	**302.6**	**217.8**	**568.3**

2023-2027 EXPENDITURES

Over the 2023-2027 rate period, actual and forecasted expenditures for the Distribution Capital Contribution to Hydro One Transmission Distribution program are $31.5M, compared to the $6.3M plan, resulting in a variance of $25.2M, or 400% above plan.

Of the four projects included in the 2023-2027 rate period, three are proceeding within the rate period. The fourth has been deferred to the 2028-2032 period to align with regional planning outcomes and the updated timing of system needs.

Despite this deferral, program expenditures have increased significantly due to the emergence of transmission supply constraints at a faster pace than anticipated. As a result, Hydro One Distribution is required to make capital contributions toward seven additional transmission projects that exceed the materiality threshold. Program expenditures have also increased due to higher average capital contribution requirements associated with the scope and cost of the underlying transmission projects.

[1] Figures presented in the tables may not sum to the totals shown due to rounding.
[2] "Plan" refers to Hydro One's revised capital expenditure and ISA forecast to implement the OEB-approved Settlement Proposal in EB-2021-0110.
[3] "Forecast" refers to Actual (2023-25) and Forecast (2026-27) expenditures.

2028-2032 EXPENDITURES

Over the 2028-2032 rate period, forecast expenditures are $568.3M. The amount of investment per year is dependent on the Transmission project costs and planned in-service dates, and the customer contributions associated with the forecasted load growth driving the need for investment. Capital contribution amounts are estimated at the time of filing based on forecasted project costs and load forecasts in accordance with Sections 6.3 and 6.5 of the TSC. These amounts are subsequently reviewed and updated during execution of the Connection Cost Recovery Agreement ("CCRA"), upon the project being placed in service based on actual construction costs, and through any subsequent true-up processes required under the TSC.

Each investment and its associated expenditure have been paced and proposed in accordance with the underlying growth needs and execution timelines over the 2028-2032 planning period. The forecasting methodology is described in further detail in DSP Section 3.11, D-SS-01, subsection 1.1.

5.0 ALTERNATIVES

The capital contributions are required to proceed with the transmission investments to which the capital contributions are linked. Accordingly, if the related transmission projects proceed, these capital contributions are non-discretionary. Details on the projects to which the forecast capital contributions relate are provided in Appendix A, which also includes the Transmission Investment Reference for each underlying investment.

6.0 EXECUTION RISK AND MITIGATION

As noted in DSP Section 3.11, D-SS-01, the timing and magnitude of future load growth may differ from the current forecast projections due to factors such as economic conditions, customer development schedules, and changes in customer demand. As a result, actual load growth in the 2028-2032 rate period may materialize faster or slower than anticipated, potentially affecting the timing of investments driven by load growth.

To manage this uncertainty, Hydro One continuously monitors system loading and customer developments and updates local load forecasts as necessary to support prudent investment decisions. This ongoing monitoring enables Hydro One to identify areas where

load growth is materializing as forecast, accelerating, or progressing more slowly than anticipated, and to adjust the timing and prioritization of investments accordingly. Through this adaptive planning approach, Hydro One can advance investments where needs emerge earlier than forecast, and defer investments where growth materializes later than anticipated, helping ensure that infrastructure investments are made when required.

Furthermore, Hydro One Distribution works closely with Hydro One Transmission and the Independent Electricity System Operator (IESO) through the Regional Planning process to identify and advance the most appropriate, technically feasible and cost-effective solution to address emerging system needs. Hydro One Distribution also obtains updated cost estimates from Hydro One Transmission throughout the planning process to support ongoing assessments of project need, timing, scope, and execution. This ongoing coordination helps ensure that plans remain aligned with evolving load forecasts, system requirements, and regional planning outcomes.

In addition, net program expenditures may be affected by changes in capital contributions from large load customers (i.e., customers with peak demand of 5MW or greater). These contribution amounts are dependent on customer load forecasts. As a result, variances between forecasted and actual customer load may increase or decrease the capital contribution amount determined at each true-up interval.

Appendix A - Hydro One - Distribution Capital Contribution to Transmission Investments[4]

Investment Type	Investment Identifier	Investment Name	Investment Need & Outcome	TSP Reference	DSP Reference	In-Service Year	Capital Expenditure ($M)
Transmission Line Upgrades, Extensions, and Connections	GP-22.01	L2M 8 km Upgrade Dx to Tx Contribution	Transmission Circuit L2M is expected to reach capacity by 2028. Investment is required to serve 16MW of forecasted new load in the region. This constraint has been identified in the latest Greater Ottawa Regional Planning Cycle. This addresses upstream transmission line capacity constraints that will unlock downstream capacity without the need for incremental distribution investment.	TSP Section 2.11, T-SA-Other	N/A	2032	14.1
	GP-22.02	New Pelham HVDS Capital Contribution	Allanburg TS and Crowland TS are expected to reach capacity by 2030. Investment is required to serve 8MW of forecasted new load in the region. This constraint has been identified in the latest Niagara Regional Planning Cycle.	TSP Section 2.11, T-SA-Other	DSP Section 3.11, D-SS-01	2030	3.0
	GP-22.03	Yarmouth Yards DESN Tx Lines	Edgeware TS is expected to reach capacity by 2028. Investment is required to serve 132MW of forecasted new load in the region. This constraint has been identified in the latest London Regional Planning Cycle.	TSP Section 2.11, T-SA-11	DSP Section 3.11, D-SS-01	2031	44.3
	GP-22.04	Tillsonburg TS: 230kV Line Conversion Capital Contribution	Tillsonburg TS has reached capacity by 2026. Investment is required to serve 95MW of forecasted new load in the region. This constraint has been identified in the latest London Regional Planning Cycle.	TSP Section 2.11, T-SA-11	DSP Section 3.11, D-SS-01	2031	129.1
	GP-22.05	Crilly DS Refurbish Dx Contribution to Tx	Crilly DS is expected to reach capacity by 2025. Investment is required to serve 4MW of forecasted new load in the region. This constraint has been identified in the latest Northwest Regional Planning Cycle.	TSP Section 2.11, T-SA-Other	DSP Section 3.11, D-SS-01	2031	3.3
	GP-22.06	Kashabowie HVDS Dx Contribution to Tx	Shabaqua DS has reached capacity by 2025. Investment is required to serve 2MW of forecasted new load in the region.	TSP Section 2.11, T-SA-Other	DSP Section 3.11, D-SS-01	2031	3.3

[4] Figures presented in the tables may not sum to the totals shown due to rounding.

Investment Type	Investment Identifier	Investment Name	Investment Need & Outcome	TSP Reference	DSP Reference	In-Service Year	Capital Expenditure ($M)
	GP-22.07	White River DS Third Transformer Installation – Capital Contribution	White River DS is expected to reach capacity by 2025. Investment is required to serve 14MW of forecasted new load in the region. This constraint has been identified in the latest Northwest Regional Planning Cycle.	TSP Section 2.11, T-SA-Other	DSP Section 3.11, D-SS-01	2029	3.2
	GP-22.08	New Maple Grove HVDS Dx to Tx Capital Contribution	Centralia TS is expected to reach capacity by 2030. Investment is required to serve 10MW of forecasted new load in the region.	TSP Section 2.11, T-SA-Other	DSP Section 3.11, D-SS-01	2031	4.5
	GP-22.09	Chapleau DS #2 Upgrade – Capital Contribution	Chapleau DS #2 is expected to reach capacity by 2028. Investment is required to serve 10MW of forecasted new load in the region.	TSP Section 2.11, T-SA-Other	DSP Section 3.11, D-SS-01	2028	1.6
	GP-22.10	Gilmour DS Dx to Tx Contribution	Investment is required to improve reliability for customers on the Coe Hill DS, by providing additional feeder ties, from feeders supplied from a new HVDS.	TSP Section 2.11, T-SA-Other	DSP Section 3.11, D-SS-02	2029	4.2
	GP-22.11	Coatsworth Line Capital Contribution	Tilbury West HVDS is expected to reach capacity by 2030. Investment is required to serve 400MW of forecasted new load in the region. This constraint has been identified in the latest Windsor-Essex Regional Planning Cycle.	TSP Section 2.11, T-SA-11	DSP Section 3.11, D-SS-01	2032	33.8
New Transformer Stations	GP-22.12	Leamington Area DESN5 and DESN6 Capital Contribution	Leamington Region has reached capacity by 2025. Investment is required to serve 400MW of forecasted new load in the region. This constraint has been identified in the latest Windsor-Essex Regional Planning Cycle.	TSP Section 2.11, T-SA-10	DSP Section 3.11, D-SS-01	2032	34.9
	GP-22.13	Northern York Region TS Capital Contribution	Holland TS, Armitage TS and Kleinburg TS are expected to reach capacity by 2028. Investment is required to serve 180MW of forecasted new load in the region. This constraint has been identified in the latest GTA North Regional Planning Cycle.	TSP Section 2.11, T-SA-09	DSP Section 3.11, D-SS-01	2031	17.6

Investment Type	Investment Identifier	Investment Name	Investment Need & Outcome	TSP Reference	DSP Reference	In-Service Year	Capital Expenditure ($M)
	GP-22.14	New DESN at Middleport TS Capital Contribution	Nebo TS, Caledonia TS and Dundas TS are expected to reach capacity by 2030. Investment is required to serve 184MW of forecasted new load in the region. This constraint has been identified in the latest Burlington to Nanticoke Regional Planning Cycle.	TSP Section 2.11, T-SA-11	DSP Section 3.11, D-SS-01	2030	14.9
	GP-22.15	New Yarmouth Center DESN Capital Contribution	Edgeware TS is expected to reach capacity by 2028. Investment is required to serve 132MW of forecasted new load in the region. This constraint has been identified in the latest London Regional Planning Cycle.	TSP Section 2.11, T-SA-11	DSP Section 3.11, D-SS-01	2031	10.3
	GP-22.16	Coatsworth DESN1 & DESN2 Capital Contribution	Tilbury West HVDS is expected to reach capacity by 2030. Investment is required to serve 400MW of forecasted new load in the region. This constraint has been identified in the latest Windsor-Essex Regional Planning Cycle.	TSP Section 2.11, T-SA-11	DSP Section 3.11, D-SS-01	2032	0.3
	GP-22.17	New DESN at Nebo TS Capital Contribution	Nebo TS is expected to reach capacity by 2030. Investment is required to serve 120MW of forecasted new load in the region. This constraint has been identified in the latest Burlington to Nanticoke Regional Planning Cycle.	TSP Section 2.11, T-SA-11	DSP Section 3.11, D-SS-01	2032	19.4
	GP-22.18	New Enfield TS #2 – Capital Contribution	Wilson TS has reached capacity by 2025. Investment is required to serve 30MW of forecasted new load in the region. This constraint has been identified in the latest GTA East Regional Planning Cycle.	TSP Section 2.11, T-SA-11	DSP Section 3.11, D-SS-01	2032	56.3
	GP-22.19	Brockville New TS – Capital Contribution	Brockville TS is expected to reach capacity by 2030. Investment is required to serve 50MW of forecasted new load in the region. This constraint has been identified in the latest St. Lawrence Regional Planning Cycle.	TSP Section 2.11, T-SA-Other	DSP Section 3.11, D-SS-01	2032	2.3
	GP-22.20	New Puslinch Station Capital Contribution	Puslinch HVDS is expected to reach capacity by 2031. Investment is required to serve 39MW of forecasted new load in the region. This constraint has been identified in the latest Kitchener-Waterloo-Cambridge-Guelph Regional Planning Cycle.	TSP Section 2.11, T-SA-Other	DSP Section 3.11, D-SS-01	2031	43.6

Investment Type	Investment Identifier	Investment Name	Investment Need & Outcome	TSP Reference	DSP Reference	In-Service Year	Capital Expenditure ($M)
Existing Transformer Station Upgrades	GP-22.21	Kleinburg TS Addition of T3 T4 & 2 breakers – DX CC	Kleinburg TS has reached capacity by 2026. Investment is required to serve 90MW of forecasted new load in the region.	TSP Section 2.11, T-SA-11	DSP Section 3.11, D-SS-01	2028	1.5
	GP-22.22	Waubaushene TS: Replace T5 T6 DESN Rebuild -Dx Contribution	Waubaushene TS is expected to reach capacity by 2028. Investment is required to serve 63MW of forecasted new load in the region. This constraint has been identified in the latest South Georgian Bay Regional Planning Cycle.	TSP Section 2.11, T-SR-03	DSP Section 3.11, D-SS-01	2028	2.7
	GP-22.23	Napanee TS Upgrade Dx to Tx Contribution	Napanee TS is expected to reach capacity by 2028. Investment is required to serve 43MW of forecasted new load in the region.	TSP Section 2.11, T-SA-11	DSP Section 3.11, D-SS-01	2032	54.0
	GP-22.24	Lauzon TS DESN2 Capital Contribution	Lauzon TS DESN2 is expected to reach capacity by 2032. Investment is required to serve 75MW of forecasted new load in the region. This constraint has been identified in the latest Windsor-Essex Regional Planning Cycle.	TSP Section 2.11, T-SR-03	DSP Section 3.11, D-SS-01	2032	3.4
	GP-22.25	Tillsonburg TS: 230kV Station Conversion - CC	Tillsonburg TS has reached capacity by 2026. Investment is required to serve 60MW of forecasted new load in the region. This constraint has been identified in the latest London Regional Planning Cycle.	TSP Section 2.11, T-SA-11	DSP Section 3.11, D-SS-01	2031	46.1
New Feeder Breakers	GP-22.26	Kent TS M1 Breaker Position	Kent TS M24 feeder is expected to reach capacity by 2028. Investment is required to serve 10MW of forecasted new load in the region.	TSP Section 2.11, T-SA-Other	DSP Section 3.11, D-SS-01	2028	2.1
	GP-22.27	Commerce Way TS New Feeder Position – CC	Woodstock TS M3, Commerce Way TS M1, and Commerce Way TS M2 feeders are expected to reach capacity by 2028. Investment is required to serve 20MW of forecasted new load in the region.	TSP Section 2.11, T-SA-Other	DSP Section 3.11, D-SS-01	2028	2.0
	GP-22.28	Commerce Way TS 2 New Feeder Positions – CC	Woodstock TS M4, Commerce Way TS M3, and Commerce Way TS M4 feeders are expected to reach capacity by 2028. Investment is required to serve 40MW of forecasted new load in the region.	TSP Section 2.11, T-SA-Other	DSP Section 3.11, D-SS-01	2028	4.2

Investment Type	Investment Identifier	Investment Name	Investment Need & Outcome	TSP Reference	DSP Reference	In-Service Year	Capital Expenditure ($M)
	GP-22.29	Wanstead TS New Feeder Capital Contribution	Wanstead TS M1 feeder is expected to reach capacity by 2027. Investment is required to serve 6.5MW of forecasted new load in the region.	TSP Section 2.11, T-SA-Other	DSP Section 3.11, D-SS-01	2031	1.3
	GP-22.30	Palmerston TS M2 load relief Dx CC to Tx	Palmerston TS M2 feeder is expected to reach capacity by 2029. Investment is required to serve 5MW of forecasted new load in the region.	TSP Section 2.11, T-SA-Other	DSP Section 3.11, D-SS-01	2029	2.6
	GP-22.31	Keith TS M7 M8 Breaker Position	Keith TS M5, Malden TS M7, Malden TS M8 and Malden TS M12 is expected to reach capacity by 2028. Investment is required to serve 20MW of forecasted new load in the region.	TSP Section 2.11, T-SA-Other	DSP Section 3.11, D-SS-01	2028	4.2

G-GP-23	**PMU SYNCHROPHASORS PROGRAM**
Primary Trigger:	Compliance
OEB RRF Outcomes:	Customer Focus, Operational Effectiveness, Public Policy Responsiveness, Financial Performance

Net Capital Expenditures:

($M)	**2028**	**2029**	**2030**	**2031**	**2032**	**Total**
Hydro One	5.2	5.0	2.2	1.8	1.7	15.8

Summary:

Synchrophasor data consists of time-synchronized, high-resolution telemetry of power system elements and is collected using a Phasor Measurement Unit (PMU). When synchrophasor data is collected from several points on the power grid it can be used for real-time monitoring of the power grid. This investment involves the implementation of PMUs at 21 Hydro One stations during the 2028-2032 planning period to collect synchrophasor data as mandated by and in accordance with the Independent Electricity System Operator's (IESO) Market Manual 1, Part 1.7 "Synchrophasor Data Requirements".

The primary trigger of the investment is compliance with the IESO market rules. The investment is also required to improve grid reliability and resiliency with wide area monitoring of the grid, and to provide enhanced post-event analysis.

1.0 OVERVIEW

This investment is necessary to comply with recent updates to the IESO market rules regarding the use of PMUs to collect synchrophasor data on the company's transmission system. At the end of 2024, the IESO updated the market rules to include PMU monitoring requirements for Ontario Transmitters and Generators. As a market participant, Hydro One is obligated to implement PMUs across its network to comply with the updated market rules. In addition to providing PMU data to the IESO, Hydro One will also make use of PMU applications to access the same wide area monitoring of its network.

Synchrophasor data consists of high-speed, time-synchronized measurements of electrical waveforms across the power grid that show the real-time state of voltage, current, and system stability. This synchrophasor data is acquired from the field using a PMU. By obtaining this data at several points across the power grid, the data can be viewed together to see overall power system conditions. Compared to traditional SCADA, PMU data provides several improvements such as higher resolution, time-synchronization, and phase angle information. These details allow for monitoring of frequency oscillations and voltage stability which cannot be seen from traditional SCADA measurements. Synchrophasor technology has widely been adopted by utilities in North America as it provides real-time situational awareness of the grid that was not possible with older technologies. It is critical to maintain reliability and resiliency in the increasingly dynamic power system.

In the years leading up to the release of the updated market rules, a PMU working group consisting of subject matter experts from both Hydro One and IESO finalized a list of power system elements where PMU monitoring would be required. The final list includes 60 transformer stations and 323 power system elements. PMU monitoring was installed at five of these stations as part of a pilot project. Prior to 2028, Hydro One expects to complete installations at an additional 34 stations. This investment will install PMU devices at each of the remaining 21 stations during the 2028-2032 planning period across the Hydro One network at a pace agreed upon by both parties. PMU data will be consolidated at a central Hydro One Phasor Data Concentrator (PDC) and forwarded to the IESO to fulfill market rule compliance.

2.0 INVESTMENT NEED

In December of 2024, the IESO released PRO-723, later revised to MAN-131, Market Manual 1, Part 1.7: “Synchrophasor Data Requirements” which details the synchrophasor data requirements for Generators and Transmitters. As a market participant, Hydro One is obligated to implement PMUs across its network to comply with the updated market rules.

Synchrophasor data can provide a precise and comprehensive view of the power grid. It provides increased situational awareness with wide area monitoring and enables operators to understand grid conditions in real-time and diagnose and react to emerging problems. It will also allow for enhanced post-event analysis, which in turn will help Hydro One better predict power system responses and avoid future disturbances.

The adoption of synchrophasor technology saw major expansion after 2009. The North American SynchroPhasor Initiative (NASPI) tracked the initial rollout out of PMU in North America, as shown in the figures below (Figure 1: 2009 and Figure 2: 2017). The technology is now considered mature and is no longer tracked by NASPI across the continent.

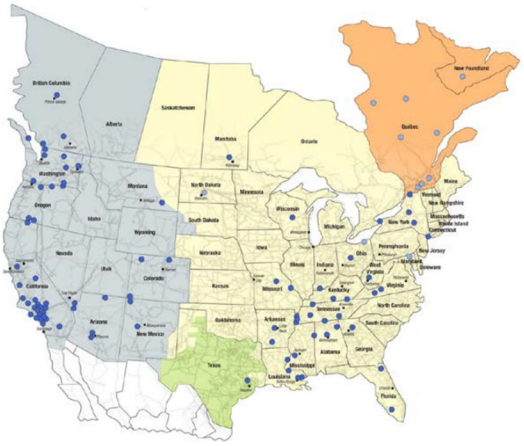

Figure 1: 2009

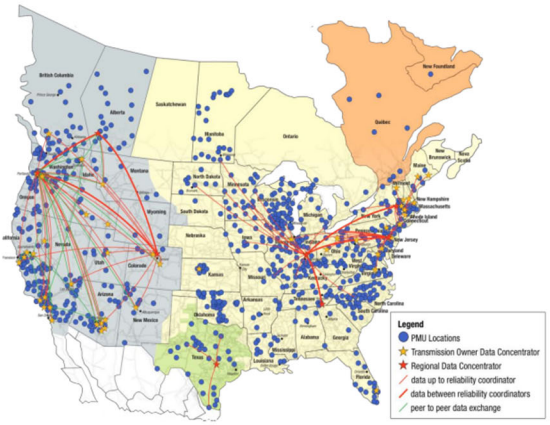

Figure 2: 2017

Source: North American Synchrophasor Initiative (NASPI)

3.0 INVESTMENT DESCRIPTION

This investment will implement synchrophasor data collection at specific stations across the Hydro One network, consolidate this data in the Hydro One central PDC from which the data will be fed into Hydro One's Wide Area Management System (WAMS) application and forwarded to the IESO for compliance.

Stations where synchrophasor data is required were identified by a Hydro One x IESO working group. Subject matter experts from Hydro One and the IESO have worked together in a PMU working group several times in the years leading up to the release of the market rule updates. In 2021, the last Hydro One x IESO working group agreed to a finalized list of 323 power system elements across 60 Hydro One stations. PMU at five of these stations have been installed as part of a pilot project, leaving 55 Hydro One stations requiring installation. Prior to 2028, Hydro One expects to complete installations at an additional 34 stations.

This investment will implement PMU synchrophasor data collection at the remaining 21 Hydro One stations during the 2028-2032 planning period to monitor the power system elements identified by the Hydro One x IESO working group. Recognizing the large volume of installations required, Hydro One and the IESO have mutually agreed to an implementation schedule. The pace of PMU installations will be on average 9 stations per year, spanning several years including into the 2028-2032 planning period. The investment's installation levels for the 2023-2032 period are summarized in Table 1.

Table 1 - PMU Synchrophasors Program

Zone	Component	Plan[1] 23-27	Act/Fcst[2] 23-27	Total 28-32
Hydro One	# of Stations (Unit)	-	34	21
	% of Fleet (%)	-	56	35

[1] "Plan" refers to Hydro One's revised capital expenditure and ISA forecast to implement the OEB-approved Settlement Proposal in EB-2021-0110.
[2] "Act/Fcst" refers to actual (2023-2025) and forecast (2026-2027) amounts.

4.0 OUTCOMES

As a result of the investment, synchrophasor data from multiple points across the Hydro One network will provide wide area monitoring of the power grid and enhanced post-event analysis to both the IESO and to Hydro One. This investment will (i) ensure Hydro One is compliant with the IESO market rules, (ii) improve grid reliability and resiliency, and (iii) enhance post-event analysis:

1. The synchrophasor implementation under this investment will satisfy the IESO market manual requirements for market participants.
2. Wide area monitoring of the Hydro One grid will provide real-time situational awareness and the ability to detect and address grid disturbances, reducing disturbance severity. This dynamic model of the grid will enhance our understanding of the system leading to better planning and asset utilization.
3. High resolution, time-stamped, and comprehensive phasor data will facilitate better post-event analysis and reconstruction of disturbances

4.1 OEB RRF OUTCOMES

Table 2 presents anticipated benefits as a result of the investment in accordance with the OEB's Renewed Regulatory Framework (RRF).

Table 2 - Outcome Summary

Customer Focus	• Installation of PMU devices will enable real-time wide area monitoring enhancing situational awareness and improved accuracy of power system state estimators. This will allow for a better understanding of the grid responses to disturbances and will result in fewer and less severe service interruptions for customers.
Operational Effectiveness	• Wide area monitoring of the power grid with synchrophasor data will provide operators with enhanced visibility into system conditions allowing for detection of disturbances. • High resolution, time stamped phasor measurements obtained from PMUs will result in more accurate post-event analysis which will aid in future reduction and avoidance of similar disturbances, increasing operational effectiveness.
Public Policy Responsiveness	• Synchrophasor monitoring is required for compliance with the IESO market rules.

5.0 EXPENDITURE PLAN

The investment will implement synchrophasor data collection at 21 stations across the Hydro One network during the 2028-2032 planning period. As mutually agreed between Hydro One and the IESO, PMU installations will follow an implementation plan spanning several years. While the installation pace is on average 9 stations per year, the plan is to front load the earlier years with more installations and have fewer installations in the later years. This will allow for some flexibility for any unforeseen circumstances that may lead to delays, such as outage constraints. This strategy is why the investment costs are lower in the later years. At this pace, Hydro One anticipates completing PMU installations at all identified stations by the end of 2030. The estimated costs over the planning period are based on historical costs of PMU devices that have been installed to date.

Table 3 below summarizes Hydro One's planned and forecast capital expenditures for the 2023-2027 rate period and the forecast capital expenditures for the 2028-2032 planning period. Amounts for the 2023-2027 plan and actual/forecast include investment expenditures that were assigned to different ISDs in Hydro One's previous Application (EB-2021-0110), as further explained in GSP Section 4.11.

Table 3 - Hydro One - Investment Expenditures[3]

($M)	Plan[4] 23-27	Act/Fcst[5] 23-27	2028	2029	2030	2031	2032	Total 28-32
Gross Capital Expenditures	**20.3**	**14.7**	**5.4**	**5.2**	**2.2**	**1.8**	**1.7**	**16.2**
Less Removals	0.0	0.4	0.2	0.2	0.0	0.0	0.0	0.4
Less Capital Contributions	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Net Capital Expenditures	**20.3**	**14.3**	**5.2**	**5.0**	**2.2**	**1.8**	**1.7**	**15.8**

[3] Figures presented in the tables may not sum to the totals shown due to rounding.
[4] "Plan" refers to Hydro One's revised capital expenditure and ISA forecast to implement the OEB-approved Settlement Proposal in EB-2021-0110. Plan shows expenditures previously mapped to Other General Plant investments in EB-2021-0110, as further discussed in GSP Section 4.11.
[5] "Act/Fcst" refers to actual (2023-2025) and forecast (2026-2027) expenditures. Act/Fcst shows expenditures previously mapped to Other General Plant investments in EB-2021-0110, as further discussed in GSP Section 4.11.

The planned expenditures of $20.3M for the 2023-2027 period were developed before the pilot PMU installations were completed. Hydro One subsequently refined the investment scope based on the experience gained from the pilot installations. Capital expenditures for the 2028-2032 period are forecasted to be $15.8M.

6.0 ALTERNATIVES

Hydro One considered the following alternatives before selecting the preferred undertaking.

ALTERNATIVE 1: STATUS QUO

Synchrophasor monitoring is mandated by the IESO through Market Manual 1, Part 1.7, Issue 2.0 “Synchrophasor Data Requirements” which describes the requirements for Generators and Transmitters. As a market participant, Hydro One is obligated to comply with these new market rules. Maintaining status quo and not implementing synchrophasors is not an option. This alternative was not considered because of the non-discretionary nature of the investment.

ALTERNATIVE 2: IMPLEMENTATION OF SYNCHROPHASORS

The recommended alternative is to implement PMU synchrophasors at the identified stations to comply with the IESO market rules. The implementation will be paced based on the mutually agreed upon implementation plan by the IESO and Hydro One. This alternative will ensure Hydro One’s compliance with the IESO market rules, provide real-time situational awareness and the ability to detect and reduce grid disturbances, allowing for better planning and asset utilization of the grid network over the long term. In addition, high resolution, time-stamped and comprehensive phasor data will facilitate better post-event analysis and reconstruction of disturbances.

7.0 EXECUTION RISK AND MITIGATION

The main risk to the investment execution is outage scheduling. Commissioning delays may arise if outages cannot be obtained. To mitigate this risk outages will be applied for as soon as possible. Barring unforeseen circumstances, early scheduling should mitigate some of this risk.

Another strategy to mitigate overall investment delays is to frontload the earlier years with more releases and taper off the number of stations in the later years. This way any work that is unavoidably delayed can be still done in the later years where the workload is lighter.

G-GP-25	OPERATIONS PROJECTS
Primary Trigger:	System Reliability
OEB RRF Outcomes:	Customer Focus, Operational Effectiveness, Public Policy Responsiveness, Financial Performance

Net Capital Expenditures[1]:

($M)	2028	2029	2030	2031	2032	Total
Hydro One	4.8	5.6	7.4	9.9	8.9	36.5

Prepaid Expenditures Related to Cloud[2]:

($M)	2028	2029	2030	2031	2032	Total
Hydro One	1.0	6.1	0.4	0.0	0.0	7.6

Summary:

This investment includes two components: (i) modernization of the Power System Database (PSDB), its dependent applications, and related interfaces, which are based on outdated architecture; and (ii) lifecycle upgrades to the Outage Request Module and Utility Work Protection Code (UWPC) Module as they approach the end of their supported lifecycles. These investments will reduce customization and accumulated complexity (known as technical debt), and increase the automation of manual processes, thereby improving operational effectiveness, solution quality, and service reliability. A comprehensive end of life strategy will also facilitate the retirement of legacy technologies. Together, these activities will improve data accuracy, strengthen cybersecurity, enhance the resilience of the solution, and mitigate risks associated with aging infrastructure.

[1] Figures presented in the tables may not sum to the totals shown due to rounding.
[2] Figures presented in the tables may not sum to the totals shown due to rounding.

1.0 OVERVIEW

Hydro One is undertaking upgrades to its Operating Technology (OT) systems. As part of this process, Hydro One will retire the legacy Power System Database (PSDB) and migrate its data to other systems. PSDB is Hydro One's system of record for approximately 66,900 power system assets and serves as the authoritative source of technical asset information across Hydro One's operational and enterprise systems. Its architecture and proprietary data model are obsolete, creating data quality issues, complex integrations, and growing manual effort to reconcile information with modern grid systems. Retiring the PSDB and its related applications and migrating its data to other systems will improve data quality, interoperability, cybersecurity, and operational efficiency. This will also reduce technical debt and establish a standardized data foundation that supports grid operations, advanced system management capabilities, analytics, regulatory reporting, and future grid modernization initiatives.

In parallel, Hydro One will complete lifecycle upgrades to two critical system operations tools: the Outage Request Module and Utility Work Protection Code (UWPC) Module. The modules support essential operational processes through the Integrated Tools for Operations Application (iTOA) platform, which has approximately 2,000 Hydro One users. These tools are essential for equipment outage planning, system reliability, and worker safety. These investments will maintain vendor support, strengthen cybersecurity, support compliance with evolving operational and safety requirements, and improve customer service, while avoiding the growing costs and risks associated with aging, unsupported technologies.

2.0 INVESTMENT NEED

Hydro One has several legacy technology solutions supporting grid operations which require modernization or lifecycle upgrades.

2.1 POWER SYSTEM ASSET DATA MODERNIZATION

Hydro One's PSDB and its portfolio of over 70 dependent legacy applications require modernization to address increasing operational, data quality, and integration challenges. The PSDB serves as the authoritative source of technical information for power system

assets and supports numerous engineering, planning, operational, and control system functions across the enterprise.

Over time, the PSDB's proprietary data structures and extensive system dependencies have become increasingly difficult to maintain and integrate with modern enterprise and operational technology platforms. As a result, Hydro One relies on growing levels of manual intervention to reconcile data between systems, maintain interfaces, and support critical business and operational processes. These activities increase operating effort while introducing risk to data consistency, accuracy, and timeliness across interconnected applications and real-time control systems.

A key driver for modernization is the industry's adoption of the Common Information Model (CIM), defined by International Electrotechnical Commission (IEC) standards IEC 61968 and IEC 61970, as the standard approach for representing power system asset data. CIM has become the predominant model used by utility software vendors and peer utilities across North America. In contrast, the PSDB relies on legacy proprietary structures that require custom mappings and transformations to exchange information with CIM-based platforms. As Hydro One continues to invest in modern grid management systems, maintaining these custom integrations becomes increasingly complex, costly, and operationally burdensome.

These challenges are evident in systems that support control centre operations. For example, the Control Room Information System (CRIS) integrates with both the PSDB and the Energy Management System (EMS). Differences in how assets are represented across these systems require ongoing manual intervention to reconcile equipment information and maintain data quality. Similar issues exist across other dependent systems, resulting in increased support effort and a greater risk of inconsistencies in operational data.

Hydro One’s Advanced Distribution Management System (ADMS) and Energy Management System (EMS) platform vendors have already adopted CIM-based models, consistent with industry practice. Aligning Hydro One's asset data environment with CIM is increasingly necessary to support vendor interoperability,

reduce integration complexity, facilitate model management, and establish a sustainable foundation for future grid technologies.

In parallel, Hydro One must modernize, replace, or retire the more than 70 applications that depend on the PSDB. Many of these applications were developed over the past three decades and rely on aging technologies, custom interfaces, and legacy infrastructure that are increasingly difficult to support. Continued dependence on these applications would require ongoing custom integrations, duplicate maintenance activities, and manual data reconciliation as Hydro One advances investments in areas such as transmission energy management, advanced distribution management, work and asset management, and enterprise data platforms.

2.2 LIFECYCLE UPGRADES

Hydro One's Outage Request Module and Utility Work Protection Code (UWPC) Module, support two critical operational functions: coordinating planned power system outages and ensuring the safe isolation of electrical equipment for field work. Based on the vendor's historical practice of providing approximately five years of standard support following a lifecycle upgrade, these applications are expected to lose standard support by 2030 and 2031 respectively. Lifecycle renewal is required to maintain vendor-provided security updates, defect corrections, product enhancements, and regulatory compliance updates.

Outage Request Module: To protect the reliability of the Bulk Electricity System, Hydro One must coordinate planned transmission equipment outages with the IESO, submit required outage information, and obtain approval before work begins.

The Outage Request Module is Hydro One's platform for planning, assessing, scheduling, coordinating, and executing transmission and distribution equipment outages. It includes the following integrated components:

- iTOA Outage/Services Request Scheduling Module
- iTOA Switching Order Module
- Defects/Trouble Equipment Log Module
- Project Planning Module

- IESO Interface
- Resource Scheduling Module

Together, these components support outage management by enabling outage request preparation and coordination, activity management switching, resource scheduling, equipment defect tracking, and direct electronic communication with the IESO. The module is required to support Hydro One's compliance with North American Reliability Corporation (NERC) and Northeast Power Coordinating Council (NPCC) reliability standards, and associated IESO market rule requirements[3]. The module also serves as the system of record for outage information and retains the operational records and electronic communications needed to demonstrate compliance, support audits, and provide evidence of reliable outage planning and execution.

UWPC Module: To ensure the safety of workers, when Hydro One personnel are working on electrical equipment, components must be de-energized, electrically isolated, and tagged before work can safely be performed on the equipment. Switching plans and work protection forms must be created in accordance with the established utility work protection code book. UWPC is a key operating tool used by field personnel and control room staff to produce a package of forms compliant with the UWPC.

Once vendor support ends, Hydro One would face increasing operational and sustainment risks. Unsupported applications no longer receive security patches, defect corrections, compliance updates, or vendor technical support, increasing the likelihood of operational disruptions and requiring greater internal effort to maintain system functionality.

Without upgrades or enhancements to these modules, Hydro One would also lose easy integration capability as other operation systems evolve, leading to additional sustainment effort and complexity to maintain the outdated integration connections.

[3] Relevant obligations include standards NERC TOP-001 Transmission Operations, NERC TOP-003, Transmission Operator and Balancing Authority Data, and Information Specification and Collection, together with IESO outage management requirements.

Modernizing the Outage Request Module and UWPC Module would maintain vendor supportability, improve cybersecurity posture, ensure continued alignment with safety and regulatory requirements, and provide a sustainable platform for outage management and work protection processes. These investments are expected to reduce operational risk, limit technical debt, and support the safe and reliable operation of Hydro One's transmission and distribution systems throughout the planning period.

3.0 INVESTMENT DESCRIPTION

3.1 POWER SYSTEM ASSET DATA MODERNIZATION

To modernize Hydro One’s power system asset data environment, the Power System PSDB will be retired and its functions transitioned to a future-state architecture based on commercial off-shelf enterprise platforms. Data currently maintained within the PSDB will be migrated to appropriate enterprise systems of record, including Hydro One’s enterprise resource planning (ERP) system, geographic information system (GIS), customer relationship management (CRM) system, and a new power system asset data registry. The new registry will manage engineering technical asset data and equipment nameplate information using a data model aligned with the IEC's CIM standards[4].

The investment includes the design, implementation, testing, and deployment of the future-state asset data architecture, including the migration of existing asset records, establishment of new system integrations, and modernization of data governance processes. The work will consolidate asset information into authoritative enterprise platforms, replace legacy interfaces, and establish standardized integration methods for exchanging asset data with enterprise and operational technology systems.

As part of this investment, Hydro One will also modernize the portfolio of more than 70 applications currently dependent on the PSDB. These applications will be addressed through a combination of retirement, where functionality can be absorbed by target enterprise systems; re-platforming onto modern infrastructure; and targeted redevelopment where specialized business capabilities must be retained. Associated

[4] IEC Standard 61970-301:2020 Energy Management System Application Program Interface, and IEC Standard 61968-1:2020 Application Integration at Electrical Utilities.

workflows for creating, maintaining, auditing, and consuming power system asset information will also be updated to align with the future-state architecture.

The modernization will include enhancements to interfaces supporting operational technology systems, power system modelling tools, engineering applications, reporting platforms, and regulatory data exchanges. The solution will be aligned with applicable industry standards, vendor integration requirements, and IESO data exchange and reporting requirements.

To manage delivery risk and maintain operational continuity, the program will be executed through a phased implementation approach. Modernization activities will be sequenced across the planning period, allowing legacy and replacement capabilities to operate in parallel, where required, supporting testing, validation, data verification, and controlled cutovers before final decommissioning of legacy systems. Table 1 outlines the planned modernization roadmap.

Table 1 - Application Modernization Roadmap

Initiative	Start	End
Document Management System Modernization	2028	2028
Protection System Data Modernization	2028	2028
Enterprise Customer Data Alignment	2028	2028
Engineering Technical Asset Data Registry and CIM Alignment	2028	2030
Milestone Reporting System Enhancement	2029	2029
Network Data Management Enhancement	2029	2029
Engineering Power System Modeling Tool Modernization	2029	2030
Operations Information Portal Modernization	2030	2030
Admin Control Room Information System Modernization	2030	2030
Geospatial-Power System Data Migration and Modernization	2030	2030
Infobase Reporting and Analysis System Modernization	2031	2031
PSDB Retirement and Legacy Application Decommissioning	2030	2031

Over the planning period, Hydro One plans to invest $17.4M in capital and $7.6M prepaid funds to implement this modernization program. The investment includes hardware required to support the future-state environment; perpetual software licenses for vendor-supplied registry components; external implementation and specialized technical

expertise; system integration, performance, security, and user acceptance testing; process automation and deployment activities; and internal resources supporting architecture, application development, infrastructure, cybersecurity, data management, and project delivery.

3.2 LIFECYCLE UPGRADES

Hydro One plans to complete lifecycle upgrades within the iTOA platform for the Outage Request Module (previously Network Outage Management System [NOMS]) and Utility Work Protection Code (UWPC) Module during the planning period. Based on Hydro One's application lifecycle practices and vendor support schedules, the Outage Request Module upgrade is planned to begin in 2030, following the completion of its previous lifecycle upgrade in 2025. The UWPC Module upgrade is planned to begin in 2031, following the completion of its current lifecycle upgrade in 2026. Given the timing of these projects, the specific functionality included in future vendor releases has not yet been defined. Accordingly, Hydro One's investment plan is based on the activities typically required to transition these applications to supported software releases while maintaining operational continuity, cybersecurity, and interoperability with dependent systems.

The lifecycle upgrades are expected to include:

- Assessment and remediation of infrastructure, operating system, database, and middleware compatibility requirements.
- Upgrade of the applications to supported vendor versions, including implementation of vendor-provided security patches and software updates.
- Modification and testing of system integrations and application programming interfaces to maintain interoperability with interconnected operational and enterprise systems.
- Migration and validation of application configurations, operating rules, and supporting data.
- Implementation of security hardening measures and remediation of identified vulnerabilities.
- Deployment of upgraded applications through controlled release and cutover processes.

In addition to the core lifecycle work, the upgrades may include functionality introduced through future vendor software releases. Hydro One will access and implement any such functionality as part of the upgrade. While the specific functionality cannot be determined at this stage, the investment plan provides flexibility to evaluate and implement enhancements that improve business processes, operational efficiency, usability, or integration capabilities where justified. This approach enables Hydro One to take advantage of vendor innovations and evolving industry practices while minimizing the need for future standalone investments.

The lifecycle upgrades will also ensure continued compatibility with Hydro One's evolving operational technology and enterprise application landscape, reducing the need for custom sustainment activities and helping maintain vendor supportability throughout the asset lifecycle.

Over the planning period, Hydro One plans to invest $19.2M in capital expenditures to complete these lifecycle upgrades and maintain the ongoing supportability of these critical operational applications.

4.0 OUTCOMES

4.1 OEB RRF OUTCOMES

Table 2 presents anticipated benefits as a result of the proposed investment in accordance with the Ontario Energy Board’s (OEB) Renewed Regulatory Framework (RRF).

Table 2 - Outcome Summary

Customer Focus	• (Power System Asset Data Modernization) Improves data accuracy and integration across systems, enabling faster, clearer, more reliable customer-facing processes and better service experiences. • (Lifecycle Upgrades) Reduces probability and impact of outages with better, more secure scheduling tools.
Operational Effectiveness	• (Power System Asset Data Modernization) Reduces technical debt, streamlines workflows, and enhances data quality and integration, enabling faster decision-making and more efficient execution of grid operations. • (Lifecycle Upgrades) Reduces technical debt and security vulnerabilities.
Public Policy Responsiveness	• (Power System Asset Data Modernization) Ensures continued alignment with evolving regulatory requirements. • (Lifecycle Upgrades) Enhances compliance with regulatory expectations by keeping critical operational and safety systems current, auditable, and aligned with evolving safety standards from the Ontario Infrastructure Health & Safety Association (IHSA) and operational standards set by NERC, NPCC, or the IESO, such as NERC TOP-001, NPCC Directory #1, and IESO Market Manual 7.
Financial Performance	• (Power System Asset Data Modernization) Avoids escalating costs arising from maintenance burdens and workarounds. • (Lifecycle Upgrades) Avoids escalating maintenance costs and higher extended vendor support fees.

5.0 EXPENDITURE PLAN

These investments are required to replace aging and increasingly unsupported operational technologies, reduce technical debt, and maintain the reliability, security, and efficiency of Hydro One's critical systems. The Power System Asset Data Modernization investments will improve data quality, operational performance, system integration, and cybersecurity, while the lifecycle upgrades to key systems will support safe outage planning, worker protection, and reliable grid operations. Together, these investments will mitigate operational and cybersecurity risks, support compliance with evolving standards, and help ensure the continued delivery of safe and reliable service to customers.

Table 3 below summarizes Hydro One's forecast net capital and prepaid expenditures for the 2028-2032 period.

Table 3 - Hydro One - Investment Expenditures[5]

($M)	2028	2029	2030	2031	2032	Total 28-32
Gross Capital Expenditures	4.8	5.6	7.4	9.9	8.9	36.5
Less Removals	0.0	0.0	0.0	0.0	0.0	0.0
Less Capital Contributions	0.0	0.0	0.0	0.0	0.0	0.0
Net Capital Expenditures	**4.8**	**5.6**	**7.4**	**9.9**	**8.9**	**36.5**
Prepaid Expenditures Related to Cloud	**1.0**	**6.1**	**0.4**	**0.0**	**0.0**	**7.6**

Table 4 below summarizes Hydro One's net capital and prepaid expenditures, including planned and forecast expenditures for the 2023-2027 rate period and planned expenditures for the 2028-2032 rate period. These expenditures are presented according to the investments described in Section 3.0 Investment Description.

Table 4 - Hydro One - Expenditures Continuity Over Rate Period ($M)[6]

Description	Capital Expenditures			Prepaid Expenditures		
	Plan[7] 23-27	Act/Fcst[8] 23-27	Total 28-32	Plan 23-27	Act/Fcst[8] 23-27	Total 28-32
Power System Asset Data Modernization	0.0	0.0	17.4	0.0	0.0	7.6
Lifecycle Upgrades	15.9	21.1	19.2	0.0	0.0	0.0
Total	**15.9**	**21.1**	**36.5**	**0.0**	**0.0**	**7.6**

2023-2027 EXPENDITURES

During the last rate period, Operations Projects expenditures are $5.2M higher than planned, with no variance related to prepaid expenditures. The capital variance is primarily attributable to enhancements to the Outage Request Module, including incremental functionality required to support enhanced distribution work planning, as well as the

[5] Figures presented in the tables may not sum to the totals shown due to rounding.
[6] Figures presented in the tables may not sum to the totals shown due to rounding.
[7] "Plan" refers to Hydro One's revised capital expenditure and ISA forecast to implement the OEB-approved Settlement Proposal in EB-2021-0110. Plan includes expenditures previously mapped to different ISDs in EB-2021-0110, as further discussed in GSP Section 4.11.
[8] "Act/Fcst" refers to actual (2023-2025) and forecast (2026-2027) expenditures.

implementation of Oracle Advanced Security to support encryption of data at rest and in transit to align with cybersecurity best practices.

2028-2032 EXPENDITURES

Over the 2028-2032 rate period, investments are forecasted to be $15.4M higher in capital and $7.6M higher in prepaid. These incremental expenditures are primarily attributable to Power System Asset Data Modernization, representing $17.4M in capital and $7.6M in prepaid work to retire and replace the PSDB.

6.0 ALTERNATIVES

Hydro One considered the following alternatives before selecting the preferred undertaking.

6.1 POWER SYSTEM ASSET DATA MODERNIZATION

ALTERNATIVE 1: RETIRE PSDB (RECOMMENDED)

The recommended alternative is to fully retire the PSDB, migrate its data to commercial off-shelf enterprise systems of record, establish a new power system asset data registry aligned with the CIM, and modernize the associated application portfolio. This approach replaces the legacy proprietary architecture with industry-standard data structures and authoritative enterprise platforms aligned to their respective business capabilities, providing a sustainable long-term foundation for managing power system asset information.

The recommended alternative addresses the underlying architectural limitations that drive existing data integrity, interoperability, and integration challenges. By migrating interconnected power system asset data domains as an integrated whole, Hydro One can establish consistent, auditable, and governed information across engineering, planning, operations, regulatory reporting, and other business functions. Standardization on CIM-aligned data structures will improve compatibility with modern enterprise and operational technology platforms and support future grid modernization initiatives.

This approach also reduces implementation and operational risk by minimizing the duration of parallel operations between legacy and target environments. A complete migration avoids the need for extensive interim interfaces, duplicate data maintenance, and ongoing synchronization activities between proprietary and industry-standard data models. Given the highly interconnected nature of the PSDB data domains and dependent applications, a full retirement provides a lower-risk path to modernization than maintaining a mixed legacy and modern environment.

Accordingly, Hydro One determined that full retirement and modernization of the PSDB environment is the preferred alternative because it addresses the root causes of current limitations, reduces technical debt, strengthens long-term maintainability and cybersecurity, and establishes a scalable and interoperable data foundation capable of supporting future operational, regulatory, and technology requirements.

ALTERNATIVE 2: STATUS QUO

Under this alternative, Hydro One would continue operating the PSDB and its associated application portfolio without undertaking the proposed modernization and retirement activities.

Maintaining the status quo would preserve the existing proprietary architecture and data model, requiring continued reliance on custom integrations, data reconciliation activities, and aging technologies. As enterprise and operational technology platforms increasingly adopt industry-standard data models, interoperability challenges and technical debt would continue to grow.

This alternative would not establish authoritative enterprise systems of record for the affected data domains, nor would it address the underlying architectural limitations that drive data quality, integration, and maintainability challenges across Hydro One's technology environment.

This alternative is not recommended because it would defer investment while continuing the operational, integration, cybersecurity, and sustainment risks associated with a legacy

platform that is becoming increasingly difficult to support and integrate with modern grid technologies.

ALTERNATIVE 3: PARTIAL RETIREMENT AND DATA MIGRATION

Under this alternative, Hydro One would retire and migrate selected PSDB data domains and applications while retaining portions of the PSDB architecture and associated legacy applications for remaining functions. This approach would reduce near-term implementation costs and defer portions of the modernization effort to a future period; however, it would require Hydro One to operate and maintain both legacy and modern environments concurrently.

Partial migration would require ongoing synchronization, translation, and reconciliation processes between PSDB's proprietary data structures and the target industry-standard data model. Because PSDB supports interconnected power system asset, engineering, operational, and network modelling information that is consumed by numerous dependent applications and operational technology systems, maintaining a mixed legacy and modern environment would introduce additional interfaces, increase operational complexity, and extend the duration of parallel operations.

This alternative was rejected because it would not address the underlying architectural limitations of the PSDB and would require significant ongoing effort to maintain consistency between legacy and target platforms. Data-quality risks, interoperability challenges, duplicate maintenance activities, and technical debt would persist while limiting the benefits of enterprise data standardization. In addition, a future phase of full modernization would still be required, resulting in additional implementation, testing, integration, and change-management activities at a higher overall lifecycle cost. Therefore, Hydro One determined that a complete retirement and migration of the PSDB environment provides the lower-risk and more sustainable long-term solution.

6.2 LIFECYCLE UPGRADES

ALTERNATIVE 1: COMPLETE LIFECYCLE UPGRADES (RECOMMENDED)

The recommended alternative is to complete lifecycle upgrades for Hydro One's Outage Request Module and UWPC Module before they exit vendor support. Consistent with Hydro One's historical application lifecycle practices, the upgrades are planned approximately five years following the applications' previous major releases. This approach maintains access to vendor-supported software, including security updates, defect corrections, compatibility enhancements, and technical support, while avoiding the increasing costs and operational risks associated with unsupported platforms.

The upgrades will ensure the continued reliability and supportability of applications that are critical to outage planning, work protection, equipment change management, control-room operations, and defect management. They will also maintain compatibility with interconnected operational and enterprise systems, reducing cybersecurity, integration, and reliability risks as Hydro One's technology environment evolves.

By upgrading the applications within their supported lifecycle, Hydro One can continue to leverage vendor enhancements, maintain alignment with applicable utility operating practices and regulatory requirements, and avoid the growing sustainment effort associated with aging technology. The upgrades will support operational resilience, auditability, and the consistent administration of work protection processes, while reducing technical debt and establishing a sustainable platform for future operational requirements.

ALTERNATIVE 2: STATUS QUO

Maintaining the status quo would result in the Outage Request Module and UWPC Module reaching the end of vendor support by approximately 2030 and 2031, respectively. Once vendor support ends, the applications would no longer receive security patches, defect corrections, product enhancements, regulatory updates, or technical support. While limited extended support may be available, it would likely come at a higher cost and would not address the underlying obsolescence of the platforms. As Hydro One's operational technology and enterprise systems continue to evolve, unsupported applications would become increasingly difficult and costly to maintain and integrate, resulting in growing

technical debt, sustainment effort, and operational complexity. Accordingly, this alternative is not recommended because it would either expose Hydro One to increasing operational, safety, cybersecurity, and compliance risks, or require costly extended support arrangements that do not provide a sustainable long-term solution.

The UWPC Module is a critical tool used to generate switching plans and work protection documentation required to safely isolate electrical equipment before work is performed. As safety standards, work protection requirements, and operating practices evolve, unsupported applications may be unable to accommodate required updates. This could force staff to rely on manual workarounds or supplemental processes, increasing the risk of errors in the preparation and administration of worker protection measures. Future corrective actions arising from operational incidents could also require system enhancements that cannot be readily implemented on unsupported platforms, increasing operational and safety risk over time.

The Outage Request Module and UWPC Module are also essential to the planning and execution of equipment outages, switching activities, emergency repairs, and service restoration. Unsupported applications are more susceptible to defects and integration issues that could disrupt these critical processes. For example, a defect in the Outage Request Module could prevent Hydro One from submitting a planned outage request to the IESO within required timelines, delaying scheduled maintenance activities. Similarly, a UWPC system issue could prevent the generation of a compliant switching plan or work protection package, delaying field work, emergency repairs, or restoration activities and potentially increasing outage durations and operating costs.

Cybersecurity risk would also increase over time as unsupported applications would no longer receive vendor-issued security patches for newly discovered vulnerabilities. As a result, the likelihood of successful exploitation would increase, potentially affecting outage management, work protection information, or other operational processes that support the safe and reliable operation of the power system.

In addition, regulatory compliance risks would increase as requirements established by the IESO, NERC, and NPCC continue to evolve. Unsupported applications may be unable

to accommodate future changes to outage approval, tracking, reporting, or record-keeping requirements. For example, future regulatory changes could require additional outage reporting, approval, or audit capabilities that unsupported systems cannot provide, increasing reliance on manual processes and creating additional compliance risk.

Hydro One determined that this alternative is not preferred because it would increase operational, safety, cybersecurity, and compliance risks while driving higher sustainment costs and technical debt, without addressing the underlying obsolescence of these critical operational applications.

ALTERNATIVE 3: DEFER TO NEXT RATE PERIOD

Deferring the Outage Request Module and UWPC Module upgrades to the next rate period would postpone the planned lifecycle upgrades from 2030 and 2031 to 2033 or later. While this alternative would defer capital expenditures, it would require Hydro One to operate the applications beyond their expected vendor support period, exposing the company to the same operational, cybersecurity, safety, and compliance risks identified under Alternative 2. Any short-term reduction in capital spending could also be partially offset by the need for extended vendor support arrangements, if available, which are typically more costly and provide limited long-term value. In addition, continued operation of unsupported applications would increase technical debt and sustainment effort as Hydro One's operational technology and enterprise environments continue to evolve. Accordingly, this alternative is not recommended because it delays resolution of known lifecycle risks while increasing Hydro One's exposure to unsupported and increasingly obsolete platforms.

7.0 EXECUTION RISK AND MITIGATION

Table 5 below summarizes execution risks and mitigations for these investments.

Table 5 - Execution Risks and Mitigations

Execution Risk	Mitigating Action
Power System Data Migration Accuracy: Approximately 1,200 data tables and decades of technical asset information must be migrated from the PSDB to multiple target platforms. Errors in data mapping, transformation, or conversion could result in inaccurate asset records, operational impacts, or regulatory reporting issues.	Establish detailed data migration rules and validation criteria for each data domain. Perform multiple trial migrations, automated reconciliation, business validation, and production readiness reviews. Maintain rollback capability and preserve archived copies of legacy data until migration quality is confirmed.
Parallel Operations and Data Consistency: During the transition period, PSDB and target systems may operate concurrently. Data discrepancies between environments could create confusion, duplicate effort, and inconsistent information across operational and enterprise systems.	Establish a clearly defined system of record for each data domain at every stage of the transition. Implement automated synchronization and reconciliation controls, monitor exceptions, and maintain governance processes to manage data ownership and issue resolution.
Enterprise System Dependency Risk: Successful delivery depends on coordination with multiple enterprise initiatives, including SAP, the Geographic Information System (GIS), Customer Relationship Management (CRM) system, OT systems, and enterprise data platforms. Delays or scope changes in related programs may affect implementation timelines or design decisions.	Maintain integrated program governance, manage cross-project dependencies through formal planning processes, and regularly review risks, assumptions, and delivery schedules at project stage-gates.
Legacy Application Modernization and Sequencing: More than 70 dependent applications require retirement, replacement, re-platforming, or integration updates. Incorrect sequencing could delay implementation, increase sustainment costs, or create service disruptions.	Develop and maintain a comprehensive application transition roadmap identifying dependencies, critical paths, retirement criteria, and readiness gates. Review sequencing through governance forums and regularly reassess priorities based on project progress.

Execution Risk	Mitigating Action
Resource Availability and Subject Matter Expertise: Specialized knowledge of PSDB data structures, legacy applications, and operational processes resides with a limited number of technical and business resources. Resource constraints or knowledge loss could delay implementation and increase delivery risk.	Implement formal knowledge-transfer activities, maintain documentation of legacy processes and interfaces, and coordinate resource planning across IT, OT, engineering, cybersecurity, and business teams.
Organizational Change and Process Adoption: The modernization of PSDB will require users to transition from long-established processes, tools, and ways of working to new applications, workflows, and data stewardship models. Even where future-state requirements and transition plans are agreed upon, users may continue to rely on familiar legacy processes, manual workarounds, or duplicate activities, delaying adoption and reducing realization of the expected operational benefits.	Develop and execute a structured transition program that includes stakeholder communications, business readiness assessments, role-based training, operational support, and phased adoption activities. Monitor adoption throughout implementation, identify barriers to process transition, and work with business leaders to embed new workflows, responsibilities, and operating practices into day-to-day operations.
Business Requirements and Rationalization Alignment: Stakeholders may have differing expectations regarding future business capabilities, application ownership, retirement priorities, target systems, and timelines. Misalignment could delay decision-making, increase project scope, or reduce realization of modernization benefits.	Conduct structured business engagement across all impacted lines of business to validate current-state processes, future requirements, application dependencies, and business ownership. Document future-state requirements and transition plans, obtain stakeholder approval of recommendations, and maintain formal governance and change-control processes throughout implementation.
Cybersecurity and Security Hardening: Temporary integrations, migration tools, new interfaces, and parallel environments may introduce cybersecurity vulnerabilities.	Apply security-by-design principles, perform architecture reviews, penetration testing, vulnerability assessments, and access reviews, and require Security Office approval prior to production deployment.

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G-GP-26	DATA, ANALYTICS, AND AI ENABLEMENT
Primary Trigger:	Business Enhancements
OEB RRF Outcomes:	Customer Focus, Operational Effectiveness, Public Policy Responsiveness, Financial Performance

Net Capital Expenditures:

($M)	2028	2029	2030	2031	2032	Total
Hydro One	5.2	5.2	5.2	5.2	5.2	26.0

Prepaid Expenditures Related to Cloud:

($M)	2028	2029	2030	2031	2032	Total
Hydro One	3.5	3.5	3.5	3.5	3.5	17.5

Summary:

Hydro One is enhancing its strategic data capability through investments in data quality, governance, and accessibility, enabling more effective decision-making while supporting regulatory compliance, transparency, and operational efficiency.

The investments outlined in this document pertain to data, analytics and artificial intelligence (AI). They include the development of centralized platforms, marketplaces, and advanced analytics tools, along with governance, privacy, and security controls to ensure compliance and protection of sensitive information.

These investments will establish a trusted data foundation, improve data-driven decision-making and near real-time insights, and deliver reusable data products to reduce duplication and support scalable innovation. In turn, these investments will enable the business to improve forecasting, increase operational efficiency, and automate processes.

1.0 OVERVIEW

Ontario's electricity grid is becoming more complex, data-intensive, and dependent on real-time decision-making. Provincial direction such as the *Energy for Generations*[1], and industry guidance such as the Ontario Energy Association's *Grid Modernization* report[2] continue to reinforce the need for data-driven enterprise-wide operations. As digital systems, connected assets, and customer interactions continue to generate increasing volumes of data, Hydro One requires enterprise-wide capabilities to manage, govern, and transform this data into actionable insights. Without enhanced infrastructure and analytics, much of this data's potential value would remain underutilized.

To leverage this data, Hydro One will establish a scalable, secure, and well-governed data and AI ecosystem comprising centralized platforms, standardized data models, governance practices, and tools that support advanced analytics and AI-driven capabilities. As the enterprise platform for data and AI, Snowflake and Copilot will enable governed data sharing, enterprise reporting, cross-functional analytics, and reusable AI solutions by providing a common foundation for information that is shared across business functions, applications, and operational domains. This approach reduces duplication, promotes consistency, and enables data products and analytical capabilities to be developed once and reused across the organization. In addition, near real-time analytics will support grid planning, outage prevention, system optimization, and the integration of emerging technologies such as electric vehicles and distributed energy resources.

The data, analytics and AI investments are expected to enhance operational efficiency through automation, improved data quality, and faster decision-making. They will enable Hydro One's lines of business to access and analyze the data required to develop more customized, customer-centric programs including demand side management and managed charging programs. Additionally, the program supports regulatory compliance, improves system reliability and flexibility, and strengthens Hydro One's ability to respond

[1] Government of Ontario, Energy for Generations (June 12, 2026), Section "Electricity Demand" (https://www.ontario.ca/page/energy-generations)
[2] Ontario Energy Association (OEA), Grid Modernization (December 17, 2025), p. 38 (https://energyontario.ca/wp-content/uploads/2025/12/OEA-Grid-Modernization-Report_Dec172025.pdf)

to evolving energy policies. Overall, these investments will position Hydro One to deliver a more reliable, efficient, and modern electricity system powered by data-driven decision-making.

2.0 INVESTMENT NEED

There are three main drivers necessitating Hydro One's proposed investments in data, analytics, and AI enablement:

- Managing significant existing and growing data volumes across the organization,
- The increasing need for near real-time analytics to support operational planning and system flexibility, and
- The requirement for governed, scalable, and secure data infrastructure to enable enterprise-wide decision-making.

Managing Data Volumes

Hydro One must continue to maintain and scale the enterprise data capabilities that underpin existing operational, customer, and corporate systems across the organization. Over decades of operation, Hydro One has accumulated and continues to maintain multiple terabytes of historical financial, customer, asset, operational, and project data that support critical business processes and regulatory obligations. This information represents a significant corporate asset, providing the historical records required for financial and regulatory reporting, asset management, investment planning, customer service, reliability analysis, and operational decision-making.

Hydro One has undertaken a number of initiatives that have or will substantially expand Hydro One's data-generation. Key systems that have, or will, accelerate the growth of data volumes across the enterprise include:

- **AMI 2.0**: The transition to AMI 2.0 meters increases interval data collection frequency from hourly to every 15 minutes across approximately 1.5 million service points, resulting in a fourfold increase in meter data volumes. Additional Distributed Intelligence applications deployed at the grid edge will also generate new operations datasets that did not exist within the AMI 1.0 environment.

- **SAP S4/HANA:** The transition from SAP ECC to SAP S/4HANA is expected to increase enterprise data storage requirements to support near real-time analysis, AI-enabled capabilities, cybersecurity logging, and integration with modern enterprise data platforms. As SAP becomes a significant source of operational and analytical data, a substantial portion of the growing data volumes, measured in terabytes, will be integrated with Snowflake to support enterprise reporting, cross-functional analytics, and other operational business needs.
- **Distributed Energy Resource integration platforms:** The growth of distributed energy resources, including rooftop solar, battery storage, electric vehicles, and other customer-connected technologies, requires the collection and management of larger volumes of near real-time operational forecasting, interconnection, and performance data to support grid planning and operation.
- **Advanced Distribution Management System (ADMS):** ADMS integrates data from multiple grid systems and field devices to provide real-time visibility and control of the distribution network. The increasing deployment of sensors, telemetry, and operational applications within ADMS is driving growth in high-frequency operational data and system event information.
- **Grid Automation Technologies:** The continued deployment of grid automation technologies will materially increase the data storage requirements. Expanded use of intelligent field devices such as operational technology systems, distributed energy resources, and cybersecurity monitoring generates substantially higher volumes of operational and historical data. Additional storage capacity is therefore required to support real-time operations, advanced analytics, predictive asset management, and the secure operation of an increasingly digital and automated electricity grid
- **Imagery Data Sets:** The increasing use of aerial imagery, satellite imagery, LiDAR, drone inspections, and computer vision technologies for asset inspections, vegetation management, and infrastructure planning generates large volumes of unstructured visual data. While these datasets exist today across multiple systems and business functions, they are not readily accessible or reusable across lines of business, limiting their broader operational value. These investments will provide the storage, processing, integration, and analytical capabilities required to govern

and leverage imagery data as an enterprise asset, supporting asset condition assessments, risk identification, operational decision-making, and the reuse of insights across multiple business functions.

Increasing need for Near Real-Time Analytics

The increasing volume and complexity of operational, asset, and customer data generated across Hydro One's business has created a need for enhanced analytics capabilities that enable faster and more informed decision-making. Grid operators, planners, and asset managers increasingly rely on timely, high-quality data to monitor system conditions, assess asset health, prioritize investments, and respond to emerging operational risks. Advanced analytics and AI-enabled tools support these activities by improving forecasting, identifying patterns and anomalies, enabling predictive maintenance, and enhancing situational awareness. These capabilities also position Hydro One to manage evolving grid conditions, including increasing levels of distributed energy resources and electrification, while maintaining the reliable and cost-effective delivery of electricity service.

Data and AI Governance

Investment is required to convert Hydro One's growing volume of operational, asset, and customer data into actionable insights that support effective decision-making and operational performance. As data volumes continue to expand across the organization, enhanced data and AI governance, quality controls, integration capabilities, and data management practices are necessary to ensure information is accurate, accessible, secure, and fit for use. These capabilities enable Hydro One to leverage data to improve asset investment planning, support outage response and restoration, forecast load and distributed energy resources impacts, enhance customer insights, and identify emerging asset and operational risks. They also provide the governance, oversight, and risk management capabilities needed to support the responsible adoption of artificial intelligence across the enterprise. Without these foundational capabilities, Hydro One risks underutilizing the value of its data assets and limiting benefits that can be realized from existing technology investment.

To address these needs, Hydro One is advancing toward a future-state enterprise data and analytics environment that provides trusted, governed, and accessible data, standardized analytics and AI capabilities, and a scalable platform for the development and deployment of data-driven solutions across the organization. To support this transition, Hydro One is investing in enterprise data and analytics capabilities including modern data infrastructure, standardized data and AI models, data and AI governance frameworks, and platforms that support the development and deployment of analytics and AI enabled solutions. The data and AI governance framework establishes policies, standards, oversight, and risk-based controls that help ensure data and AI solutions are deployed in a secure, transparent, and responsible manner. These capabilities enable improved forecasting, asset management, operational decision-making, reporting, and customer service.

A key component of this strategy is the adoption of a hybrid cloud model, reflecting evolving vendor requirements for cloud-enabled solutions and the need to efficiently manage Hydro One's extensive enterprise data assets. The hybrid cloud approach provides scalable, resilient, and cost-effective infrastructure that supports the storage, integration, processing, and analysis of large datasets while maintaining appropriate controls over sensitive information. It also enables Hydro One to take advantage of modern analytics and AI capabilities that are increasingly delivered through cloud-based platforms.

The need for these investments is further supported by the findings of Gartner’s IT maturity assessment (GSP Section 4.3, Attachment 7), which identified opportunities to strengthen Hydro One’s enterprise data management and analytics capabilities. Collectively, these investments will improve the utility’s ability to derive value from its data, enhance operational efficiency, and support the reliable and cost-effective delivery of electricity services.

3.0 INVESTMENT DESCRIPTION

Hydro One is investing in enterprise data, governance, and AI capabilities required to operate a modern electric utility. This investment supports the continued evolution and expansion of Hydro One’s enterprise data and AI platform, enabling a scalable, secure,

and well-governed environment for managing and using data across the organization. The platform provides centralized capabilities for ingesting, storing, integrating, securing, and analyzing large volumes of data from multiple business systems, improving accessibility, consistency, and quality while enabling advanced analytics, reporting, automation, and AI-driven solutions.

The enterprise data platform is primarily enabled through a cloud-based architecture, with Snowflake serving as a core data platform provider. In parallel, Hydro One is advancing an enterprise AI platform that leverages a combination of embedded capabilities within the data platform (such as native analytics and AI features) and complementary technologies outside of it, including Microsoft-based services (e.g., Copilot ecosystem and Azure AI/Foundry capabilities). Together, these platforms provide a flexible and extensible foundation that supports a broad range of analytics and AI use cases while maintaining strong governance, security, and interoperability across the enterprise.

Hydro One will continue to expand the functionality, adoption, and business application of the enterprise data and AI platform through the 2028-2032 period. These investments will support the development and deployment of data analytics, automation, and AI use cases. The investment also includes ongoing enhancements to data management capabilities, including data governance, data quality, metadata management, master data management, and the establishment of reusable data products that improve access to trusted information across the organization.

Hydro One's Data and AI investments are organized into two complementary categories. The first category funds qualifying use cases and associated data management capabilities. The second category funds the platforms, tools and services required to enable those cases:

- **Use Cases for Data Analytics and Management:** These investments will expand on enterprise reporting, analytics, visualization, and decision support capabilities through the Snowflake platform. These investments will also offer enhancements to enterprise data governance, data quality, data integration, meta data management, and information lifecycle practices.

- **Data and AI Platforms and Marketplace**: These investments provide access to a broad ecosystem of data and AI capabilities, while Hydro One applies governance and architecture standards to select models that align with the complexity and value of each use case. This ensures that lower-cost models are utilized where appropriate and that more advanced AI capabilities are deployed only when justified by the expected business benefit.

3.1 USE CASES FOR DATA ANALYTICS, AI, AND DATA MANAGEMENT

Over the 2028-2032 period, Hydro One plans to invest $26.0M in qualifying use cases for Data Analytics, AI, and Data Management, which consists of $26.0M in capital expenditures and $0.0M in prepaid expenditures.

Recognizing the rapidly evolving nature of data and AI technologies, Hydro One has adopted a use case-driven approach to investment deployment. Rather than pre-defining all initiatives over the planning horizon, funding will be allocated annually to a prioritized portfolio of opportunities identified through established business planning and governance processes. Each potential use case will be assessed based on regulatory requirements, expected business value, strategic alignment, implementation feasibility, and enterprise-wide scalability before funding is allocated. This approach enables Hydro One to respond to evolving needs while directing the proposed expenditures toward use cases that fall within the scope of the Data Analytics, AI, and Data Management investment category.

These use cases will advance Hydro One's data and analytics capabilities by expanding the functionality and integration of the Snowflake platform while strengthening the underlying data management tools, processes, and governance required to support trusted and actionable information.

Use cases are expected to be categorized into two main categories:

- **Analytics and AI Tools**: This category encompasses use cases that will leverage the Snowflake platform to enhance analytics, reporting, automation, and artificial intelligence capabilities across the utility. Investments may include the implementation of advanced analytics tools, business intelligence solutions,

artificial intelligence and machine learning applications, generative AI capabilities, robotic process automation, and third-party solutions available through Snowflake and related technology ecosystem. A major component in the prioritization will be on improving worker safety. Safety related initiatives could include enhanced near-miss trend analysis, safety observation intelligence, and supporting asset risk management. Other use cases may include supporting customer service delivery through the application of data-driven insights and intelligent automation. Use cases may support a broad range of business functions including asset management, system planning, operations, customer service finance, regulatory reporting, and corporate services.

- **Data Management:** This category encompasses use cases that strengthen the management, governance, quality, accessibility, and security of enterprise data assets within the Snowflake platform. This includes implementation and enhancement of data governance capabilities, data quality monitoring and remediation tools, metadata management, master data management, and data product development. These initiatives will be focused on establishing and maintaining a trusted, governed, and scalable data foundation that supports Hydro One's growing analytics and AI capabilities.

Identification and Selection of Use Cases

Priority use cases are identified through ongoing engagement with business units, enterprise planning activities, regulatory developments, and technology strategy. Potential use cases are assessed to ensure that investments are directed toward initiatives that provide the greatest value to customers and the utility while supporting Hydro One's objectives.

In assessing the use cases Hydro One considers factors such as regulatory requirements, expected business value, strategic alignment, implementation feasibility, and enterprise-wide scalability. In addition, Hydro One's ability to develop and deploy these use cases is dependent on the underlying technology, data, and business processes. As such, implementation feasibility is a key consideration in determining timing. The prioritization process is iterative and will be revised as business needs, regulatory requirements, and technology capabilities evolve. As Hydro One's foundational data and technology

capabilities mature over the 2028-2032 period, additional use cases are expected to progress from concept to implementation, enabling the organization to realize increasing value from its investments in data, analytics, and artificial intelligence.

Use Case Example

As an example of a use case currently under development, Hydro One is enhancing its enterprise search capabilities through the Hydro One Document System (HODS) AI Search. Currently, critical operational knowledge and documentation is distributed across multiple document repositories, making it difficult for employees to quickly locate the information they need. Today, users often rely on manual keyword searches to locate policies, procedures, training materials, engineering standards, and technical documentation. This process can be time-consuming and may not consistently return the necessary information.

The HODS AI Search tool will enhance Hydro One's existing document search capabilities by introducing an AI-powered search and retrieval solution. Rather than relying on precise keywords or document titles, employees will be able to ask questions using natural language and receive relevant, source-attributed responses drawn from the indexed HODS document library. The solution uses AI to retrieve and synthesize information from authoritative corporate documents while providing citations to the original source documents, enabling users to easily validate the information and supporting transparency and auditability.

By indexing the full HODS document corpus and improving the discoverability of enterprise knowledge, the initiative is expected to significantly reduce the time employees spend searching for information, improve access to operational knowledge, and support more efficient and consistent decision-making. The initiative also establishes a foundation for future AI-enabled knowledge management capabilities as Hydro One continues to mature its enterprise data and AI platforms.

3.2 DATA AND AI PLATFORMS AND MARKETPLACE

Over the 2028-2032 period, Hydro One plans to invest $17.5M in Data and AI Platforms and Marketplace, which consists of $0.0M of capital expenditures and $17.5M in prepaid expenditures.

The data and AI platforms and marketplace refer to the technology, tools, and services that enable Hydro One to store, manage, access, and use data and AI solutions across the organization. Together, they form an integrated ecosystem that supports the full lifecycle of Hydro One's data and AI assets. The platforms provide the underlying foundation for collecting, storing, maintaining, and preserving data, as well as the computing environments and tools needed to develop and deploy AI solutions. The marketplace is the business facing layer that allows employees to easily discover, access and use trusted data, analytics, and embedded third-party products and services. Together, these capabilities enable Hydro One to transform data into actionable insights that support informed decision-making, improve operational efficiency, enhance customer service, and foster innovation across the organization.

During the 2028-2032 period, investments will focus on expanding and maturing a secure, scalable, and well-governed enterprise environment capable of supporting the growing demand for data, analytics, automation, and AI solutions. The proposed investments will enhance the underlying data and AI platforms through the implementation of new capabilities, integrations, and tools that support data management, advanced analytics, machine learning, and generative AI applications. Investments will also strengthen governance, security, and operational controls to ensure data and AI assets are managed responsibly and effectively.

By establishing and maintaining a centralized and scalable enterprise environment, Hydro One will be positioned to efficiently develop and deploy advanced analytics, automation, and AI use cases in response to evolving business needs. These foundational investments will enable the delivery of the advanced analytics and AI use cases described in this ISD while ensuring that data remains trusted, accessible, secure, and capable of generating value across the organization.

4.0 OUTCOMES

4.1 OEB RRF OUTCOMES

Table 1 presents anticipated benefits as a result of the investments, in accordance with the Ontario Energy Board's (OEB) Renewed Regulatory Framework (RRF).

Table 1 - Outcome Summary

Customer Focus	• Enables innovation and development of new customer-facing tools by giving the business teams easy access to reusable datasets and AI models • Supports the creation of a unified, 360-degree customer view by integrating data across functions, including metering, grid operations, billing, and customer interactions • Enhances customer experience by enabling personalized, data-driven insights
Operational Effectiveness	• Enables data-driven innovation and operational efficiency by developing and operationalizing advanced analytics solutions for the business • Increases speed of processes through reliable, automated data pipelines, and reduced errors / inaccuracies due to improved governance
Public Policy Responsiveness	• Supports the goals of the Government of Ontario's Energy for Generations policy, and aligns with recommendations from the Ontario Energy Association's Grid Modernization report; that is, to leverage smart technologies to improve reliability, lower costs, and support greater system flexibility • Improved regulatory compliance through improvements to data quality
Financial Performance	• Improves operational effectiveness, leading to productivity increases driven by reduced rework from standardization, and increased accuracy from improved governance • Provides opportunity to increase revenues through enabling participation in new data-driven initiatives such as distributed energy resources

5.0 EXPENDITURE PLAN

Investments in data, analytics, and AI enablement are required to support Hydro One's growing need for timely, reliable, and actionable information across its operations. As the company continues to generate increasing volumes of data from grid assets, customers, work management systems, and other business processes, investments are needed to establish the platforms, tools, governance, and capabilities required to transform this data

into insights that improve decision-making, operational efficiency, asset management, reliability, customer service, and regulatory reporting. These investments will allow Hydro One to leverage emerging analytics and AI technologies that can further enhance operational efficiency and business outcomes.

The planned expenditures are distributed across the rate period to reflect the ongoing nature of these capabilities. Hydro One has identified a sustained requirement for investment in data, analytics, and AI enablement, and has therefore forecast expenditures across each year of the rate period. However, the specific mix and timing of projects will evolve as business priorities, technology opportunities, and organizational needs mature.

Table 2 below summarizes Hydro One's forecast net capital and prepaid expenditures for the 2028-2032 period.

Table 2 - Hydro One - Investment Expenditures

($M)	2028	2029	2030	2031	2032	Total 28-32
Gross Capital Expenditures	5.2	5.2	5.2	5.2	5.2	26.0
Less Removals	0.0	0.0	0.0	0.0	0.0	0.0
Less Capital Contributions	0.0	0.0	0.0	0.0	0.0	0.0
Net Capital Expenditures	**5.2**	**5.2**	**5.2**	**5.2**	**5.2**	**26.0**
Prepaid Expenditures related to Cloud	**3.5**	**3.5**	**3.5**	**3.5**	**3.5**	**17.5**

Table 3 below summarizes Hydro One's net capital and prepaid expenditures, including planned and forecast expenditures for the 2023-2027 rate period and planned expenditures for the 2028-2032 rate period. These expenditures are presented according to the investments described in Section 3.0 Investment Description.

Table 3 - Hydro One - Expenditure Continuity Over Rate Periods ($M)[3]

($M)	Capital Expenditures			Prepaid Expenditures		
	Plan[4] 23-27	Act/Fcst[5] 23-27	Total 28-32	Plan 23-27	Act/Fcst[5] 23-27	Total 28-32
Use Cases for Data Analytics and Management	0.0	9.7	26.0	0.0	0.0	0.0
Data and AI Platforms and Marketplace	0.0	5.5	0.0	0.0	2.3	17.5
Total	**0.0**	**15.3**	**26.0**	**0.0**	**2.3**	**17.5**

2023-2027 EXPENDITURES

During the 2023-2027 period, data, analytics and AI enablement investments are $15.3M higher than plan in capital and $2.3M higher than plan in prepaid. These investments began in 2026 and are compared against a baseline of $0.0M as investments in this area were not included in the EB-2021-0110 application. Investments over the 2023-2027 period include:

- Establishing Hydro One's enterprise data platform, Snowflake.
- Advancing an enterprise AI platform that leverages embedded capabilities within the data platform (such as native Snowflake analytics and AI features) and complementary technologies outside of the platform (such as Microsoft-based AI services like Copilot).
- Developing Hydro One's data management capabilities (including data governance, data quality, metadata management, and master data management),
- Initiating data integration to the data platform.

2028-2032 EXPENDITURES

Over the 2028-2032 rate period, Hydro One forecasts investments of $26.0M in capital expenditures and $17.5M in prepaid expenditures to advance its Data, Analytics, and AI capabilities. These expenditures will support Data Analytics and Management use cases, representing $26.0M in capital investments deployed through a use case-driven approach

[3] Figures presented in the tables may not sum to the totals shown due to rounding.
[4] "Plan" refers to Hydro One's revised capital expenditure and ISA forecast to implement the OEB-approved Settlement Proposal in EB-2021-0110. Plan includes expenditures previously mapped to different ISDs in EB-2021-0110, as further discussed in GSP Section 4.11.
[5] "Act/Fcst" refers to actual (2023-2025) and forecast (2026-2027) expenditures.

focused on delivering business value, as well as Data and AI Platforms and Marketplace investments. The $17.5M of prepaid expenditures funds technology, tools, and services required to store, manage, access, govern, and leverage data and AI solutions across the organization.

6.0 ALTERNATIVES

Hydro One considered the following alternatives before selecting the preferred undertaking.

ALTERNATIVE 1: MINIMAL INVESTMENT OPTION (STATUS QUO)

Under this alternative, Hydro One would limit incremental Data, Analytics, and AI investments to existing data and analytics tools and capabilities. This approach would reduce upfront expenditures, but would not provide the additional capacity, capabilities, or modernization required to meet evolving business, operational, customer, and regulatory needs.

Maintaining the status quo would constrain Hydro One’s ability to support new data-driven use cases, integrate emerging data sources, and scale enterprise analytics capabilities. Existing limitations in data accessibility, quality, governance, and platform performance would persist, reducing the organization's ability to generate actionable insights and derive value from its growing data assets.

While this approach would reduce upfront expenditures, it may limit opportunities to enhance operational effectiveness, scalability, and technology modernization over the planning period.

It would also impair Hydro One’s ability to support modernization initiatives that will be key to an effective energy transition strategy, advanced operational decision-making, and customer expectations for timely and accurate information. Given these limitations and the growing reliance on data as a strategic enterprise asset, the Status Quo alternative was rejected.

ALTERNATIVE 2: RECOMMENDED ALTERNATIVE

The proposed investments will enable the delivery of priority data and analytics use cases and marketplace capabilities in alignment with demonstrated growth in enterprise data volumes, business adoption, and operational needs.

The proposed level of investment reflects the scale and capability required to address changes in Hydro One's operating environment. As the volume and variety of data generated across the organization continues to grow, Hydro One requires a modern, scalable data and analytics foundation capable of securely ingesting, managing, and analyzing enterprise data. At the same time, increasing operational complexity and the need for greater system flexibility require more timely and sophisticated analytics to support operational decision-making, asset management, grid planning, and real-time system operations.

Hydro One's adoption of a use case approach to allocate expenditures over the 2028-2032 period will enable flexibility to direct investments to the highest-value opportunities as business needs and technologies evolve. This alternative enables Hydro One to evaluate emerging technologies, operational priorities, and organizational readiness each year, ensuring expenditures are focused on initiatives that deliver the greatest business value.

7.0 EXECUTION RISK AND MITIGATION

Table 4 below summarizes execution risks and mitigations for these investments.

Table 4 - Execution Risks and Mitigations

Execution Risk	Mitigating Action
Rapidly evolving technology landscape: Given the pace of technological advancement, there is a risk that data, analytics, and AI solutions may become outdated over the 2028-2032 period.	Hydro One applies a phased and modular delivery approach that enables incremental development and adaptation over time. Solutions are built using standards-based, configurable technologies to maintain flexibility. Priorities are reassessed periodically to ensure ongoing alignment with regulatory expectations, business needs, and technological advancements.
Misalignment with evolving priorities and funding constraints: Use cases may shift in priority due to changing regulatory requirements, business needs, or emerging technologies. In addition, not all use cases can be funded within the planning envelope.	Use cases will be assessed based on customer impact, operational value, regulatory alignment, feasibility, and scalability. The portfolio will be reassessed and reprioritized as required.
Subscription and Cloud Cost Escalation: Cloud and SaaS-based solutions may experience cost increases over time, potentially impacting planned scope or requiring the reallocation of funding.	Hydro One actively manages vendor contracts and conducts periodic value and cost reviews. Funding may be reallocated as required based on priority.

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G-GP-27	TRANSMISSION CAPITAL CONTRIBUTION TO THIRD PARTY
Primary Trigger:	Regional Planning
OEB RRF Outcomes:	Customer Focus, Operational Effectiveness, Public Policy Responsiveness, Financial Performance

Net Capital Expenditures:

($M)	2028	2029	2030	2031	2032	Total
Hydro One	3.2	4.8	0.0	0.0	0.0	8.0

Summary:

This investment of $16.0M towards the Simcoe Battery Project represents an innovative Non-Wires Alternative (NWA) to meet Norfolk area transmission needs. This investment includes a capital contribution of $15.0M to the project, and $1.0M in interest cost to cover the period from 2026 to 2029. The primary trigger of the investment is local area load growth. The investment is expected to defer traditional transmission reinforcement investments for up to 20 years. Expenditures of $8.0M are planned prior to 2028.

The Simcoe Battery Project was awarded an IESO contract in the LT2 Window 1 capacity Request for Proposals for 150 MW. Hydro One's capital contribution supports the incremental capability required for the facility to meet the reliability needs of the local transmission system.

This investment is required to increase the Load Meeting Capability (LMC) of the 115 kV transmission system supplied from Caledonia TS to support continued load growth in the Norfolk area, as identified in both the IESO's 2024 Integrated Regional Resource Plan (IRRP) and Hydro One's 2025 Regional Integrated Plan (RIP) for the Burlington to Nanticoke regional planning area.

This capital expenditure has been appropriately classified as capital as it will provide intangible assets with economic benefits over a number of years in the future.

1.0 OVERVIEW

This investment represents a capital contribution towards the Simcoe Battery Project, an innovative NWA to meet regional transmission needs. The Simcoe Battery Project was awarded a contract to design, build, construct and operate the Simcoe Battery Project under the IESO LT2 Request for Proposals. The Simcoe Battery Project, by means of the additional capabilities (MVAr and MW) required by Hydro One, will defer the area transmission reinforcement need for up to 20 years, largely coinciding with the IESO LT2 contract period. The capital contribution required from Hydro One is $15.0M. The investment cost also includes internal interest charges of $1.0M for the period 2026-2029.

2.0 INVESTMENT NEED

This investment is required to increase the Load Meeting Capability (LMC) of the 115 kV transmission system supplied from Caledonia TS to support continued load growth in the Norfolk area, as identified in both the IESO's 2024 IRRP[1] and Hydro One's 2025 RIP[2] for the Burlington to Nanticoke regional planning area.

The summer peak load currently exceeds the area LMC of 80 MW. The LMC is limited to 80 MW due to voltage decline following the loss of one of the two circuits under peak load conditions, even though the line thermal capacity is approximately 150 MW. The local area is currently being managed by transferring load to adjacent area stations and, without the proposed investment, transmission reinforcement will be required in the next 3 to 5 years.

3.0 INVESTMENT DESCRIPTION

The Simcoe Battery Project was awarded an IESO LT2 capacity contract for a 150 MW battery energy storage system (BESS) close to Norfolk TS.

Hydro One's investment supports an innovative NWA, by leveraging the system resource to satisfy a local area need. Hydro One will make a capital contribution to cover the

[1] Burlington to Nanticoke Integrated Regional Resource Plan, dated December 18, 2024, https://www.ieso.ca/-/media/Files/IESO/Document-Library/regional-planning/Burlington-to-Nanticoke/b2n-20241218-IRRP.pdf

[2] Regional Infrastructure Plan Report, Burling to Nanticoke, dated June 16, 2025, https://www.hydroone.com/abouthydroone/CorporateInformation/regionalplans/burlingtontonanticoke/Documents/Burlington-to-Nanticoke-3rd-Cycle-Regional-Infrastructure-Plan-Final.pdf

incremental costs required for the proponent to build additional MW and MVAR capabilities for the Simcoe Battery Project, beyond those required under the IESO LT RFP contracted requirements. This contribution is intended to secure the necessary dynamic VAR capability to support the 115 kV voltage and MW capability, which will address load growth uncertainty beyond the line thermal capacity. These capabilities are needed to prevent voltage collapse and to ensure line loading remains within its thermal capacity under contingency scenarios, regardless of IESO dispatch levels, thereby increasing the area load-serving capability from 80 MW to up to 150 MW.

This investment is expected to defer the need for additional transmission reinforcement in the area for up to 20 years based on the current load forecast.

4.0 OUTCOMES

The BESS will support area loads at peak periods and defer the need for transmission reinforcement for up to 20 years, largely coinciding with the BESS contract period. This NWA will support the area's growth and reliability by maximizing the use of the existing infrastructure, with minimal capital investment.

4.1 OEB RRF OUTCOMES

Table 1 below presents anticipated benefits as a result of the Investment in accordance with the OEB's Renewed Regulatory Framework (RRF).

Table 1 - Outcome Summary

Customer Focus	• Ensure adequate supply capacity to support future load growth.
Operational Effectiveness	• Increase the load-serving capability of the existing transmission system while deferring the need for traditional transmission reinforcement.
Public Policy Responsiveness	• Comply with Hydro One's obligation under its Transmission License and the TSC to maintain the reliability and integrity of its transmission system and reinforce or expand its transmission system as required to meet load growth. • Consistent with OEB objectives to pursue non-wires alternatives where cost-effective, maximizing the use of existing infrastructure while deferring the need for traditional transmission reinforcement.
Financial Performance	• Address local area transmission needs at a lower cost than traditional reinforcement.

5.0 EXPENDITURE PLAN

Table 2 below summarizes Hydro One's forecast capital expenditures for the 2028-2032 planning period. Amounts for the 2023-2027 actual and forecast have been adjusted to include investment expenditures that have been assigned to different ISDs for the 2028-2032 rate period compared to Hydro One's previous transmission Application (EB-2021-0110), as further explained in GSP Section 4.11.

Table 2 - Hydro One - Investment Expenditures[3]

($M)	Plan[4] 23-27	Act/Fcst[5] 23-27	2028	2029	2030	2031	2032	Total 28-32
Gross Capital Expenditures	0.0	8.0	3.2	4.8	0.0	0.0	0.0	8.0
Less Removals	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Less Capital Contributions	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Net Capital Expenditures	**0.0**	**8.0**	**3.2**	**4.8**	**0.0**	**0.0**	**0.0**	**8.0**

This investment is expected to be placed in-service in 2029 at a forecast Project Total of $16.0M. Hydro One is responsible for capital contributions totaling $8.0M prior to 2028.

6.0 ALTERNATIVES

Hydro One considered the following alternatives before selecting the preferred investment. Alternatives 2 to 4 have estimated costs ranging from $60M to $250M, each of which is significantly higher than the recommended alternative.

ALTERNATIVE 1: STATUS QUO

This alternative is not acceptable as it does not address the system needs.

[3] Figures presented in the tables may not sum to the totals shown due to rounding.
[4] "Plan" refers to Hydro One's revised capital expenditure and ISA forecast to implement the OEB-approved Settlement Proposal in EB-2021-0110.
[5] "Act/Fcst" refers to actual (2023-2025) and forecast (2026-2027) expenditures.

ALTERNATIVE 2: NEW TRANSMISSION LINE BETWEEN CALEDONIA TS AND NORFOLK TS

Build a new 45 km long 230 kV transmission line between Caledonia TS and Norfolk TS and replace both Norfolk TS 115 kV DESN and the Bloomsburg DS with a new 230 kV DESN station by summer 2027. This cost is very high and does not allow optimal use of existing assets.

ALTERNATIVE 3: NEW TRANSMISSION LINE BETWEEN JARVIS TS / NANTICOKE TS AND THE VICINITY OF NORFOLK TS

Build a new 20 km long 230 kV transmission line between Jarvis TS / Nanticoke TS and the vicinity of Norfolk TS and build a new 230 kV DESN.

The project cost is high and does not maximize the use of the existing 115 kV supply system. This alternative may be appropriate in the future if load growth in the Norfolk area materializes as forecast and demand is expected to exceed the thermal capacity of the existing 115 kV supply system. However, the long-term load forecast does not yet indicate that demand will exceed the thermal capacity of the 115 kV system within the near to mid-term, and this level of investment is not warranted at this time. Based on information available today, Hydro One expects to review and consider this upgrade after approximately 15 years.

ALTERNATIVE 4: STATCOM AT NORFOLK TS

Install a 100 MVAR STATCOM at Norfolk TS to provide reactive power only. This device would support the 115 kV system voltage and defer the need for a transmission line by up to 15 years at which time the transmission system could be reinforced through Alternatives 2 or 3, subject to future regional planning recommendations based on load growth, system conditions, and infrastructure needs. This alternative is the most economical option after the recommended alternative; however, it remains significantly more expensive.

ALTERNATIVE 5: CAPITAL CONTRIBUTION TO SIMCOE BATTERY PROJECT (RECOMMENDED)

Proceed with the $16.0M investment in the Simcoe Battery Project described above, deferring the need for traditional transmission reinforcement for up to 20 years. Following

the deferral period, Hydro One expects to reinforce the transmission system in the Norfolk area through either Alternative 2 or 3, subject to future regional planning recommendations based on load growth, system conditions, and infrastructure needs at that time. This is the recommended option as it addresses the current area supply need at a lower cost than the wires alternatives, while deferring capital expenditure and preserving flexibility to select the most appropriate long-term reinforcement.

7.0 EXECUTION RISK AND MITIGATION

The following risks have been considered:

1. Risk that the BESS does not meet performance requirements:
    - The Simcoe Battery Project is contractually obligated to provide sufficient reactive and real power support for the local area. The capital contribution payments will be made in installments upon successful completion of mutually agreed upon project milestones by the Simcoe Battery Project. Evidence supporting the completion of milestones will be reviewed by Hydro One prior to making payments to minimize risk of the facility not satisfying the contractual obligations.
    - Hydro One and the Simcoe Battery Project will jointly identify, in accordance with good utility practice, additional tests required to demonstrate the capability and effectiveness of the BESS, including an energization test.

2. Risk of a delay to the BESS in-service date:
    - Minor delays to the BESS in-service date can be managed temporarily through load transfers to existing stations.

G-GP-28	ENTERPRISE PLATFORM MODERNIZATION AND SUSTAINMENT
Primary Trigger:	Business Support Sustainment
OEB RRF Outcomes:	Operational Effectiveness, Financial Performance

Prepaid Expenditures Related to Cloud:

($M)	2028	2029	2030	2031	2032	Total
Hydro One	10.0	6.5	5.3	4.5	4.5	30.8

Summary:

This investment improves the reliability, consistency, and supportability of Hydro One's digital workplace and technology environment through Microsoft 365 (M365) enhancements, migration to strategic integration services, retirement of legacy integration hosting, and completion of the monitoring and observability deployment. The primary trigger of the investment is Business Support Sustainment. The investment is expected to strengthen enterprise-wide platform adoption, governance, and standardization; improve security and compliance within the digital workplace; reduce integration sustainment effort and cost; and improve visibility into technology performance and service health.

1.0 OVERVIEW

The investments in this Investment Summary Document (ISD) are required to sustain and enhance Hydro One's core information technology services over the planning period, maintaining a secure, reliable, and scalable foundation as Hydro One's use of cloud-hosted applications and integrated enterprise technology platforms expands. Collectively, the investments support the continued operation, enhancement, rationalization, and standardization of enterprise platforms that enable collaboration, application delivery and integration, cybersecurity and operational resilience, and visibility into technology performance and service health.

This ISD includes investments to:

- Enhance and standardize Microsoft 365 (M365) as Hydro One's primary digital workplace platform, strengthening collaboration, communications, content management, security and compliance, and workflow automation capabilities across the organization.
- Simplify and modernize integration services by migrating integrations from the legacy Oracle iHub platform to a cloud-aligned integration model, reducing reliance on legacy technologies and supporting a more standardized integration environment.
- Complete the final phase of Hydro One's multi-year monitoring and observability program, expanding visibility into IT system performance and service health to support earlier issue detection, faster resolution, and improved operational reliability.

2.0 INVESTMENT NEED

The primary trigger of these investments is Business Support Sustainment. Investments are required to maintain reliable, efficient, and scalable IT services as Hydro One's use of cloud-hosted applications, integrated enterprise technology platforms, automation, and digital workplace capabilities expands.

Investments over the planning period are required to:

- Strengthen and standardize Hydro One's primary digital workplace platform;

- Reduce the cost and complexity of application integration and low-code application delivery by transitioning from legacy and non-strategic platforms to enterprise-standard solutions; and
- Complete the deployment of monitoring and observability capabilities that support earlier identification and resolution of technology issues.

Without targeted investment, gaps in consistent enablement, standardization, and long-term supportability across these areas can increase operational complexity, drive higher support costs, and constrain the organization's ability to effectively support business operations.

The following sections describe the investment need and intended outcomes across the three key areas addressed by this ISD: Digital Workplace Platform (M365), Platform Rationalization, and Monitoring and Observability.

2.1 DIGITAL WORKPLACE PLATFORM (M365)

M365 is Hydro One's primary digital workplace platform, providing enterprise collaboration, communication, content management, workflow automation, identity management, device management, security, compliance, and emerging AI-enabled capabilities. Continued investment is required to maintain a secure, reliable, and standardized digital workplace as business requirements, cybersecurity threats, regulatory expectations, and platform capabilities continue to evolve.

Historically, some business requirements supported by M365 were addressed through separate tools, localized solutions, or business-specific practices. As a result, M365 capabilities have not always been enabled, adopted or governed across the enterprise. Since its initial deployment, Microsoft has significantly expanded the platform's capabilities, including enhanced security, compliance, automation, device management, and AI-assisted services, creating an opportunity to consolidate legacy approaches and provide a more standardized and supportable digital workplace environment.

Without continued investment, Hydro One risks inconsistent adoption and use of collaboration, content management, workflow, security, and AI-enabled capabilities across the organization. This may limit Hydro One's ability to apply security controls, compliance requirements, records management practices, and identity protections consistently across the enterprise, increasing the risk of data exposure, compliance gaps, and operational inefficiencies. As M365 continues to evolve, failure to invest would also reduce Hydro One's ability to assess, implement, and govern relevant new platform capabilities. The investment is therefore required to strengthen enterprise-wide standardization, governance, security, and adoption of M365 while ensuring that the platform continues to serve as Hydro One's primary digital workplace foundation.

2.2 PLATFORM RATIONALIZATION

Investment is required to rationalize select enterprise platforms that support integration and application delivery to reduce cost, operational complexity, and reliance on legacy technologies. Hydro One currently maintains multiple platforms that provide overlapping capabilities, requiring additional licensing, infrastructure, support resources, and governance processes.

Investment is required to simplify Hydro One's integration environment and reduce the cost and operational complexity associated with maintaining an integration hosting environment that is no longer the preferred solution for many enterprise integration needs. As described in GSP Section 4.11 G-GP-29, Subsection 2.0, the legacy integration technology utilized is the Oracle iHub solution. iHub is Hydro One's legacy integration platform, currently running on Oracle WebLogic 12.2.x, which reaches end of extended support December 2027. A WebLogic upgrade is planned to version 14.1.x to maintain access to vendor updates, fixes, and security patches through 2030. Maintaining this environment alongside newer integration services requires Hydro One to support multiple technology stacks, increasing sustainment costs, support effort, and governance complexity. The resulting duplication limits opportunities to standardize integration delivery and increases the long-term effort required to maintain and evolve enterprise integrations. This increased effort, combined with the legacy solution reaching end of life necessitates an investment to migrate outstanding services on iHub to new integration services (e.g. SAP's Business Technology Platform or MuleSoft). In addition to legacy

integrations, iHub has historically been used to embed custom code within the platform to enable business functions and perform complex, bespoke data transformation tasks that go well beyond the typical use of an integration platform. This investment will review these embedded functions for potential migration to other business development platforms.

Investment is also required to reduce reliance on a non-strategic low-code application platform that supports a limited number of business applications. Maintaining separate low-code platforms results in ongoing licensing, administration, support, and specialized resource costs. Hydro One will leverage planned enhancement, upgrade, and sustainment activities to transition suitable application functionality to its strategic enterprise low-code platform over time.

Without these investments, Hydro One will continue to incur ongoing costs associated with sustaining multiple integration platforms and patterns across the enterprise. Over time, this increases the complexity of delivering, maintaining, and evolving integrations, while limiting Hydro One's ability to standardize modern cloud-based integration services. Maintaining multiple platforms also increases support requirements and the risk of custom integration solutions that are more difficult and costly to govern and sustain.

This investment will establish a more streamlined and standardized integration environment, reduce long-term sustainment costs, and align enterprise integration capabilities with Hydro One's cloud-based service delivery model.

2.3 MONITORING AND OBSERVABILITY

Hydro One requires targeted investment to complete the final year of a multi-year deployment of IT performance monitoring and observability tools across its technology landscape. These tools provide visibility into system performance, service health, and the root causes of technology issues, enabling Digital and Technology Solutions (DTS) to identify and resolve problems before they affect users.

DTS currently has limited enterprise-wide visibility into system performance, service health, and emerging technology issues, which can contribute to a more reactive operating model where issues may be identified after users report disruptions. Completing this deployment

would increase monitoring coverage and align monitoring requirements to defined service levels, supporting earlier issue detection, reducing the likelihood or duration of major incidents, and contributing to a more stable technology environment.

3.0 INVESTMENT DESCRIPTION

The investments included in this ISD comprise a set of cloud architected initiatives intended to sustain and enhance core IT services over the planning period. The scope of the investments focuses on enhancing the organization's digital workplace platform, migrating integrations from the existing non-supported platform to strategic integration services, beginning a phased transition of suitable low-code application functionality to enterprise strategic platforms, and completing the monitoring and observability deployment. The investments are described below across the same key areas outlined in Section 2, above.

3.1 DIGITAL WORKPLACE PLATFORM (MICROSOFT 365)

This investment funds enhancements to Hydro One's Microsoft 365 (M365) digital workplace platform through the deployment of new capabilities, implementation of platform improvements, and establishment of supporting governance and security controls. The scope includes expanding the use of existing M365 functionality and implementing new platform capabilities released during the planning period to strengthen collaboration, information management, cybersecurity, compliance, and workflow automation across the enterprise.

Key activities include:

- **Collaboration and communications:** Expanding and standardizing Teams capabilities, including intelligent meeting recaps, AI-generated notes and action items, live translation, enhanced meeting security, and more consistent meeting and calling experiences to support collaboration across distributed and field-based teams.
- **Document and content management:** Improving how documents and information are stored, shared, retained, and managed across SharePoint, OneDrive, and Teams workspaces to strengthen records management, improve

information discoverability, and reduce inconsistent document management practices.

- **Security, identity, and compliance:** Expanding and standardizing security, compliance, identity, and endpoint management capabilities across the digital workplace. This includes continued adoption of Microsoft Defender, Purview, Intune, and Entra capabilities to strengthen device management, information protection, access controls, and compliance monitoring in alignment with Hydro One's Zero Trust Architecture roadmap. Alignment with the Cybersecurity and Infrastructure Security Agency's (CISA) Zero Trust Maturity Model is described in Exhibit 4.6.
- **Workflow automation and AI-enabled services:** Expanding the use of Power Platform and related M365 capabilities to automate routine approvals, requests, notifications, and other repeatable business processes that may otherwise rely on email, spreadsheets, or manual follow-up.

As M365 is a continuously evolving cloud platform, the investment also includes assessing, configuring, testing, and implementing new platform capabilities released during the 2028–2032 planning period. This ensures Hydro One can adopt relevant enhancements as they become available while maintaining appropriate governance, security, and operational controls.

The investment also includes enterprise-wide governance and standardization activities to improve consistency in how key Microsoft 365 features are configured and used. This includes defining and implementing common usage patterns, improving administrative and operational practices for sustainable use, and supporting adoption so that M365 collaboration and productivity tools are used more consistently across the organization.

Hydro One plans to invest $22.5M in this category over the 2028-2032 period. The forecast reflects both identified enhancement initiatives and the effort required to evaluate and implement new M365 capabilities expected to emerge as the platform continues to evolve.

3.2 PLATFORM RATIONALIZATION

This category includes investments to reduce reliance on duplicate and legacy technology platforms that support enterprise application integration and low-code application delivery.

This investment will complete the migration of the remaining non-SAP integrations from the legacy Oracle iHub environment to Hydro One's strategic integration platforms. While most iHub-hosted integrations support SAP systems and are being addressed through investments in GSP Section 4.11 G-GP-29, Subsection 2.0, this investment will focus on the remaining integrations and associated custom-developed functionality that continue to rely on the end of life platform. The scope includes assessment, migration, redesign where required, testing, and cutover activities.

As part of this work, custom data transformation processes and application functionality embedded within the iHub platform will be assessed and, where necessary, rebuilt on appropriate enterprise application and integration platforms. Completing these migrations will enable Hydro One to retire the legacy environment, reduce sustainment costs and support requirements, and further standardize integration services on modern enterprise platforms that are better aligned with its long-term cloud strategy.

The investment will also support the phased rationalization of a non-strategic low-code application platform. Rather than maintaining multiple platforms with overlapping capabilities, Hydro One will leverage planned enhancement, upgrade, and sustainment activities to assess and transition suitable application functionality to its strategic enterprise low-code platform where technically and economically practical. Activities may include application assessments, solution design, redevelopment of selected functionality, interface modifications, testing, deployment, and transition support.

Over the planning period, Hydro One plans to invest $6.8M in this category.

3.3 MONITORING AND OBSERVABILITY

This investment completes the final year of a multi-year deployment of IT performance monitoring and observability tools across Hydro One’s technology landscape. The scope of this final-year investment includes expanding monitoring coverage across prioritized IT

systems, applications, and supporting infrastructure; defining service levels and associated monitoring requirements; implementing monitoring standards; and improving operational visibility into system performance and service health.

This work will support a more proactive sustainment model by enabling DTS to identify and resolve issues earlier and, where appropriate, automate responses to reduce manual intervention and lower the likelihood or duration of major incidents.

Over the planning period, Hydro One plans to invest $1.5M in this category.

4.0 OUTCOMES

4.1 OEB RRF OUTCOMES

Table 1 presents anticipated benefits as a result of the proposed investment in accordance with the Ontario Energy Board's (OEB) Renewed Regulatory Framework (RRF).

Table 1 - Outcome Summary

Operational Effectiveness	• Improves the efficiency and reliability of core IT services through enhancements to the digital workplace platform, migration and rationalization of enterprise integration services, phased re-platforming of suitable low-code application functionality, and expanded monitoring and observability capabilities. • Reduces operational complexity and support effort by standardizing how core platforms are used across the organization and improving visibility into system performance so issues can be identified and resolved earlier.
Financial Performance	• Improves cost efficiency by retiring the existing integration hosting environment following migration of the affected integrations and by moving suitable low-code functionality to Hydro One's strategic enterprise platform through planned enhancement, upgrade, and sustainment opportunities. • Supports long-term value realization from IT investments by improving utilization of existing enterprise capabilities (including M365), reducing reliance on fragmented or overlapping solutions, and simplifying long-term sustainment of core platforms and integration services.

5.0 EXPENDITURE PLAN

Over the planning period, Hydro One's planned forecast prepaid expenditures for this ISD reflect the sequencing and scope of the initiatives described in Section 3.0. The expenditure profile reflects the planned sequencing of the underlying work. M365 related activities are spread across the period because they involve ongoing enablement, standardization, configuration, and future capability implementation as the platform continues to evolve. Integration migration activities are planned earlier in the rate period to complete the migration from Oracle iHub in line with the end of support at end of 2030. This sequencing results in higher spending in earlier years and reduced spending in the later years of the period. Table 2 below summarizes Hydro One's forecast prepaid expenditures for the 2028-2032 period.

Table 2 - Hydro One - Investment Expenditures

($M)	2028	2029	2030	2031	2032	Total 28-32
Prepaid Expenditures Related to Cloud	10.0	6.5	5.3	4.5	4.5	30.8

Table 3 below summarizes Hydro One's prepaid expenditures, including planned and forecast expenditures for the 2023-2027 rate period and planned expenditures for the 2028-2032 rate period. These expenditures are presented according to the investments described in Section 3.0 Investment Description.

Table 3 - Hydro One - Expenditure Continuity Over Rate Periods ($M)

Description	Plan[1] 23-27	Act/Fcst[2] 23-27	Total 28-32
Digital Workplace Platform (M365)	0.0	0.0	22.5
Platform Rationalization	0.0	0.0	6.8
Monitoring and Observability	0.0	6.0	1.5
Total	**0.0**	**6.0**	**30.8**

[1] "Plan" refers to Hydro One's revised capital expenditure and ISA forecast to implement the OEB-approved Settlement Proposal in EB-2021-0110. Plan includes expenditures previously mapped to different ISDs in EB-2021-0110, as further discussed in GSP Section 4.11.
[2] "Act/Fcst" refers to actual (2023-2025) and forecast (2026-2027) expenditures.

2023-2027 EXPENDITURES

During the 2023-2027 rate period, Enterprise Platform and Modernization Sustainment expenditures are $6.0M higher than Plan in prepaid. The variance reflects the deployment of monitoring and observability capabilities that were not included in the 2023-2027 approved Plan because the need emerged after the rate period was established. As Hydro One's technology environment became increasingly distributed through the adoption of cloud-hosted applications and integrated enterprise platforms, existing monitoring capabilities no longer provided sufficient end-to-end visibility. The additional investment expanded and standardized monitoring across prioritized IT systems, applications, and supporting infrastructure, enabling DTS to identify the source of issues more quickly, detect emerging problems before they affect users, and reduce the likelihood or duration of service disruptions.

2028-2032 EXPENDITURES

Over the planning rate period, Enterprise Platform and Modernization Sustainment prepaid expenditures are $24.8M higher than the current rate period. The increase reflects Hydro One's growing need to modernize, standardize, and sustain foundational enterprise technology platforms as reliance on digital services, cloud-based technologies, enterprise applications, automation, and integrated technology environments continues to expand. The proposed investments address emerging needs to improve governance and adoption of key enterprise platforms, consolidate fragmented or higher-cost technologies, strengthen security and compliance capabilities, and enhance operational visibility into technology services. Together, these investments support a more standardized, secure, and supportable technology environment while reducing long-term complexity and sustainment effort across the enterprise. More specifically:

- **Digital Workplace Platform** investments reflect planned work to enhance, standardize, govern, and expand Hydro One's Microsoft 365 environment as collaboration, information management, cybersecurity, compliance, automation, and AI-enabled capabilities continue to evolve.
- **Platform Rationalization** investments reflect planned work to migrate the remaining affected integrations from Oracle iHub and begin a phased transition of suitable low-code application functionality to a supported enterprise low-code

platform. Low-code work will be undertaken when planned enhancements, upgrades, or sustainment activities create technically and economically practical opportunities to move selected functionality, rather than fully migrating all four applications during the rate period.

- **Monitoring and Observability** investments decrease from $6.0M in the last rate period to $1.5M in the planning period because the majority of the multi-year monitoring and observability deployment is being completed during the current rate period. The remaining investment supports final deployment activities, including completion of monitoring coverage, service-level requirements, monitoring standards, and operational readiness. These capabilities improve visibility into system performance and service health, enabling DTS to identify and resolve issues earlier, automate responses where appropriate, reduce manual intervention, and lower the likelihood or duration of major incidents.

6.0 ALTERNATIVES

Hydro One considered the following alternatives before selecting the preferred investment approach.

ALTERNATIVE 1: STATUS QUO (DO NOTHING)

Under the status quo, Hydro One would continue to operate the current digital workplace platform usage model, integration hosting environment, and low-code toolset without proceeding with the proposed investments. This approach would maintain current limitations, including inconsistent enablement and governance of digital workplace capabilities, continued operational overhead associated with sustaining the existing integration hosting environment alongside other integration approaches, and ongoing costs associated with maintaining a separate low-code toolset for a limited set of applications. Over time, this would increase operational complexity and sustainment effort, constrain standardization, and limit Hydro One’s ability to support evolving business and technology needs. This alternative does not adequately address the identified investment need.

ALTERNATIVE 2: PARTIAL OR INCREMENTAL INVESTMENT

Under this scenario, Hydro One would proceed with a reduced scope of M365 activities focused on baseline governance, standardization, and sustainment of the digital workplace platform, while deferring or reducing the capacity to assess, configure, test, secure, and adopt relevant new M365 capabilities as they become available. Hydro One would also defer the migration of integrations from Oracle iHub and would have less capacity to assess and transition suitable application functionality from non-strategic low-code platforms when planned enhancements, upgrades, or sustainment work arise.

While this approach could reduce near-term expenditures, it would also delay or reduce realization of the intended benefits. For M365, a reduced approach would limit Hydro One's ability to respond to new Microsoft capabilities that may improve collaboration, automate routine activities, strengthen security and compliance, support standardization, or increase operational efficiency. It could also result in continued variability in how digital workplace capabilities are enabled, governed, and adopted across the enterprise. Deferring integration migration and retirement of the current hosting environment would prolong avoidable sustainment effort and maintain a more complex integration landscape. Reduced funding for low-code platform rationalization would limit opportunities to transition suitable application functionality to Hydro One's strategic enterprise platform, prolonging the cost and complexity associated with maintaining multiple application development platforms. As a result, this alternative would deliver only incremental improvements during the rate period while postponing the benefits associated with M365 capability, platform rationalization and low-code transition. This alternative would therefore not be preferred.

ALTERNATIVE 3: PROCEED WITH PROPOSED INVESTMENTS (RECOMMENDED)

This alternative provides the most effective means to address the identified investment needs by funding the three investment streams described in this ISD: M365 enhancement and standardization, platform rationalization, and monitoring and observability. It enables Hydro One to complete the planned integration migration, strengthen and standardize its digital workplace platform, and complete the monitoring and observability deployment.

This alternative is recommended because it provides the greatest opportunity to:

- Improve governance, standardization, and adoption of key enterprise technology platforms;
- Reduce operational complexity and sustainment effort through integration platform rationalization and the phased transition of suitable low-code functionality;
- Improve the long-term supportability, security, and visibility of core enabling technologies; and
- Realize the planned operational benefits and make measurable progress toward longer-term cost-efficiency objectives.

In comparison, the status quo does not address the need, and partial or incremental investment delays key benefits and maintains avoidable cost and complexity.

7.0 EXECUTION RISK AND MITIGATION

The primary execution risks associated with these investments relate to change management, business disruption during migration or selective re-platforming, resource and skills availability, reliance on vendor and platform functionality, and coordination across multiple interdependent initiatives. Integration migration and low-code re-platforming activities may temporarily affect business users, integrations, workflows, or dependent applications if assessment, redevelopment, cutover, testing, and transition activities are not carefully managed. The benefits of the M365 investment also depend on effective adoption of new or standardized capabilities, as inconsistent adoption could limit intended collaboration, workflow, security, and compliance benefits.

These risks will be mitigated through phased implementation, established project governance practices, detailed migration and cutover planning, testing and validation of impacted applications and integrations, and ongoing engagement with business and IT stakeholders. Hydro One will also use change management, communication, training, and adoption support to help users transition to new or standardized ways of working. Resource and skills risks will be managed through delivery planning, prioritization, use of appropriate internal subject matter expertise, and vendor support where required. Vendor and platform dependency risks will be managed by aligning implementation activities to Microsoft release cycles and platform roadmaps, assessing new capabilities before adoption, and applying security, compliance, and governance requirements before

broader rollout. Sequencing and interdependency risks will be managed through coordinated planning across the M365, integration migration, low-code re-platforming, and supporting monitoring activities to reduce disruption and ensure dependencies are addressed before major implementation milestones.

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G-GP-29	SAP S/4HANA ONECORE TRANSFORMATION
Primary Trigger:	Business Support Sustainment
OEB RRF Outcomes:	Customer Focus, Operational Effectiveness, Financial Performance

Net Capital Expenditures:

($M)	2028	2029	2030	2031	2032	Total
Hydro One	0.0	0.0	0.0	0.0	0.0	0.0

Prepaid Expenditures Related to Cloud:

($M)	2028	2029	2030	2031	2032	Total
Hydro One	70.0	45.0	64.0	43.0	20.0	242.0

Summary:

This investment supports Hydro One's continued transition from the legacy SAP ECC platform to SAP S/4HANA and completion of the organization's multi-year enterprise resource planning (ERP) transformation. The primary trigger of the investment is Business Support Sustainment, driven by SAP ECC vendor end-of-support, increasing technology complexity, aging supporting platforms, and risks associated with maintaining highly customized legacy technologies. The proposed investment completes Hydro One's transition to SAP S/4HANA while addressing remaining technology, integration, reporting, and business process requirements across Finance, Supply Chain, Work and Asset Management, Customer, and Human Resources Payroll capabilities.

The proposed investments continue and extend the SAP S/4HANA initiative introduced in Hydro One's 2023-2027 rate period. Following enterprise discovery activities, Hydro One revised several key planning assumptions and adopted a single integrated “OneCore” implementation utilizing a combination of greenfield and brownfield delivery approaches and SAP S/4HANA Cloud Private Edition (RISE with SAP) as the target platform.

The investments within this program include completion and stabilization of the OneCore implementation, Customer Improvements (S/4HANA Utilities and Customer Engagement Platform), Human Resources Payroll Improvements, Core Continuous Improvements, and S/4HANA Upgrade Preparation. These investments support completion of the ERP transition, reduction of customization and technology complexity, retirement of aging technologies, and alignment with SAP's long-term product roadmap.

1.0 OVERVIEW

The investments included in this Investment Summary Document (ISD) support the continuation of Hydro One's SAP S/4HANA Transformation, a multi-year, enterprise-wide initiative that originated from the need to replace the organization's legacy SAP Enterprise Resource Planning (ERP) Centralized Component (ECC) platform with SAP S/4HANA platform and establish a modern, integrated ERP system. The investment replaces the legacy SAP ECC platform with a modern, integrated SAP S/4HANA Cloud Private Edition environment, establishes a scalable enterprise ERP foundation, and completes critical stabilization, modernization, integration, and upgrade-preparation activities through 2028-2032.

The investment is required to address vendor end-of-support risk, retire aging infrastructure and integration platforms, reduce customization and technical debt, and enable cleaner, more standardized business processes across Finance, Supply Chain, Work and Asset Management, Customer, and Payroll capabilities. The planned 2028-2032 investment totals $242.0M across SAP ECC Conversion to S/4HANA Completion (referred to as the "OneCore" program), Customer improvements (S/4HANA Utilities and Customer Engagement Platform), Human Resources Payroll improvements, Core Continuous Improvements, and S/4HANA Upgrade Preparation.

2.0 INVESTMENT NEED

The proposed SAP investments for the 2028-2032 period are required to complete Hydro One's transition from SAP ECC to SAP S/4HANA, address remaining technology and business process risks, reduce technical debt, and establish a sustainable foundation for future modernization and innovation. While the OneCore program delivers the core SAP S/4HANA implementation, additional investments are required to complete deployment and stabilization activities, modernize business areas that were transitioned using a brownfield approach, adopt SAP's strategic target-state solutions, enable ongoing business process improvements, and prepare for future mandatory platform upgrades. Together, these investments will enhance operational efficiency, improve data quality and process standardization, reduce technology and support risks, and maximize the long-term value of Hydro One's SAP S/4HANA platform.

The proposed investments are organized into the following areas:

- **SAP ECC Conversion to S/4HANA Completion (OneCore)** – Complete the implementation, testing, cutover, stabilization, and post-go-live support activities required to successfully transition Hydro One to SAP S/4HANA.
- **Customer Improvements (S/4HANA Utilities and Customer Engagement Platform)** – Modernize customer billing, meter management, customer service, reporting, and integration capabilities by reducing technical debt, adopting SAP's strategic customer engagement platform, and retiring legacy technologies.
- **Human Resources Payroll Improvements** – Simplify payroll processes, reduce customizations, modernize integrations and reporting, and align Human Capital Management capabilities with SAP's long-term payroll strategy.
- **Core Continuous Improvements** – Enable the ongoing adoption of SAP-delivered innovations, business process enhancements, automation, analytics, artificial intelligence capabilities, and targeted improvements in planning, asset management, work management, and supply chain functions.
- **S/4HANA Upgrade Preparation** – Initiate the planning, discovery, and business case activities required to prepare for future SAP S/4HANA release upgrades and maintain a supported ERP platform beyond 2032.

The need for these investments, including the necessary procedural and project history is described below.

Current-state Platform Need

Hydro One's current SAP environment has evolved over approximately two decades and is embedded across the organization, supporting core business functions including finance, supply chain, materials and warehousing, human resource management, payroll, enterprise asset management, meter device management, customer billing, and customer operations. Over time, the system has become increasingly complex, with several additional SAP applications supporting corporate reporting, data storage and management, security and access controls, data governance, and numerous data transfers and application integrations with other non-SAP systems.

Hydro One currently utilizes SAP ECC 6.0, Enhancement Pack 8 (EHP8), SAP's previous generation ERP platform. While periodic enhancement packs have delivered some incremental capabilities without requiring a full ERP replacement, the underlying platform was first released in 2005 and the most recent enhancement pack was released in 2016. Since 2015, SAP has focused its product development on SAP S/4HANA, releasing regular new versions within the SAP S/4HANA platform. As a result, Hydro One's current system has not benefited from major new capabilities, features, or functionality improvements from SAP in the core system for approximately 10-20 years.

Remaining on the same ERP platform has also required Hydro One to continue using business data structures established when the system was originally implemented in 2007, including asset accounting structures and hierarchy, work breakdown structures, material masters, warehouse management configuration, financial chart of accounts, and other core master data. While Hydro One has implemented several cloud-based SAP solutions for specific business functions, including Human Resource related modules within the SAP Success Factors solution (Employee Central, Workforce Software for time reporting, Recruiting, Performance and Goals, and Learning), expense management (Concur), vendor contracts and sourcing (Ariba), and external worker management (Fieldglass), the majority of approximately 400 core business processes continue to rely on the on-premise SAP ECC platform.

The current on-premise SAP ECC environment also contains a significant level of customization, with over 33,000 custom developed objects created to support Hydro One's business processes beyond the standard SAP functionality. In addition, the system includes more than 300 integrations into other enterprise applications and over 190 automated data integration workflows supporting business operations, reporting, and information exchange across the organization. While these customizations and integrations have enabled the system to meet Hydro One's operational needs, they have also increased complexity and the effort required to maintain and modernize the platform.

Regulatory and Planning Background

In Hydro One's 2023-2027 Joint Rate Application (EB-2021-0110), Hydro One introduced a phased replacement approach to transition from SAP ECC to SAP S/4HANA in response

to SAP's announced end of standard vendor support for ECC by end of 2027. Although some extended maintenance options remain available until 2030 at an increasing cost, continued reliance on SAP ECC would expose Hydro One to increasing operational, cybersecurity, compliance, and financial risks, while limiting the organization's ability to respond to evolving regulatory and business requirements.

The EB-2021-0110 plan was structured as a phased implementation. Finance and Supply Chain capabilities were planned first within GSP Section 4.11 G-GP-06, followed by Enterprise Asset Management and Capital Portfolio Delivery capabilities within GSP Section 4.11 G-GP-08, and Customer Billing, Customer Relationship Management, and Meter Device Management within GSP Section 4.11 G-GP-07. Together, these investments established a phased approach to transition Hydro One from SAP ECC to SAP S/4HANA. As part of the implementation of the EB-2021-0110 settlement agreement, Hydro One deferred the Customer modernization phase (from GSP Section 4.11 G-GP-07) to the 2028-2032 period.

Discovery Findings and Revised Implementation Approach

In 2024, Hydro One began enterprise discovery activities to evaluate transition options, delivery approaches, and develop the case for change including cost refinements to increase the cost certainty required for business case development. Through engagement with SAP, implementation specialists, industry peers, and external advisors, Hydro One determined that several previous planning assumptions required revision, summarized in Table 1 below.

Table 1 - SAP Planning Assumption Changes from Enterprise Discovery Activities

EB-2021-0110, Planning Assumption	Discovery Finding	EB-2026-0164 Planning Assumption
Phased conversion from SAP ECC to S/4HANA (Finance/Supply Chain, Work and Asset Management, Customer)	• Hydro One operates on a single SAP ECC instance with technical customizations and data configurations integrated together • Separation of SAP ECC modules would result in increased risk and cost due to technical complexities	Core SAP ECC components will be transitioned to SAP S/4HANA as part of a single implementation effort.
Conversion from SAP ECC to SAP S/4HANA did not include planned transformation of core data structures	• Core data structures are difficult and costly to modify after a system lift and shift conversion to S/4HANA • Future business needs and improvements to business operations require a change to core data structures • Core data structure changes are most impactful in Finance, Supply Chain, and Work and Asset Management (activities covered across planning, engineering, construction, and field services in stations, transmission lines, distribution, and forestry)	SAP components that support Finance, Supply Chain, and Work and Asset Management will be converted to SAP S/4HANA through a greenfield approach (i.e. new system implementation requiring fresh build of system structures and business processes).
Most existing application integrations, data integrations, and business reports would remain as-is, with some effort required to connect to the new S/4HANA system	• Integrations and reports related to SAP components that require core data structure changes would not be possible to re-use and would need a full re-build • Most application integrations go through Hydro One's enterprise Oracle iHUB platform. This platform is reaching end of support in the 2028-2032 period and will need all integrations to be migrated or re-built in a new system. Maintaining most SAP integrations on iHUB would result in more costly re-work during 2028-2032 to re-build a second time.	SAP components being converted as greenfield (see row above) to have legacy integrations decommissioned and new required integrations built into the target state SAP Business Technology Platform (BTP) to avoid unnecessary costly future rework.

As shown in the table above, the transition to SAP S/4HANA required additional scope beyond that originally planned. The implementation approach selected by Hydro One was based on the technical need to transition from the SAP ECC platform, while also strengthening business capabilities in areas requiring changes to core data structures.

The selected approach balances these objectives while remaining financially prudent and minimizing organizational risk:

- **Greenfield Implementation:** Implement a new SAP S/4HANA solution using SAP's standard "out of the box" business processes and data structure, with customizations only approved by exception. This approach applies to Finance, Supply Chain, Materials Management, Enterprise Asset Management, and Capital Portfolio Delivery capabilities.
- **Brownfield Migration:** Perform a technical migration of the existing SAP ECC environment to SAP S/4HANA by converting the current system while retaining most existing customizations, business processes and data. This approach applies to Customer Billing and Payroll.

The resulting project, referred to as "OneCore", will implement a single, integrated instance of SAP S/4HANA. Process standardization and business process improvements will be focused on the business areas identified within the Greenfield Implementation, while the Brownfield Migration approach balances transformation with operational stability for Customer Billing and Human Resources Payroll processes.

Target-state Business and Technology Outcomes

This adopted scope harmonizes Hydro One's technology landscape by retiring legacy infrastructure and reducing technology risks. Transitioning from SAP ECC not only addresses the vendor end-of-support timeline but also enables the decommissioning of the existing servers and hardware infrastructure that currently support the platform. Extending SAP ECC to 2030 would require significant additional capital investment to maintain hardware and apply critical security updates.

The implementation also establishes new standard integrations using SAP Business Technology Platform (BTP), beginning the migration away from the legacy Oracle iHUB integration platform, which is approaching end of life and planned to be decommissioned in the 2028-2032 period (a part of GSP Section 4.11, G-GP-28).

The business processes selected for the Greenfield implementation were also identified through the discovery activities as requiring significant modernization. Changes to core business data structures are necessary to adopt SAP's standard business processes, reducing reliance on manual workarounds, spreadsheets, and processes maintained outside of the ERP system. These changes will also improve the quality, consistency, and accessibility of enterprise data by enabling business users to rely on information maintained within the ERP system, rather than manual data manipulation from multiple sources.

Deployment Option and Rationale

The discovery activities also evaluated SAP S/4HANA deployment options; including implementing the solution on-premise or in SAP's cloud-hosted environment (RISE with SAP). Based on the evaluation criteria summarized in the table below, Hydro One determined that RISE with SAP represents the most prudent and cost-effective deployment option.

Table 2 - S/4HANA Deployment Evaluation Summary:

On-Premise vs RISE with SAP

Consideration Area	On-Premise	RISE with SAP	Preference
SAP Costs	• SAP provided cost estimate – higher cost of one-time license purchase plus ongoing license maintenance cost	• SAP provided cost estimate - lower cost of annual RISE	RISE with SAP
Additional Costs	• Require purchase of new hardware (servers, databases, etc.) for all environments, plus effort to install and configure • New infrastructure purchases and replacements would be required every 5-7 years per normal hardware asset lifecycle	• Limited costs required to setup connection landscape from the enterprise with SAP at the hyperscaler selected (i.e. cloud location where SAP services are being provided from)	RISE with SAP
Ongoing Maintenance Costs	• Require labour support costs and hardware license cost (hardware, operating system and database licenses) for ongoing maintenance, monitoring, patching, and upgrading.	• No additional costs. Infrastructure support and maintenance included in SAP RISE above	RISE with SAP
Future Artificial Intelligence (AI) and Automation Adoption	• SAP indicated AI use is not available[1] with on-premise systems • Future development of AI use cases would not be deployed to On-Premise	• AI functionality and standard automation features are accessible to SAP RISE customers	RISE with SAP

The selection of RISE with SAP was based on the factors above, and also aligns to SAP's long term product roadmap, with intention to deliver services exclusively over their RISE

[1] SAP's AI (also known as Joule) was available for cloud-only customers during the time of the assessment in 2024. Since then, SAP has indicated some limited AI capabilities will be possible to on-premise customers through an integration required to a cloud-AI platform. There remains no native AI layer available for on-premise S/4HANA installations.

with SAP offering. Hydro One is implementing SAP S/4HANA Cloud Private Edition (RISE with SAP) Release 2025, SAP's latest cloud-based ERP platform. The OneCore project is expected to go-live late 2028, with additional post go-live support and stabilization efforts extending into 2029.

Future Releases, Clean Core, and Upgrade Needs

SAP has communicated its intention to release new versions of SAP S/4HANA every two years, with each release named after the corresponding year. Each release will receive seven years of standard support, including ongoing maintenance updates and support packs. At the end of the seven-year support period, customers are expected to upgrade to a supported release. This release strategy enables SAP to provide ongoing innovation, new functionality, and technology enhancements through regular software releases. A visualization of SAP's planned release cycle is provided in Figure 1 below.

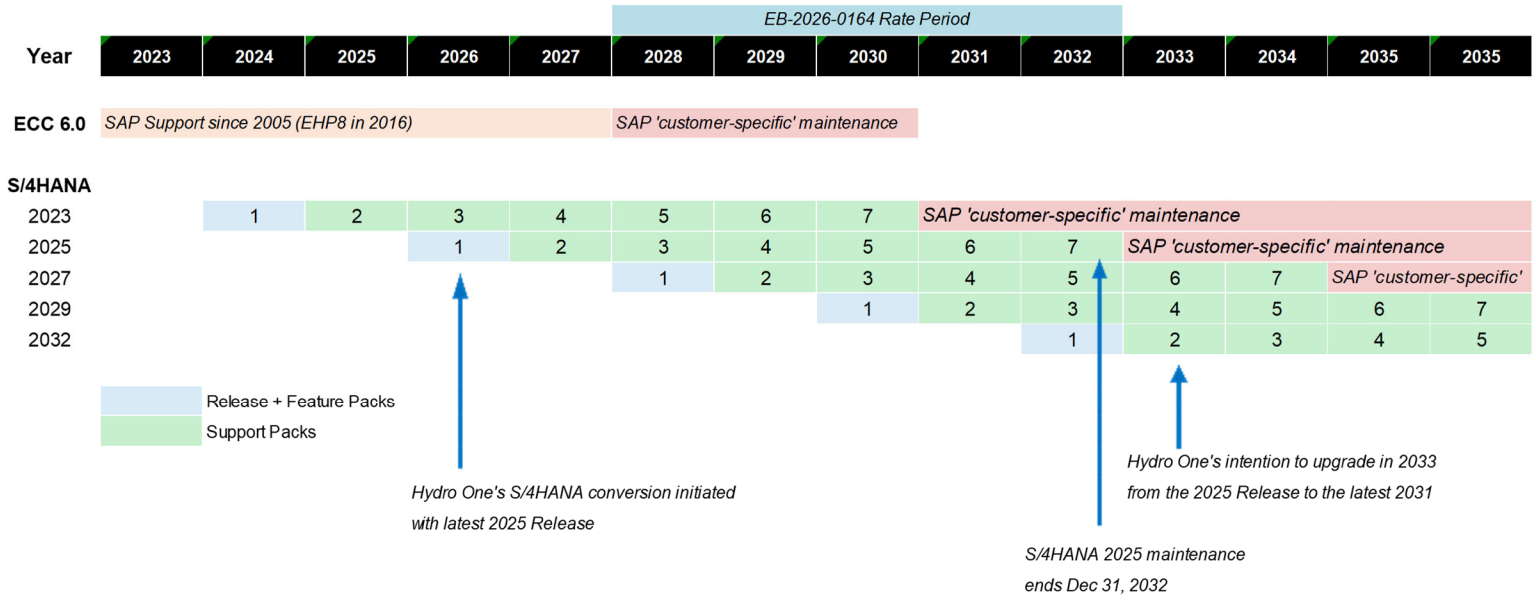

Figure 1: SAP Release Visualization with Planned Support Timelines

Hydro One is implementing the latest S/4HANA 2025 Release, which reaches end of standard maintenance on Dec 31, 2032. Hydro One plans to remain on the 2025 release for the full supported period to maximize the value of the investment and defer upgrade expenditures for as long as prudently possible. Hydro One expects to begin discovery and initiation of a system upgrade in 2032, with the majority of implementation effort and expenditure occurring during the 2033-2037 period.

Unlike SAP ECC 6.0, which customers have been able to operate on the same core software version since 2005, SAP's S/4HANA support model requires customers to periodically upgrade to newer software releases to remain on a supported platform. These upgrades require significant planning, effort, and cost. The complexity, risk, and cost of future upgrades increases significantly as the level of system customization increases, because each customization must be assessed for compatibility with the new release, modified, or rebuilt where necessary, and extensively tested.

To reduce the cost and risk of future upgrades, SAP now encourages customers to adopt "clean core" principles by minimizing customizations and relying on standard system functionality wherever practical. Hydro One's proposed investments during the 2028-2032 period are intentionally sequenced to first complete the implementation of SAP S/4HANA and then progressively reduce customization within the Customer and Payroll functions before the next major system upgrade planned for 2033.

In addition, Hydro One proposes incremental investment throughout 2029-2032 to support continued business improvement and innovation. These investments will enable new SAP functionality, enhance business process and system integrations, and support the adoption of emerging automation, AI, and data analytics capabilities as they become available within the SAP platform. Planned areas of investment include Asset Management, Investment Planning, Supply Chain procurement and vendor management processes, work scheduling and asset maintenance.

A visual summary of these planned activities is depicted in Figure 2 below.

G-GP-29 Investment Areas	EB-2026-0164 Rate Period				
	2028	2029	2030	2031	2032
SAP ECC Conversion to S/4HANA Completion ('OneCore')		*Stabilization*			
Customer Improvements (S/4HANA Utilities and Customer Engagement Platform)				*Stabilization*	
Human Resources Payroll Improvements					*Stabilization*
S/4HANA Upgrade Preparation					
Core Continuous Improvements					

Figure 2: Planned phased timing of SAP investments over 2028-2032 period

3.0 INVESTMENT DESCRIPTION

SAP ECC Conversion to S/4HANA Completion (OneCore)

This investment completes the implementation of the OneCore program and supports Hydro One's transition from SAP ECC to SAP S/4HANA through testing, deployment, cutover, stabilization, and post-go-live support activities.

At the beginning of the rate period, the OneCore program is expected to be in advanced testing and deployment activities leading to go-live and transition to SAP S/4HANA by the end of 2028. Testing is a critical way Hydro One will validate the solution and de-risk future business and technical challenges that may occur after implementation. There are multiple stages of System Integration Testing (SIT), followed by User Acceptance Testing (UAT). These testing activities will involve business and technical resources from across the enterprise and require the preparation and connection of upstream and downstream systems to validate end-to-end business processes.

In parallel to SIT and UAT activities, dedicated testing cycles will be conducted for both customer billing functions and payroll. These testing cycles include multiple parallel test runs to validate future-state processing and support readiness for cutover to SAP S/4HANA. Additional activities include performing data conversion and cutover preparations, business readiness and training, and coordinated go-live and cutover onto the new system.

Following go-live, Hydro One will undertake Hypercare and stabilization activities to support system adoption, resolve implementation issues, and transition to steady-state operations. These activities will include enhanced operation support, change management, integration stabilization, and business process support.

Over the 2028-2032 period, Hydro One plans to invest $62.0M in the completion and stabilization of the OneCore project to implement S/4HANA.

Customer Improvements (S/4HANA Utilities and Customer Engagement Platform)

This investment modernizes Hydro One's customer, billing, meter management, customer engagement, reporting, and integration capabilities following implementation of the OneCore program. The scope includes modernization of SAP S/4HANA Utilities, replacement of SAP CRM 7.0, migration of remaining legacy integrations, and modernization of associated reporting and data integration platforms.

Hydro One's Customer Information System (CIS), customer service, billing, and meter device management capabilities are primarily delivered through SAP for Utilities (SAP IS-U), which is being migrated to SAP S/4HANA Utilities as part of OneCore. To reduce implementation risk and cost, the initial migration follows a brownfield conversion approach, preserving existing business processes, configurations, and a significant portion of custom-developed functionality. While this approach supports a successful transition to the new platform, it also carries forward a significant amount of technical debt that has accumulated over many years.

Approximately one-third of Hydro One's SAP ECC customizations are concentrated within the SAP IS-U solution or are related to connection with the IS-U and engagement platform, CRM. These customizations extend beyond the core CIS to the applications used by customer service representatives, data integration platforms, reporting environments, and the interfaces that connect the CIS to more than 100 other enterprise applications. Collectively, these customizations increase system complexity, require specialized support, prevent adoption of new system capabilities, complicate future software upgrades, and increase long-term operating costs. As a result, these solution areas have preserved

a significant amount of technical debt within SAP and across associated integrated applications.

The proposed investment will systematically reduce this technical debt by replacing customized functionality with standard SAP capabilities with more practical, modern applications, and simplifying the supporting technology landscape. The investment includes four primary areas:

- Modernization of SAP S/4HANA Utilities by reducing unnecessary customizations and aligning business processes more closely with standard SAP functionality
- Replacement of the existing SAP Customer Relationship Management (CRM) platform, which supports Hydro One's customer service and call centre operations and approaches the end of vendor support during the planning period
- Retirement and re-platform of legacy integrations used to connect the Customer Information System with other enterprise applications, allowing these interfaces to transition to Hydro One's strategic enterprise integration platforms
- Modernization of reporting and data integration capabilities by reducing reliance on legacy reporting tools and custom data transformations while transitioning to SAP's strategic analytics and reporting solutions.

Replacing SAP CRM is a key component of this investment. Hydro One currently relies on SAP CRM 7.0, a heavily customized application that supports customer service representatives, customer interactions, and call centre operations. Similar to SAP ECC, SAP's CRM 7.0 is approaching the end of vendor support. Hydro One plans to replace this platform with SAP's strategic customer engagement solution, implemented using clean-core principles and standardized business processes. This approach will reduce customization, simplify future upgrades, improve maintainability, and position the customer service platform to adopt future SAP innovations.

The investment also addresses Hydro One's SAP application integration landscape. Approximately 120 of Hydro One's more than 300 SAP application integrations are associated with the SAP for Utilities components. Many of these integrations continue to rely on legacy integration technology (the Oracle iHub solution) that was retained during

the OneCore implementation to reduce project complexity and risk. iHub is Hydro One's legacy integration platform, currently running on Oracle WebLogic 12.2.x, which reaches end of extended support December 2027. A Weblogic upgrade is planned to version 14.1.x to maintain access to vendor updates, fixes, and security patches through 2030. This timeline will allow for the migration of SAP interfaces as a precursor to the decommissioning of iHub (completed under GSP Section 4.11, G-GP-28, Subsection 2.2), avoiding the need for additional extended support and further upgrades. As customer applications are standardized, these interfaces can be simplified and migrated to Hydro One's strategic integration platforms, reducing support requirements and improving long-term system sustainability.

Similarly, the reporting and data integration environment supporting Customer Information System (SAP Business Warehouse reporting platform and SAP BusinessObjects Data Services data integration platform) rely on legacy reporting platforms and numerous custom reports and data transformations that were preserved during the initial SAP S/4HANA migration. Standardizing customer business processes and reducing customization will allow many of these reports and interfaces to be retired or significantly simplified. Reporting will transition towards SAP's strategic analytics capabilities and standard SAP S/4HANA functionality, reducing reliance on customized reporting solutions while improving data consistency and maintainability.

Over the 2028-2032 period, Hydro One plans to invest $70.0M in the Customer Information System (CIS) Transformation category.

Human Resources Payroll Improvements

This investment modernizes Hydro One's payroll platform, payroll processes, integrations, and reporting capabilities while aligning with SAP's strategic human capital management and payroll roadmap.

Hydro One currently utilizes SAP SuccessFactors as its strategic human capital management platform. As part of the OneCore implementation, payroll capabilities are being migrated to SAP S/4HANA through a brownfield approach that preserves existing payroll processes, employee master data structures, workforce management processes,

payroll calculations, and integrations with SAP Finance to minimize implementation risk and maintain business continuity. While this approach prudently limits cost and implementation complexity, it also carries forward complex customizations, extensive configuration, custom business logic, and manual processes that have accumulated over many years. Given Hydro One's statutory obligations, multiple collective agreements, and complex pay rules, these legacy processes are becoming increasingly difficult to sustain over the long term. Although SAP HCM for S/4HANA remains a supported payroll platform, SAP's strategic payroll roadmap is increasingly focused on SuccessFactors Employee Central Payroll (ECP), which continues to receive ongoing investment and modernization as SAP's long-term payroll solution.

Following stabilization of the OneCore implementation, the Human Resources Payroll Improvements investments will simplify payroll processes, reduce custom-developed functionality where practical, and align the solution with SAP's long-term payroll strategy. A key objective of these investments is to redesign payroll processes to better align with standard SAP capabilities, reducing future maintenance efforts while improving flexibility to accommodate future business and regulatory changes.

Hydro One will also use this opportunity when re-building payroll processing rules to transition to the target ECP platform. This transition, combined with investment to reduce payroll complexity and eliminate customizations where practical will align with SAP's future product direction. SAP's innovation investments are focused on ECP, including cloud-native automations, AI-enabled payroll services, and enhanced payroll administration tools, all of which Hydro One will be positioned to implement as a result of this investment.

The investment will also improve labour costing and financial reporting by simplifying integrations between SuccessFactors and SAP S/4HANA. Currently, payroll costs are allocated to capital projects, operating activities, and other work programs through a series of customized interfaces and manual mapping processes developed to accommodate legacy financial structure and business processes. These activities require significant manual effort to validate, reconcile, and correct labour cost allocations before they can be used for financial reporting and project accounting. As part of the OneCore program, Hydro One is standardizing its financial data structure, including ledgers, cost objects, and

project work breakdown structures. Building on this foundation, the proposed investment will simplify labour cost allocation and automate the flow of payroll information into SAP S/4HANA using standardized business rules and data structure. This will reduce manual processing and reconciliation activities, improve the accuracy and timeliness of labour cost reporting, strengthen financial controls, and provide more reliable cost information to support project management, capital reporting, and operation decision-making.

Lastly, investments in this area will include the ability to improve data and reporting. Many HR and pay related reports rely on uniquely configured data integrations and reports that must be maintained independently. These investments will allow reporting to be based on information in SuccessFactors for Human Capital Management, and available through standard SAP embedded reports or standard connected analytics platforms.

Over the 2028-2032 period, Hydro One plans to invest $60.0M in the Human Resources Payroll Improvements category. Investment activities begin in 2030 with detailed planning, solution design, and modernization of reporting and data integrations, followed by implementation of payroll process improvements and platform modernization through 2032.

Core Continuous Improvements

This investment provides funding for the ongoing implementation of SAP-delivered capabilities following stabilization of the OneCore platform. Investments will be delivered through incremental releases focused on business process optimization, planning capabilities, supply chain modernization, automation, analytics, and emerging SAP innovations.

Following the transition to S/4HANA through the OneCore implementation, Hydro One will continue investing in the platform to realize additional business process improvements and adopt new capabilities delivered through SAP's ongoing product roadmap. These investments will enable Hydro One to maximize the value of the OneCore implementation by improving operational efficiency, standardizing business processes, and leveraging SAP's continuing investments in cloud technologies, analytics, and AI. Rather than implementing all enhancements as part of the initial OneCore deployment, these initiatives

will be delivered through a series of modular releases over the 2028-2032 period, allowing Hydro One to prioritize investments based on business needs, organizational readiness, and the maturity of new SAP capabilities.

The migration to SAP S/4HANA Private Cloud establishes the technology foundation required to take advantage of SAP's continuous innovation model. Subsequent investments, covered in this category, are required to evaluate, prioritize, and implement new business capabilities delivered through SAP's ongoing product roadmap, to meet evolving business needs and drive work efficiency. Known investment areas include SAP's embedded AI capabilities, including Joule, business AI use cases, advanced analytics, workflow automation, and other cloud platform innovations.

Additional known areas of business improvements were identified during the OneCore Discovery efforts and planned as part of this investment. This includes:

1. Planning

These investments expand SAP S/4HANA beyond core accounting and financial close into integrated planning, forecasting, and analytical capabilities. Scope includes the enablement of SAP based planning tools to support financial, workforce, and operational planning directly within the enterprise platform, reducing reliance on spreadsheets and disconnected planning models. This includes work to configure and deploy additional modules in SAP’s Integrated Business Planning (SAP IBP) solution and analytics capabilities with SAP Analytic Cloud Planning (SAC Planning), establish consistent planning data models, and integrate planning processes with HR, capital projects, and asset data maintained in SAP.

Implementation activities include redesigning planning and forecasting workflows, integrating upstream data sources such as workforce and project cost inputs, and aligning financial planning cycles with enterprise operational processes. For example, headcount and cost planning can be performed using SAP based planning tools that draw directly on HR master data and approved project forecasts rather than manually compiled spreadsheets. These improvements also include targeted enhancements to tax, cash

management, and management reporting processes, enabling more timely and consistent financial insights within the SAP environment.

2. Supply Chain

Supply Chain Enhancements extend beyond core logistics functionality delivered in OneCore to improve procurement, materials management, and supplier collaboration using SAP aligned platforms. Scope includes targeted enhancements and simplification of processes in supply chain processes across SAP S/4HANA and associated solutions in Sourcing (Ariba) and contractor resource contracting and management (FieldGlass) and invoicing and payments (SAP Taulia). Implementation activities include improving integration between supplier platforms and SAP financials, and enhancing visibility across purchasing, inventory, and contract management processes. For example, guided buying and supplier self service capabilities can be enabled through SAP aligned tools, reducing manual intervention, and improving consistency between purchasing activity and financial reporting. These enhancements also support improved alignment between supply chain execution, capital delivery schedules, and financial controls without introducing standalone systems.

Collectively, these initiatives are delivered incrementally on the stabilized SAP S/4HANA foundation, with investments planned incrementally across 2029-2032, and avoid the introduction of stand-alone or overlapping systems.

Over the 2028–2032 period, Hydro One plans to invest $40.0M in the Core Continuous Improvements.

S/4HANA Upgrade Preparation

The SAP S/4HANA 2025 release will reach end of support on December 31, 2032. To maintain a supported platform, Hydro One plans to initiate upgrade planning activities in 2032, including discovery, requirements development, target-release assessment, and business case preparation. These activities will establish the foundation for execution of the subsequent S/4HANA upgrade program, with the majority of implementation costs expected to occur in the next rate period beginning in 2033.

Over the 2028-2032 period, Hydro One plans to invest $10.0M in the S/4HANA Upgrade Preparation activities.

4.0 OUTCOMES

4.1 OEB RRF OUTCOMES

Table 3 presents anticipated benefits as a result of the proposed investment in accordance with the Ontario Energy Board's (OEB) Renewed Regulatory Framework (RRF).

Table 3 - Outcome Summary

Customer Focus	• Supports the continuity, accuracy, and reliability of customer billing and account management by ensuring that the enterprise systems underpinning these functions remain stable, supported, and fit for ongoing use. • Reduces the risk of customer impacts arising from billing errors, delayed rate implementation, or system instability by replacing aging, highly customized platforms with standardized, vendor-supported solutions. • Improves Hydro One's ability to engage with customers through our contact centre, providing an excellent customer service experience using systems that remain supported and reliable, reduce reliance on manual workarounds, and are connected with enterprise information necessary to addressing customer needs • Strengthens the integrity and consistency of customer, financial, and operational data used across billing, inquiries, and downstream reporting processes that ultimately affect customers.
Operational Effectiveness	• Simplifies and stabilizes Hydro One's enterprise application landscape by reducing technical debt, custom code, and point-to-point integrations that increase operational risk and delivery complexity. • Improves the predictability and reliability of core corporate and operational processes—including finance, payroll, capital planning, asset analytics, and supply chain execution—by standardizing processes on a common SAP S/4HANA platform. • Enhances enterprise-wide planning, coordination, and governance through integrated project, financial, workforce, and asset data, reducing manual reconciliation and fragmented decision-making across systems. • Enables more efficient execution of capital and operational programs by improving visibility into project scope, schedules, resources, and costs using consistent, system-based information.

	• Strengthens Hydro One's ability to manage SAP lifecycle activities, platform upgrades, and future enhancements through a cleaner, more supportable SAP core aligned with vendor roadmap expectations.
Financial Performance	• Avoids escalating sustainment and remediation costs associated with operating unsupported or heavily customized enterprise systems, including increased reliance on extended vendor support and specialized skills. • Reduces long-term total cost of ownership by consolidating enterprise capabilities onto standardized platforms, minimizing duplication of systems, and limiting future upgrade and testing effort. • Improves financial control and transparency through integrated planning, forecasting, and reporting capabilities that reduce manual effort and dependency on disconnected tools. • Enables more disciplined, scalable future investment by aligning enterprise processes and supporting technologies with SAP's standard release cadence and product roadmap • Reduces likelihood of unplanned remediation, emergency fixes, and extended vendor support

5.0 EXPENDITURE PLAN

Table 4 below summarizes Hydro One's forecast net capital and prepaid expenditures for the 2028-2032 period.

Table 4 - Hydro One - Investment Expenditures

($M)	2028	2029	2030	2031	2032	Total 28-32
Gross Capital Expenditures	0.0	0.0	0.0	0.0	0.0	0.0
Less Removals	0.0	0.0	0.0	0.0	0.0	0.0
Less Capital Contributions	0.0	0.0	0.0	0.0	0.0	0.0
Net Capital Expenditures	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
Prepaid Expenditures Related to Cloud	**70.0**	**45.0**	**64.0**	**43.0**	**20.0**	**242.0**

Table 5 below summarizes Hydro One's net capital and prepaid expenditures, including planned and forecast expenditures for the 2023-2027 rate period and planned expenditures for the 2028-2032 rate period. These expenditures are presented according to the investments described in Section 3.0 Investment Description.

Table 5 - Hydro One - Expenditure Continuity Over Rate Periods ($M)

	Capital Expenditures			Prepaid Expenditures		
Description	**Plan[2] 23-27**	**Act/Fcst[3] 23-27**	**Total 28-32**	**Plan 23-27**	**Act/Fcst[3] 23-27**	**Total 28-32**
SAP ECC Conversion to S/4HANA Completion (OneCore)	93.2	16.5	0.0	0.0	175.5	62.0
Customer Improvements	0.0	0.0	0.0	0.0	0.0	70.0
Human Resources Payroll Improvements	0.0	0.0	0.0	0.0	0.0	60.0
Core Continuous Improvements	0.0	0.0	0.0	0.0	0.0	40.0
S/4HANA Upgrade Preparation	0.0	0.0	0.0	0.0	0.0	10.0
Total	**93.2**	**16.5**	**0.0**	**0.0**	**175.5**	**242.0**

2028-2032 EXPENDITURES

Over the 2028-2032 rate period, the major SAP component investments are centralized into this G-GP-29. Previous investments in the 2023-2027 period to replace SAP ECC to S/4HANA were planned as separate investments across various ISDs (GSP Section 4.11 G-GP-06, GSP Section 4.11 G-GP-08, GSP Section 4.11 G-GP-07). The total planned SAP investments to upgrade to S/4HANA have been consolidated and included in the above table within the OneCore Completion activity.

2023-2027 EXPENDITURES

During the 2023-2027 rate period, SAP S/4HANA forecast expenditures are $76.7M lower than plan in capital and $175.5M higher than plan in prepaid expenditures. On a combined basis, forecast program expenditures are $98.8M higher than the amounts planned in Hydro One's 2023-2027 Joint Rate Application, EB-2021-0110. This variance reflects the revised implementation and deployment approach developed through enterprise discovery, which changed the scope, sequencing, delivery requirements, and accounting treatment of the SAP S/4HANA initiative.

[2] "Plan" refers to Hydro One's revised capital expenditure and ISA forecast to implement the OEB-approved Settlement Proposal in EB-2021-0110. Plan includes expenditures previously mapped to different ISDs in EB-2021-0110, as further discussed in GSP Section 4.11.
[3] "Act/Fcst" refers to actual (2023-2025) and forecast (2026-2027) expenditures.

Following approval of the original 2023-2027 plan, Hydro One completed detailed discovery activities to evaluate implementation options, delivery approaches, and target-state requirements for its transition to SAP S/4HANA. The discovery work identified significantly greater complexity within Hydro One's SAP environment than originally anticipated, including approximately 400 business processes, more than 33,000 custom-developed objects, over 300 application integrations, and more than 190 automated data integration workflows. As a result, several foundational planning assumptions required revision, including the feasibility of the planned phased conversion approach and the scope of business process, data, integration, and reporting changes required to support the transformation. Details of the planning assumption changes can be seen in Table 1 above.

Based on these findings, Hydro One revised its implementation strategy from a phased conversion to a single integrated OneCore implementation. Discovery also determined that key Finance, Supply Chain, and Work and Asset Management capabilities required fundamental changes to business processes and core data structures that could not be efficiently achieved through an as-is technical migration. Hydro One adopted a greenfield implementation approach for these functions, expanding the scope of work to include new system structures, business process redesign, integration redevelopment, data transformation, testing, and migration activities beyond those contemplated in the original plan.

As part of the discovery process, Hydro One also evaluated deployment options and selected SAP S/4HANA Cloud Private Edition through RISE with SAP as the preferred solution. Details of this can be seen in Table 2 above. Compared to the original on-premise approach, this decision reduces capital investments in infrastructure, software licenses, and related technology assets, while increasing prepaid expenditures associated with cloud-based service arrangements. Together, the revised implementation approach, expanded scope, and cloud deployment model account for the variance from the original plan.

6.0 ALTERNATIVES

Hydro One considered the following alternatives before selecting the preferred undertaking.

ALTERNATIVE 1: COMPLETE ONECORE AND SUSTAIN RETAINED LEGACY COMPONENTS

Under this alternative, Hydro One would complete the OneCore program for the implementation of the S/4HANA solution conversion from the current SAP ECC 6.0 platform. No further improvements or investments would be made across the platform, with existing systems being maintained as-is.

Under this alternative, the SAP CRM 7.0 platform would reach the end of available vendor support in the rate period, as would the on-premise legacy reporting platform (SAP BW) containing business required reports related to Customer and Human Resources, and the legacy application integration platform (Oracle iHUB). These applications and platforms are critical for enterprise activities. Maintaining these systems beyond end of vendor support would require increased sustainment costs while still exposing Hydro One to unacceptable risk of system failures or security vulnerabilities which would negatively impact operations and the ability to serve customers and meet critical obligations such as accurate customer bills and employee payroll. As such, this option was rejected.

ALTERNATIVE 2: COMPLETE ONECORE AND REPLACE END OF LIFE COMPONENTS ON A LIKE-FOR-LIKE BASIS

In this alternative, Hydro One would complete the OneCore program for the implementation of S/4HANA and the retirement of the current SAP ECC platform. After this conversion to S/4HANA, Hydro One would sustain and maintain the overall enterprise landscape, including required upgrades of applications that reach end of life. In this alternative, customizations and complexity within the systems would remain, with upgrades being performed as “like-for-like” to re-platform individual applications and hardware while maintaining existing configurations and customizations into new supported systems.

The Customer related investments would result in a migration off the existing SAP CRM 7.0 to a newer supported SAP customer engagement platform. Without modernization efforts to remove customizations and resolve data structures, the migration would include significant costs to analyze and remediate customized code collisions, and extensive testing to ensure existing business processes operate in the new system. Similarly, existing application integrations in the legacy Oracle iHUB would be re-built as-is in supported Hydro One enterprise integration platforms, and SAP enterprise reports would need to be migrated off the SAP BW on-premise solution reaching end of life to supported enterprise solutions. Efforts required to re-build integrations and reports using existing customizations and data structures would be higher compared with standard connection patterns and out-of-the-box available standard system reports. The migration of enterprise reporting from the current SAP BW solution would be done to a cloud-based platform. Without modernization, the database size and report complexity would result in increased cloud hosting and processing costs. This will result in increased ongoing vendor licensing costs above current planned levels.

This investment option would also mean Hydro One continues to maintain and operate the Human Resources and Payroll functions as-is, on the SAP HCM for S/4HANA payroll solution. Similar to the Customer investments, this option would result in the continued operations and sustainment of all existing customized HR business processes, data integrations, labour costing processing, and complex payroll rules. Without modernization, the Human Resource related reports within the legacy SAP reporting solution (BW) would require re-build effort during the reporting solution re-platforming. This would result in higher re-build efforts compared with out-of-the-box reports and standard data flows that would otherwise be used. By not investing towards SAP's long term strategic payroll solution, Hydro One would be unable to take advantage of any future improvements or capabilities including automations, AI-enabled services, or enhanced administration tools. Significant manual efforts would continue to be required to validate, reconcile, and correct labour cost allocations needed for accurate financial reporting and project accounting. Payroll services would also continue to require additional sustainment effort for manual activities to correct and stabilize data integrations and payroll processing. Each year, additional payroll rules required due to changes in regulatory or compliance requirements

would continue to be built onto the already highly complex system. This adds incremental risk and costs to implement changes.

This alternative would also defer investments focused on realization of additional business process optimization, planning capabilities, supply chain process simplification and additional enterprise automation, analytics and emerging SAP innovations. Reductions of these investments would hinder Hydro One's ability to adopt new capabilities and be unable to meet new evolving business needs and requirements. Without these modernization investments, there is also additional risk that would be introduced to support the systems across the enterprise landscape, potentially requiring increased sustainment investments to maintain enterprise system functions.

The preparation of the future S/4HANA system upgrade required as the planned S/4HANA platform approaches end of support would still be required. Without the modernization efforts to eliminate customizations, the complexity and cost of the future upgrade would increase significantly. This would result in significantly more cost and duration to perform the system upgrade, for increased customization analysis, remediation and testing, as well as for prolonged extended support that may be required due to elongated upgrade timelines.

Although the upfront costs in this alternative would be lower than the proposed alternative, the result would be required increased ongoing sustainment efforts (labour and licensing) to continue to operate the overall SAP platform for critical business functions to support the ongoing system operations, grid management, and customer experience. This alternative also reduces Hydro One's flexibility to deliver on ongoing evolving business needs and increases future system upgrade costs. As such, this alternative was rejected.

ALTERNATIVE 3: COMPLETE ONECORE AND PROGRESSIVELY MODERNIZE RETAINED COMPONENTS

The preferred alternative is to complete Hydro One's conversion to SAP S/4HANA through the ongoing implementation of the OneCore program and the associated business process, application, integration, data, and reporting improvements described throughout this exhibit. This alternative establishes a standardized and sustainable enterprise

platform that supports Hydro One's core business operations while reducing complexity, improving supportability, and enabling the organization to operate more efficiently over the long term including ongoing support and upgrades of the S/4HANA solution.

This alternative addresses aging technology reaching end of life in the 2028-2032 period, complex system integrations, data inconsistencies, and the SAP customizations that remain present in the solution, specifically within the customer and payroll components. Similar to Alternative 2, the end of life solutions are addressed, with integrations, data, reports, or systems being replaced with newer supported solutions. This alternative takes advantage of the investment being done to replace aging technology by incrementally investing to clean up customizations, reducing complexity and eliminating a number of integrations or custom programs. This approach is prudent as it maximizes the investment when replacing the end of life components to reduce the complexity required to sustain the solution, and allow for easier support, future upgrades, and adoption of new capabilities introduced into the platform. This will allow Hydro One the flexibility to reliably support business operations and evolving business requirements.

This alternative is recommended because it:

- Advances Hydro One's adoption of SAP's "Clean Core" architecture by significantly reducing customizations, technical workarounds, and non-standard business processes across the SAP landscape. Greater alignment with SAP standard functionality reduces ongoing maintenance requirements, future testing effort associated with system changes and upgrades, dependency on highly specialized support resources, and long-term sustainment costs, while improving Hydro One's ability to adopt future SAP capabilities and innovations.
- Improves Hydro One's ability to implement future regulatory, financial, operations and business changes by leveraging "out-of-the-box" business solutions over customizations and workarounds.
- Creates a more scalable operating environment by standardizing core business processes and data across the enterprise, enabling Hydro One to manage increasing work volumes, capital investment activity, customer growth, and

regulatory requirements without a corresponding increase in process complexity or technology overhead.

- Strengthens cyber security, resiliency and compliance by reducing the reliance on aging technologies, unsupported integrations, and customized solutions that require separate security and maintenance activities.
- Maximizes the value of investments already made through the current phases of the OneCore program by completing the remaining scope that is required to achieve intended enterprise-wide benefits.

This alternative was selected because it represents a combination of lowest-risk and most cost-effective long-term approach to sustain Hydro One's enterprise business capabilities. While other alternatives would address immediate end of life risk, they leave much of the existing complexity, customization, fragmented data and integration burden intact. As a result, Hydro One would continue to incur increasing sustainment, hosting, testing, support, and enhancement costs while realizing only a portion of the operational benefits intended through the OneCore program. Completing the planned SAP conversion and associated business improvements provides the most sustainable path forward by addressing both technology lifecycle requirements and the underlying structural inefficiencies that drive operating complexity and cost.

7.0 EXECUTION RISK AND MITIGATION

Table 6 below summarizes execution risks and mitigations for these investments.

Table 6 - Execution Risks and Mitigations

Execution Risk	Mitigating Action
Program Execution and Delivery Complexity	Hydro One will employ a robust program governance structure, including executive sponsorship, stage-gate reviews, integrated project controls, and dedicated program management resources. Scope, schedule, cost, and risk performance will be monitored through established governance forums to identify and address issues early, minimizing the risk of delays, cost overruns, or scope changes.
Business Process Transformation Risk	Hydro One will engage business stakeholders throughout design and implementation to ensure future-state processes are well defined, standardized, and aligned with operational requirements. Process design workshops, fit-to-

Execution Risk	Mitigating Action
	standard assessments, and controlled change management practices will be used to reduce process disruption and support business readiness.
Resource and Subject Matter Expert Availability	Hydro One will proactively manage internal and external resource requirements through workforce planning, strategic vendor partnerships, and knowledge transfer activities. Project sequencing and release planning will be aligned to minimize demand on critical business and technical resources and reduce impacts from competing enterprise priorities.
Data Migration and Data Integrity Risk	Comprehensive data migration strategies, including data cleansing, validation, reconciliation, and testing activities, will be implemented to ensure the completeness and accuracy of migrated data. Business data owners will participate in data quality reviews and migration acceptance activities prior to production cutover.
Integration and Interface Complexity	Hydro One will leverage enterprise integration standards, API-based services, and detailed solution architecture planning to manage the extensive interfaces between SAP S/4HANA and dependent business systems. End-to-end integration testing, interface monitoring, and deployment rehearsals will be performed to reduce operational and implementation risks.
Organizational Change and User Adoption Risk	Formal organizational change management activities, including stakeholder engagement, communications, role-based training, readiness assessments, and post-go-live support, will be implemented to facilitate adoption of new business processes and system capabilities. Hypercare support will be provided following implementation to address issues and reinforce user adoption.
Cybersecurity and Regulatory Compliance Risk	Security, privacy, and regulatory requirements will be embedded throughout solution design, implementation, testing, and operations. Architecture reviews, cybersecurity assessments, access controls, and compliance validation activities will be performed to ensure alignment with Hydro One standards and applicable regulatory obligations.
Vendor and System Integrator Dependency Risk	Hydro One will leverage experienced implementation partners and established SAP delivery methodologies while maintaining strong internal governance and oversight. Clearly defined contractual obligations, performance monitoring, knowledge transfer requirements, and vendor management practices will be used to mitigate delivery and support risks.
Customer Billing Accuracy and Service Disruption Risk	The transition to SAP S/4HANA includes critical customer billing, customer information, meter management, and customer service capabilities. Defects in solution configuration, data conversion, system integrations, or business process execution could result in billing errors, delayed billing activities, increased customer inquiries, or customer service disruption following implementation. To mitigate this risk, Hydro One will perform extensive system integration testing, user acceptance testing, end-to-end business process validation, parallel billing test cycles, data reconciliation activities, and cutover rehearsals prior to go-live. Dedicated Hypercare resources, enhanced monitoring, and issue resolution processes will be established following implementation to rapidly identify and resolve issues while maintaining accurate customer billing and service operations.

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G-GP-30	**ENTERPRISE SECURITY PLATFORMS AND CONTROLS**
Primary Trigger:	System Reliability
OEB RRF Outcomes:	Customer Focus, Operational Effectiveness, Public Policy Responsiveness, Financial Performance

Prepaid Expenditures Related to Cloud:

($M)	**2028**	**2029**	**2030**	**2031**	**2032**	**Total**
Hydro One	12.3	9.2	8.6	7.1	7.2	44.4

Summary:

This investment strengthens Hydro One's cloud-based cybersecurity and digital protection capabilities that support Hydro One's business and operational systems. The primary trigger for this investment is System Reliability.

As a critical infrastructure provider, Hydro One is strengthening its cybersecurity posture to safeguard operations, data, and services against an increasingly complex and evolving threat landscape. The investment is expected to reduce operational risk, provide stronger protection for customer and corporate data, and deliver measurable maturity improvements across the core cybersecurity functions of identify, protect, detect, respond, and recover. It will also improve resilience, governance, and visibility across cloud and hybrid environments and support alignment with applicable North American Electric Reliability Corporation (NERC) Critical Infrastructure Protection (CIP) standards, and the OEB's Ontario Cyber Security Framework (OCSF) requirements.

A confidential version of this ISD is attached as GSP Section 4.11 G-GP-30 Attachment 1 and it contains risk assessments, technical specifications, and other security-sensitive information. Hydro One has requested confidential treatment of these materials pursuant to the OEB's Practice Direction on Confidential Filings.

1.0 OVERVIEW

The investments in this Investment Summary Document (ISD) focus on enhancing and expanding the company's cloud-based cybersecurity and digital protection capabilities across the 2028-2032 period. They address evolving cybersecurity threats, strengthen security governance and visibility across cloud environments, and support continued compliance with applicable NERC CIP standards[1], the OEB's OCSF[2] and internal security requirements. Collectively, these investments represent the cloud-specific cybersecurity capabilities required to reinforce Hydro One's security posture, enhance threat detection and monitoring, and maintain compliance as cloud environments continue to expand.

Hydro One operates a large and complex cybersecurity environment that increasingly spans both on-premises and cloud platforms. As business processes, operational technologies and corporate applications increasingly transition into cloud-hosted environments, strong, integrated cybersecurity controls are required to prevent unauthorized access, protect sensitive information and reduce the likelihood of security incidents across hybrid infrastructures. These controls are essential to supporting the reliability of corporate and operational systems and safeguarding corporate and operational assets from cyber threats that could disrupt services or compromise business functions.

The continual operation and monitoring of cybersecurity systems supporting cloud workloads is required under applicable security policies and NERC CIP requirements related to access control and monitoring for critical assets. These requirements are further reinforced by Zero Trust security principles, which require access to be continuously verified and limited to what is necessary, regardless of network location or hosting model.

[1] NERC CIP standards referenced include: CIP-002-5.1a BES Cyber System Categorization; CIP-007-6 Cyber Security - System Security Management; CIP-010-4 Cyber Security - Configuration Change Management and Vulnerability Assessments; CIP-015-1 Internal Network Security Monitoring.

[2] Ontario Cyber Security Framework (OCSF) is the OEB's mandated cybersecurity assessment and reporting framework for electricity distributors and transmitters. It is based on the NIST Cybersecurity Framework and incorporates controls from standards such as ISO 27001/27002, NERC CIP and direction from the Communications Security Establishment (CSE). Licensees are required to perform annual OCSF self-assessments and report maturity levels to the OEB through the Cyber Security Scorecard.

As Hydro One expands its use of cloud platforms, ensuring consistent, scalable, and compliant cybersecurity protections is essential to maintain resiliency, integrity, and operational readiness across IT and OT environments. The investments included in this ISD strengthen the secure operation of cloud environments and support the modernization of the company's cybersecurity capabilities.

2.0 INVESTMENT NEED

As cloud adoption expands across business operations, cybersecurity controls must evolve to address threats within an increasingly distributed, hybrid environment. Electricity utilities are widely recognized as part of Canada's critical infrastructure and therefore priority targets for malicious cyber activity, including ransomware campaigns, supply chain compromise and unauthorized access to cloud-connected systems. In cloud environments, limitations in visibility, identity governance, and monitoring can make it more difficult to detect suspicious activity, enforce access controls, and respond quickly to emerging threats. These risks elevate the likelihood of security incidents, complicate compliance efforts, and reduce the ability to proactively identify and contain threats.

The investments outlined below are intended to address these challenges by strengthening cloud-aligned security capabilities, improving visibility and analytics across hybrid environments, and enabling sustained compliance with OCSF and NERC CIP requirements as cloud usage grows. They can be grouped into three main categories:

i. Threat Detection and Preventive Security Controls
ii. Identity, Access, and Data Protection
iii. Compliance, Governance, and Risk Visibility

Detailed information regarding investment needs for the proposed investment programs listed below, including technical specifications and detailed risk assessments, is set out in GSP Section 4.11 G-GP-30 Attachment 1.

2.1 THREAT DETECTION AND PREVENTIVE SECURITY CONTROLS

Security tools are required to provide monitoring, analytics, and segmentation to identify and contain sophisticated threats across cloud-connected environments. As cloud workloads, remote access, and endpoint diversity increase, limitations in visibility and

detection reduce the ability to identify suspicious activity early and prevent threats from escalating.

2.2 IDENTITY, ACCESS AND DATA PROTECTION

As cloud usage expands, managing access to systems and safeguarding sensitive information becomes increasingly complex. Where protections are fragmented across platforms, there is a heightened risk of unauthorized disclosure or loss of sensitive information, particularly as data is accessed and shared across services. These challenges create a need for strengthened identity, access, and data protection capabilities that improve governance over who can access cloud systems and information, reduce reliance on standing (always-on) privileged access, and improve oversight of third-party connectivity.

2.3 COMPLIANCE, GOVERNANCE AND RISK VISIBILITY

In addition to preventing and detecting threats, cybersecurity risks must be governed, measured, and controlled. Regulatory expectations related to access governance, financial controls, and cybersecurity oversight continue to increase, while existing processes rely on manual reviews and fragmented sources of risk information. These conditions limit the organization's ability to maintain consistent oversight of cybersecurity risks and to demonstrate control effectiveness in a timely and repeatable manner. Key challenges include:

- Reliance on manual processes to demonstrate compliance and control effectiveness, thereby increasing the risk of inconsistency, delay, and error in regulatory and audit response activities.
- Fragmented visibility into cybersecurity risk across the organization, limiting the ability to develop a consolidated, enterprise-level view of risk exposure and control maturity.
- Difficulty prioritizing cybersecurity investments based on risk, reducing confidence that resources are being directed to the areas of greatest potential impact.
- Increased effort required to support audits and regulatory reporting, diverting specialized resources toward evidence collection rather than proactive risk management and control improvement.

These challenges create a need for strengthened cybersecurity governance, compliance oversight, and risk visibility capabilities that improve confidence in control effectiveness and enable clearer understanding of cybersecurity risk exposure across the organization. Addressing these risks is necessary to support sustained compliance, reduce audit and regulatory burden, and enable more informed, risk-based decision-making as regulatory expectations and system complexity increase.

3.0 INVESTMENT DESCRIPTION

The investments included in this ISD focus on strengthening cloud cybersecurity capabilities that support secure cloud operations and ongoing compliance with applicable regulatory and internal control requirements. The scope, technical specifications, implementation, and risk mitigation capabilities of each program are set out in GSP Section 4.11 G-GP-30 Attachment 1.

3.1 THREAT DETECTION AND PREVENTIVE SECURITY CONTROLS

Investments in this category support the enhancement of threat detection and preventive security controls across Hydro One's cloud and hybrid environments by strengthening visibility into network activity, protecting users during normal day-to-day system use, expanding endpoint security coverage, and improving the early identification of potential cyber threats.

Over the planning period, Hydro One plans to invest $12.1M in this category.

3.2 IDENTITY, ACCESS AND DATA PROTECTION

Investments in this area address governance of access to cloud-based systems and protection of sensitive information as it is accessed, stored, and shared across environments.

Over the planning period, Hydro One proposes to invest $26.1M in this category.

3.3 COMPLIANCE, GOVERNANCE AND RISK VISIBILITY

Investments in this category focus on strengthening cybersecurity governance, improving auditability and enhancing visibility into cybersecurity risk across the organization. Hydro

One is investing in enterprise-wide governance, risk oversight, and cybersecurity risk management capabilities to improve compliance, strengthen risk visibility, and support consistent risk informed decision making.

At an enterprise level, the investments improve how cybersecurity risk is understood and governed by strengthening the organization's ability to measure, aggregate, and communicate risk in a structured and repeatable way. By enabling cybersecurity risk information to be expressed in business-relevant terms, these improvements support clearer executive and board-level understanding of relative risk exposure and inform prioritization decisions. This approach reduces reliance on fragmented or qualitative assessments and supports more consistent, risk-informed governance.

In parallel, investments strengthen access governance and compliance oversight for regulated systems. This includes improving controls that support financial access requirements and increasing the consistency and efficiency of access reviews, attestations, and evidence collection activities associated with internal and regulatory obligations. Enhancements to workforce-related security governance will improve the consistency of case management, oversight, and compliance processes associated with personnel security risks.

Together, these investments are intended to reduce reliance on manual compliance activities, improve the availability and quality of control evidence, and strengthen ongoing oversight of cybersecurity risks across the organization. In doing so, they support sustained compliance with applicable requirements, including NERC CIP standards such as CIP-004 (Personnel and Training), while enabling a more efficient and resilient cybersecurity governance model.

Over the planning period, Hydro One plans to invest $6.2M in this category.

4.0 OUTCOMES

4.1 OEB RRF OUTCOMES

Table 1 presents anticipated benefits as a result of the proposed investment in accordance with the Ontario Energy Board's (OEB) Renewed Regulatory Framework (RRF).

Table 1 - Outcome Summary

Customer Focus	• Supports reliable electricity service by reducing cybersecurity risks that could disrupt operations or compromise customer related systems. • Help protect information and services that underpin customer interactions as cloud adoption expands.
Operational Effectiveness	• Strengthens cybersecurity capabilities needed to manage risk across cloud and hybrid environments. • Reduces reliance on manual processes and improves Hydro One's ability to identify and respond to security issues in a timely manner.
Public Policy Responsiveness	• Supports sustained compliance with applicable cybersecurity and critical infrastructure protection requirements, including relevant NERC CIP standards • Strengthens governance and oversight practices aligned with public policy expectations for secure operation of the electricity system.
Financial Performance	• Enables a scalable and sustainable approach to cybersecurity as cloud usage increases. • Helps mitigate the financial impacts associated with cybersecurity incidents, regulatory non-compliance and unplanned operational disruptions.

5.0 EXPENDITURE PLAN

Over the 2028-2032 period, Hydro One's forecast prepaid investments related to this ISD are planned to strengthen cloud-based cybersecurity and digital protection capabilities supporting Hydro One's business and operational systems. As Hydro One increases its use of cloud services and platforms, additional cybersecurity and digital protection requirements arise to ensure effective control coverage, monitoring, and protection of these environments. This direction is consistent with broader industry adoption of cloud solutions as discussed in GSP Section 4.6.5. The expenditure profile over planning period reflects that some investments require ongoing capability development throughout the period, while other investments are expected to be completed earlier (primarily in 2028–2029), resulting in higher spending in earlier years and reduced spending in the later years of the period.

Table 2 below summarizes Hydro One's forecast prepaid expenditures for the 2028-2032 period.

Table 2 - Hydro One - Investment Expenditures

($M)	2028	2029	2030	2031	2032	Total 28-32
Prepaid Expenditures Related to Cloud	12.3	9.2	8.6	7.1	7.2	44.4

Table 3 below summarizes Hydro One's prepaid expenditures, including planned and forecast expenditures for the 2023-2027 rate period and planned expenditures for the 2028-2032 rate period. These expenditures are presented according to the investments described in Section 3.0 Investment Description.

Table 3 - Hydro One - Expenditure Continuity Over Rate Period ($M)

Description	Plan[3] 23-27	Act/Fcst[4] 23-27	Total 28-32
Threat Detection and Preventive Security Controls	0.0	0.0	12.1
Identity, Access and Data Protection	0.0	0.9	26.1
Compliance, Governance and Risk Visibility	0.0	0.5	6.2
Total	**0.0**	**1.4**	**44.4**

2023-2027 EXPENDITURES

Over the 2023-2027 rate period, Hydro One expects Forecast expenditures to be $1.4M higher than Plan due to the accelerated initiation of Identity, Access and Data Protection work and an unplanned investment in Compliance, Governance and Risk Visibility in advance of the 2028-2032 planning period. While no expenditures were included in the 2023-2027 Plan for either category, Hydro One is forecasting limited 2027 spending to begin foundational activities that support the larger $32.3M combined investment planned for 2028-2032. Advancing this work helps reduce delivery risk, supports timely execution of the 2028-2032 program, and responds to the increasing priority of strengthening access

[3] "Plan" refers to Hydro One's revised capital expenditure and ISA forecast to implement the OEB-approved Settlement Proposal in EB-2021-0110. Plan includes expenditures previously mapped to different ISDs in EB-2021-0110, as further discussed in GSP Section 4.11.
[4] "Act/Fcst" refers to actual (2023-2025) and forecast (2026-2027) expenditures.

and data protection controls as cloud adoption expands. The additional Compliance, Governance and Risk Visibility expenditure of $0.5M was required to address material gaps in the existing third-party vendor risk management process, which relied on manual, spreadsheet-based assessments and lacked scalability, consistent oversight, and continuous monitoring. The investment enables implementation of an automated SaaS solution integrated with ServiceNow to strengthen vendor-risk visibility, cybersecurity monitoring, governance, and regulatory compliance. Deferring this work would have prolonged exposure to unmanaged third-party, operational, and cybersecurity risks while increasing reliance on a resource constrained manual process.

2028-2032 EXPENDITURES

Expenditures over the planning period relate to vendor platforms shifting to cloud-based computing solutions and the incremental cybersecurity and digital protection capabilities required to safely sustain expanding cloud adoption, maintain visibility and control coverage across hybrid environments, and support alignment with applicable OCSF and NERC CIP requirements. The Threat Detection and Preventive Security Controls expenditures are expected to be $12.1M over five years, due to the need to strengthen network controls and user/device protections to improve visibility, segmentation, and threat detection across cloud and hybrid environments. The Identity, Access and Data Protection expenditures are expected to be $26.1M over five years, due to the need to tighten privileged and third-party access governance and apply consistent data protection across cloud, endpoints, and SaaS services. Compliance, Governance and Risk Visibility expenditures are expected to be $6.2M over five years, due to the need to reduce manual compliance effort by improving auditability, centralizing evidence, and consolidating cybersecurity risk visibility for oversight.

6.0 ALTERNATIVES

Hydro One evaluated alternatives for the investment programs. The detailed alternatives analysis, including the evaluation criteria and basis for the recommended approach, is set out in GSP Section 4.11 G-GP-30 Attachment 1.

7.0 EXECUTION RISK AND MITIGATION

The execution of these cloud-based cybersecurity investments carries risks related to implementation sequencing, integration with existing systems, and the availability of internal resources to configure and operate new capabilities. These risks will be mitigated through phased implementation planning, the application of existing security and risk management practices adapted for cloud environments and coordinated delivery across business and technology teams. Procurement and contracting activities will be structured to manage cost and delivery risk, while ongoing monitoring and change management will support controlled implementation.

G-GP-31	**CONTROL ROOM EQUIPMENT**
Primary Trigger:	Compliance
OEB RRF Outcomes:	Customer Focus, Operational Effectiveness, Public Policy Responsiveness, Financial Performance

Net Capital Expenditures:

($M)	**2028**	**2029**	**2030**	**2031**	**2032**	**Total**
Hydro One	0.0	0.0	5.9	3.4	0.0	9.3

Summary:

This investment involves (procuring the equipment and software) to integrate the organization's provincial mobile radio (PMR) and satellite phone equipment system with the Genesys Cloud platform at the Integrated System Operating Centre (ISOC) and Back-Up Ontario Grid Control Centre (BU-OGCC) to support safe, compliant, and resilient grid operations.

1.0 OVERVIEW

This proposed investment is to integrate the organization's provincial mobile radio (PMR) and satellite phone equipment with the Genesys Cloud telephony platform at the ISOC and BU-OGCC to support safe, compliant, and resilient grid operations.

By improving outage visibility through system integration, this investment enhances operator effectiveness, situational awareness, and event response while maintaining compliance with applicable NERC communications standards (e.g., COM-001-3) and IESO Market Rules on redundant and reliable voice/emergency communications.

This investment does not include any field or radio infrastructure. A separate investment, Mobile Radio System Replacement (TSP Section 2.12, T-SR-14) includes the replacement of radio consoles, servers, and network components by 2031.

The projected investment is $9.3M for the 2028-2032 rate period. The replacement of the current PMR/satellite phone system is planned to be fully in place by 2031.

2.0 NEED AND OUTCOME

2.1 INVESTMENT NEED

The Control Room Equipment investment is required to address operational inefficiencies and capacity limitations associated with the current PMR and satellite phone communications environment.

Today, when field crews are unable to access cellular coverage, they must contact the control room through a dedicated PMR or satellite phone module located at the front of the control room. Operators are required to leave their workstations to answer these communications and then return to their desks to document information, coordinate response actions, and continue managing system operations.

This process creates workflow interruptions during critical periods when operators are managing outages, switching operations, and coordinating power restoration activities. The physical separation between the communications module and the operator

workstation increases the risk of delays in relaying information and creates inefficiencies because operators must move between systems to perform a single task.

In addition, the current configuration has a capacity constraint. The PMR and satellite phone module can only process one incoming communication at a time. During major outage events or severe weather conditions, multiple field crews may need to contact the control room concurrently. Under the existing arrangement, only one call can be actively handled through the module at any given time, creating the potential for communication bottlenecks during events when timely information exchange is most critical for system reliability and public safety.

The need for a more scalable and integrated communications solution is expected to increase over time. While call volume forecasts are not available, Hydro One anticipates growth in field activity associated with the significantly larger capital investment portfolio planned for the 2028-2032 period, combined with the increasing frequency and severity of storm-related events. These factors are expected to drive higher volumes of PMR and satellite phone communications between field crews and control room operators, further increasing pressure on the current communications model.

The PMR and satellite phone systems therefore require integration with the Genesys Cloud platform, Hydro One's enterprise telephony and contact management platform, to provide operators with a single communications workspace that supports efficient, reliable, and scalable control room operations. The Control Room Equipment investment is to integrate the new PMR and satellite phone communications systems with the Genesys Cloud telephony platform.

The Genesys Cloud telephony platform will be implemented by the end of 2027 with the PMR system replacement program starting in 2027. System integration between the Genesys Cloud platform and the provincial mobile radio and satellite phone systems are planned to begin in 2030. The timing for this investment is to ensure the Genesys Cloud platform will be fully stabilized post implementation and the PMR system replacement program will be established and integration-ready (see T-SR-14 for more details about exact deployment timing).

3.0 INVESTMENT DESCRIPTION

This investment will integrate Hydro One's PMR and satellite phone systems with the Genesys Cloud telephony platform used by control room operators. The solution will consolidate cellular, PMR, and satellite communications into a single desktop interface, enabling operators to manage all communications directly from their workstation.

The investment will implement the technical integration required to route PMR and satellite communications through the Genesys Cloud platform, allowing calls from field crews operating in remote and non-cellular coverage areas to be presented and managed alongside other control room communications. This includes the integration of telephony, radio, and satellite communication systems, associated infrastructure upgrades, desktop interface enhancements, and supporting control room technology changes.

The investment will also expand communication handling capabilities by enabling multiple PMR and satellite communications to be managed within the Genesys Cloud environment rather than through dedicated standalone communications equipment. This will provide a unified communications platform supporting day-to-day operations, outage restoration activities, and emergency response coordination.

Overall, the investment will bring PMR, satellite phone, and telephony services into a single platform, supporting more effective coordination between control room operators and field crews across Hydro One's service territory.

4.0 OUTCOMES

4.1 OEB RRF OUTCOMES

Table 1 presents anticipated benefits as a result of the proposed investment in accordance with the Ontario Energy Board’s (OEB) Renewed Regulatory Framework (RRF).

Table 1 - Outcome Summary

Customer Focus	• By integrating PMR and satellite phone traffic with the Genesys Cloud platform, this standardized operating environment further reduces the time it takes for operators to synthesize information and act.
Operational Effectiveness	• Integrating PMR and satellite phone systems with the Genesys Cloud platform unifies and streamlines work processes for dispatchers and controllers. • Removes communication bottlenecks and better supports coordination with field crews during periods of elevated operational activity.
Public Policy Responsiveness	• Strengthens Hydro One's ability to meet Market Rules and the NERC communication standards.
Financial Performance	• Integrated PMR and satellite phone systems with the Genesys Cloud platform eliminates parallel systems and the inefficiencies of switching between them.

5.0 EXPENDITURE PLAN

Table 2 below summarizes Hydro One's net capital expenditures, including planned and forecast expenditures for the 2023-2027 rate period and planned expenditures for the 2028-2032 rate period. These expenditures are presented according to the investments described in Section 3.0 Investment Description.

Table 2 - Hydro One - Investment Expenditures

($M)	Plan[1] 23-27	Act/Fcst[2] 23-27	2028	2029	2030	2031	2032	Total
Gross Investment Expenditures	0.0	0.0	0.0	0.0	5.9	3.4	0.0	9.3
Less Removals	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Less Capital Contributions	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Net Investment Expenditures	**0.0**	**0.0**	**0.0**	**0.0**	**5.9**	**3.4**	**0.0**	**9.3**

[1] "Plan" refers to Hydro One's revised capital expenditure and ISA forecast to implement the OEB-approved Settlement Proposal in EB-2021-0110.
[2] "Act/Fcst" refers to actual (2023-2025) and forecast (2026-2027) expenditures.

2023-2027 EXPENDITURES

The cost shown in the above table is derived from cost estimates based upon past integration project experience; there was no integration planned nor forecasted spend under the 2023-2027 rate period.

2028-2032 EXPENDITURES

Over the 2028-2032 rate period, Control Room Investments forecast to be $9.3M forecast in capital. This is primarily due to the need for system integration between the Genesys Cloud platform and the provincial mobile radio and satellite phone systems, which are planned to begin in 2030. This is outlined further in Section 2.0 Investment Need.

6.0 ALTERNATIVES

Hydro One considered the following alternatives before selecting the preferred option.

ALTERNATIVE 1: STATUS QUO

Under the status quo, the PMR and satellite phone systems would continue to operate as standalone communications platforms separate from the Genesys Cloud telephony environment. Field crews operating in areas without cellular coverage would continue to contact the control room through a dedicated PMR or satellite phone module located at the front of the control room.

As discussed above, this approach would maintain the existing workflow (i.e. control room operators would continue to leave their workstations to answer PMR and satellite communications), resulting in continued operational inefficiencies and increased potential for delays in processing and relaying critical information during system events.

The status quo also maintains a capacity limitation whereby only one PMR or satellite phone communication can be handled through the module at a time. During major outage events, storms, or other periods of elevated operational activity, multiple field crews may attempt to contact the control room simultaneously, creating communication bottlenecks and increasing the risk of delayed response.

As Hydro One's capital work program continues to expand and severe weather events become more frequent and impactful, reliance on PMR and satellite communications is expected to increase. Maintaining the current operating model would not provide the scalability, efficiency, or resiliency required to support future operational demands. Accordingly, this alternative is not recommended.

ALTERNATIVE 2: PROCEED WITH PMR/SATELLITE PHONE SYSTEM INTEGRATION WITH GENESYS CLOUD TELEPHONY PLATFORM (RECOMMENDED)

The recommended alternative is to integrate the provincial mobile radio (PMR) and satellite phone systems with the Genesys Cloud telephony platform, creating a unified communications environment for control room operations.

Under this approach, PMR and satellite phone communications would be presented directly through the Genesys Cloud interface at operators' workstations. Operators would be able to receive, monitor, and manage communications from field crews through a single desktop environment without leaving their consoles, improving workflow efficiency and reducing the risk of missed or delayed information during critical operating events.

The integration would also eliminate the current single-channel limitation of the standalone PMR and satellite phone module by enabling communications to be managed through the enterprise telephony platform. This would improve the control room's ability to handle elevated call volumes during major storms, widespread outages, and emergency response situations.

In addition to improving operational effectiveness, a common communications platform enhances situational awareness by consolidating voice communications into a single operator-centric interface. This supports faster decision-making, more efficient coordination between field crews and system operators, and improved outage restoration activities.

This alternative is recommended because it addresses existing workflow inefficiencies and capacity constraints, supports growing operational demands, improves resilience during

major events, and provides a scalable communications platform that strengthens Hydro One's ability to safely and reliably operate the grid.

7.0 EXECUTION RISK AND MITIGATION

To reduce the risk of potential delays or unforeseen complexities during implementation, test environments will be designed, built and tested prior to full deployment. This approach provides for non-conformances to be identified and corrected prior to deployment. This investment will leverage a well-coordinated project management schedule and timely intervention to prevent unexpected delays.