

# Hydro One & Power Advisory Webinar:

## Agenda:

1. Market Insights on Commodity Pricing – *Power Advisory*
2. Billing the Global Adjustment and the Industrial Conservation Initiative – *Hydro One CICR*
3. Energy Efficiency and Demand Management Programs for Business – *Hydro One eDSM*

# Part 1: Market Insights on Commodity Pricing

# Welcome and Setting the Context



IESO's renewed market has fundamentally changed Ontario's wholesale pricing dynamics



Customers are now navigating price levels and volatility they have not previously had to manage



Our goal today is to explain the drivers, clarify the mechanics, and outline what this means for customers

# 1. Background

# Electricity Commodity in Ontario

## Key Players:

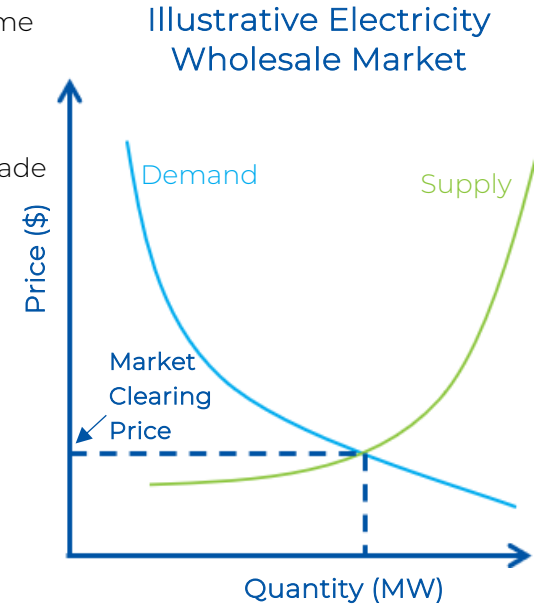
- **Hydro One** is a regulated electricity distributor that flows through electricity commodity charges to customers, reflecting the cost of electricity supply in Ontario
- **Independent Electricity System Operator (IESO)** operates the wholesale electricity market and procures supply from independent power producers
- **Ontario Power Generation (OPG)** provides electricity through a mix of rate-regulated and IESO-contracted supply
- **Independent Power Producers** provide electricity and are typically contracted with the IESO

## Two Components of Electricity Costs:

- **Ontario Electricity Market Price (OEMP):** Hourly electricity price established in the IESO-administered wholesale energy market
- **Global Adjustment (GA):** Charge that covers the difference between the wholesale market price and the contracted and rate-regulated payments to generators, as well as conservation program

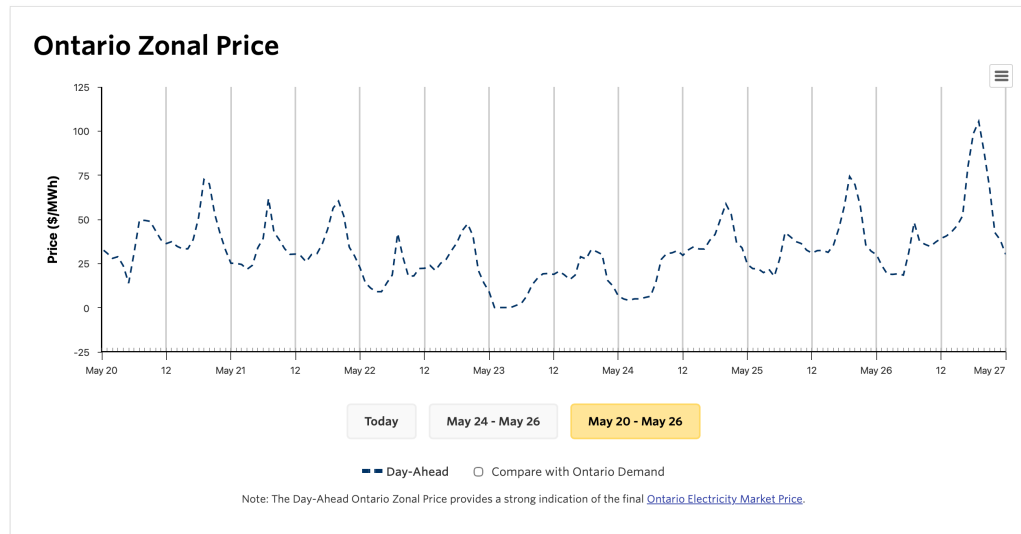
# OEMP – Wholesale Market Price

- IESO's wholesale market clears electricity supply and demand every 5 minutes in real-time and hourly in the Day-Ahead Market (DAM)
  - Large customers bid to buy (Demand); generators offer to sell (Supply)
- IESO implemented its Market Renewal Program (MRP) on May 1, 2025 after nearly a decade of planning
  - OEMP replaced Hourly Ontario Energy Price (HOEP)
  - OEMP applies to most customers unless directly participating in the wholesale market
- IESO's renewed market includes:
  - **Locational Marginal Prices (LMPs)**: reflect cost of supply at each node, including transmission congestion and line losses, and
  - A financially binding DAM where most supply is procured
- OEMP is based on:
  - **Day-Ahead Market Ontario Zonal Price (DAM OZP)**: weighted average of LMPs
  - Plus, a small Load Forecast Deviation Adjustment (day-ahead vs. real-time demand and prices)



# Hourly Variation in Wholesale Price

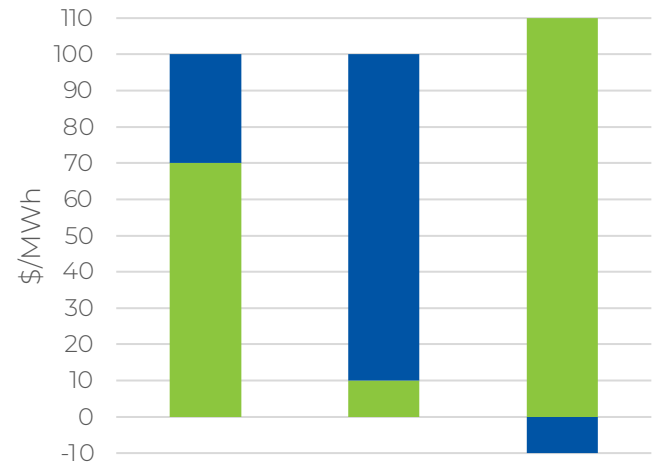
- Note the wholesale energy price is hourly and fluctuates throughout the day based on supply/demand for electricity



# Global Adjustment – True-up to Contracted Price

- In Ontario, most electricity supply is either contracted by the IESO or rate-regulated
- GA funds are used for:
  - **Regulated Generation:** payments to OPG for its prescribed nuclear and hydroelectric facilities
  - **Contracted Generation:** payments for natural gas, wind, solar, biomass and contracted nuclear (i.e. Bruce)
  - **Conservation Programs:** provincial energy efficiency programs
- GA is the difference between:
  - Wholesale market revenues earned by generators, and
  - Contracted / rate-regulated payments to generators
- GA ensures generators recover their fixed costs

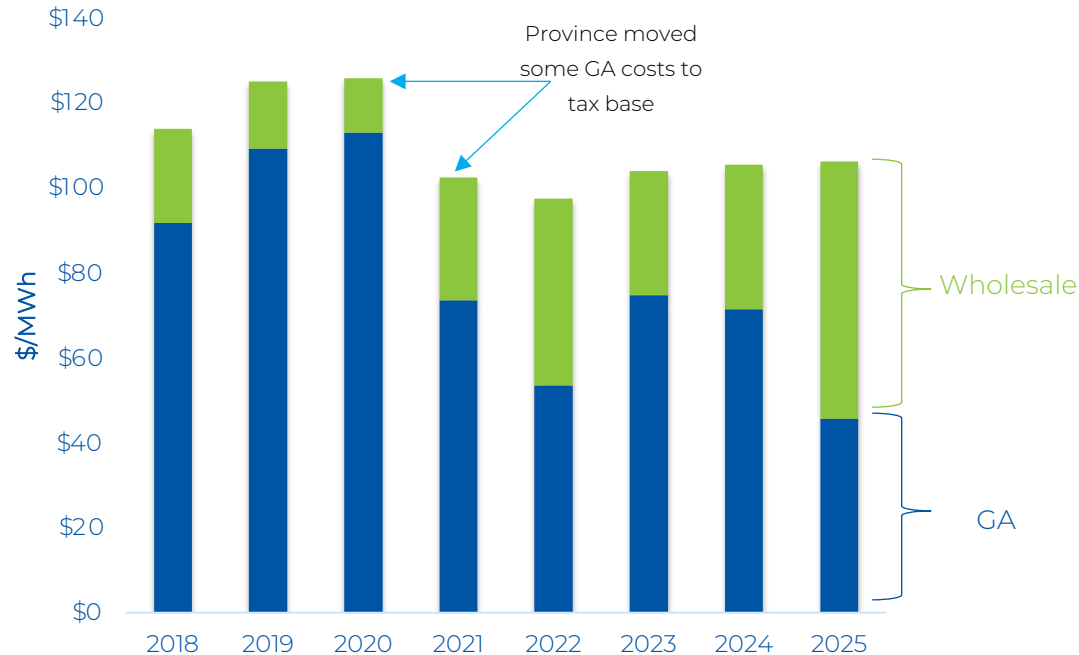
Example  
Contract Price \$100/MWh



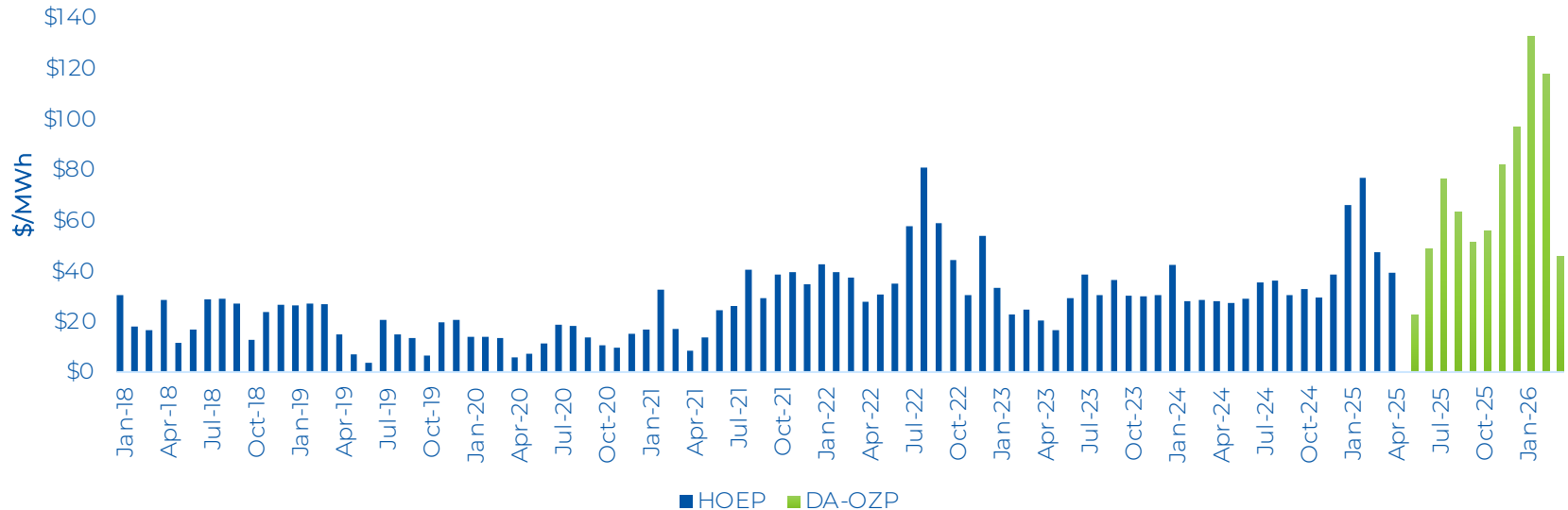
■ Wholesale Market Revenue ■ Global Adjustment

# GA has been the largest part of electricity commodity costs in recent years, but this is changing

- As wholesale prices have moved higher, the GA has commensurately moved lower
- In 2021, the province also shifted a portion of costs to the tax base, which lowered the overall system cost of supply in Ontario
- Class A Customers (ICI Participants) can reduce their GA costs by avoiding consumption during the top 5 coincident peak demand periods – with these costs then shifted to Class B customers
- Wholesale market prices are flowed through to the customer



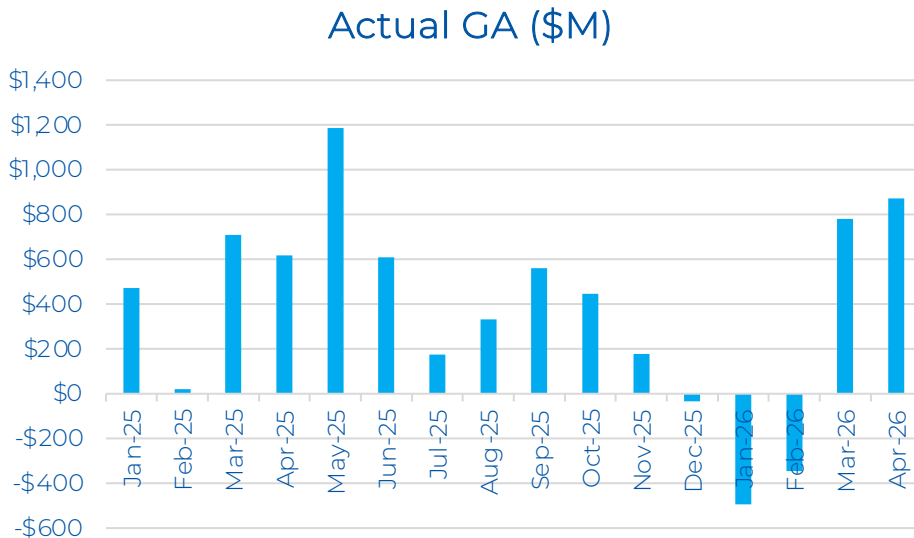
# Wholesale Market Prices – Look Back



- Wholesale energy prices increased since mid-2021
  - Tighter supply (mid-2021 to present)
  - Post MRP implementation (May 2025 to present) – significant increases, particularly throughout the winter

# GA Charges – Recent Look Back

- As expected, months with high wholesale energy prices are generally associated with lower GA costs
- For the first time since market opening, GA costs were negative between December 2025 and February 2026, driven by exceptionally high wholesale energy prices
- Class A customers are charged monthly GA based on their Peak Demand Factor (PDF), calculated as:  $\text{PDF} \times \text{monthly GA costs}$ .



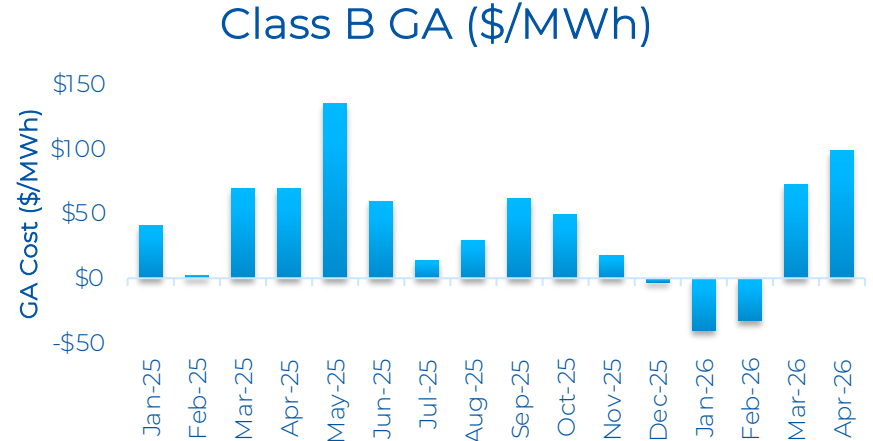
# GA Charges – Recent Look Back

- Post MRP launch – volatile wholesale energy prices driving volatile GA charges

2026	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1st Estimate (€/kWh)	1.44	-0.29	-4.06	0.01	7.27							
2nd Estimate (€/kWh)	0.95	-4.85	5.02	9.24								
Actual Rate (€/kWh)	-4.06	-3.28	7.27	9.91								

2025	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1st Estimate (€/kWh)	8.39	8.90	4.11	0.30	4.01	8.90	11.59	0.30	0.30	7.48	3.96	2.23
2nd Estimate (€/kWh)	4.58	0.02	6.12	5.99	14.37	8.78	-0.18	1.75	8.19	4.22	2.55	-2.57
Actual Rate (€/kWh)	4.11	0.30	6.95	6.92	13.49	5.97	1.44	3.01	6.19	4.89	1.82	-0.29



# Data Sources

- The IESO publishes detailed and frequently-updated information about the electricity market. For example:
  - Monthly GA (first and second estimates and final): <https://ieso.ca/Power-Data/Price-Overview/Global-Adjustment>
  - Historical monthly GA by component and class allocation: <https://ieso.ca/-/media/Files/IESO/Power-Data/data-directory/Global-Adjustment-Components-Costs-Consumption-by-Class.xlsx>
  - Monthly Ontario Electricity Market Price: <https://ieso.ca/Power-Data/Price-Overview/Ontario-Market-Prices#Ontario-Price>
  - Day-ahead hourly zonal price: [https://reports-public.ieso.ca/public/DAHourlyOntarioZonalPrice/PUB\\_DAHourlyOntarioZonalPrice.xml](https://reports-public.ieso.ca/public/DAHourlyOntarioZonalPrice/PUB_DAHourlyOntarioZonalPrice.xml)

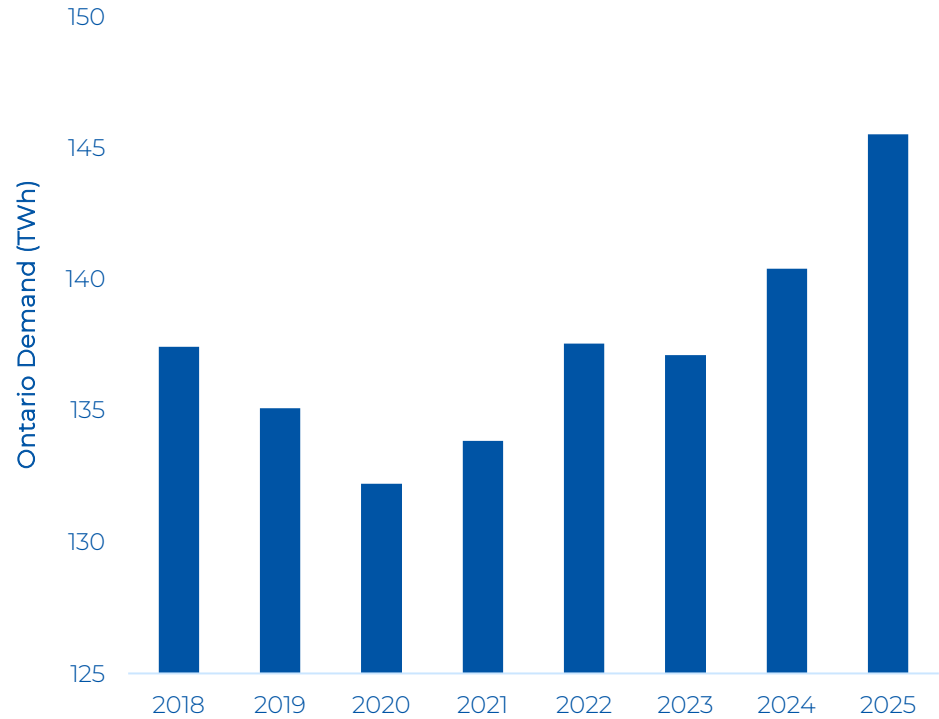
## 2. Changes in the Wholesale Market

# Drivers for Changing Prices

- There are several different factors that are driving the new pricing dynamic for supply from Ontario's electricity grid
1. **Market Supply and Demand**
    - *Demand* – After more than a decade of flat or declining electricity demand in Ontario, demand is slowly increasing – with 2025 marking the highest demand since 2008
    - *Gas Prices* – Natural gas prices have steadily moved higher throughout 2025 and into 2026, spiking in the 2025/26 winter months
    - *Changing Supply Mix* – With the retirement and refurbishment of several nuclear facilities, Ontario has had to rely on supply from its gas-fired generators more heavily – with total gas-fired supply reaching a record 32 TWh in 2025 – it's highest level
  2. **Price Formation**
    - *New MRP Market Design* – the new market design implemented in May 2025 includes several structural changes that reduce several features of the legacy market that suppressed prices and volatility

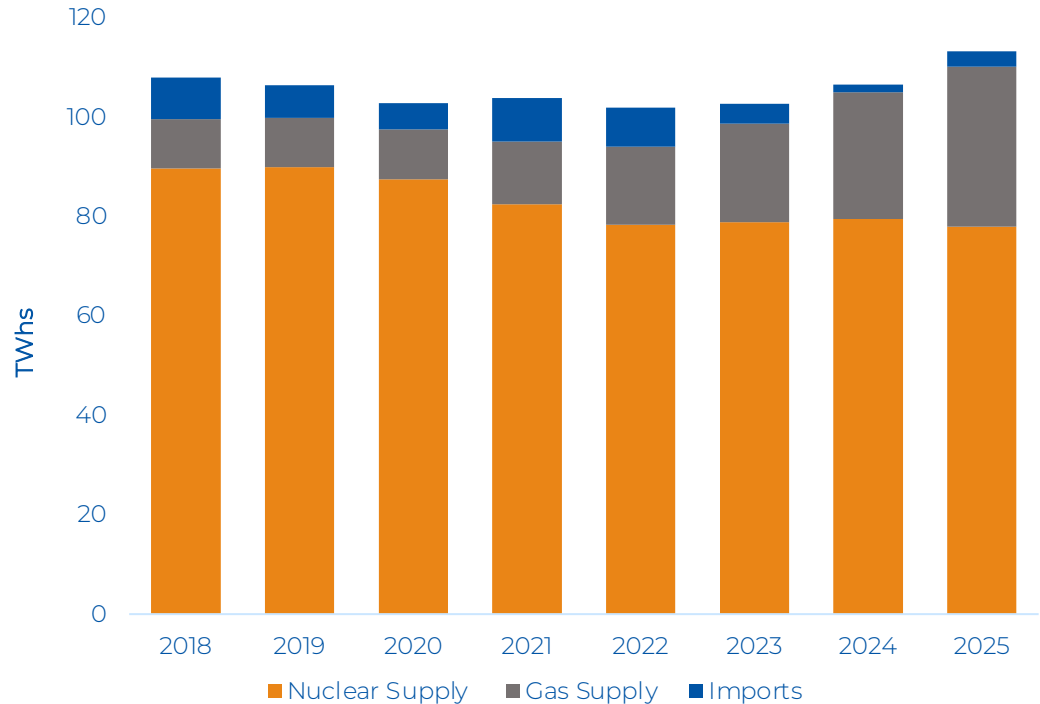
# Changing Supply/Demand Balance in Ontario

- Ontario's electricity grid is facing an increasingly tight supply demand balance
- Notably, after more than a decade of flat or declining demand, Ontario's electricity grid is experiencing demand growth – with Ontario demand hitting more than 145 TWh in 2025, its highest level in more than a decade
- An increase in demand will require higher marginal cost resources to be dispatched and result in higher wholesale market costs



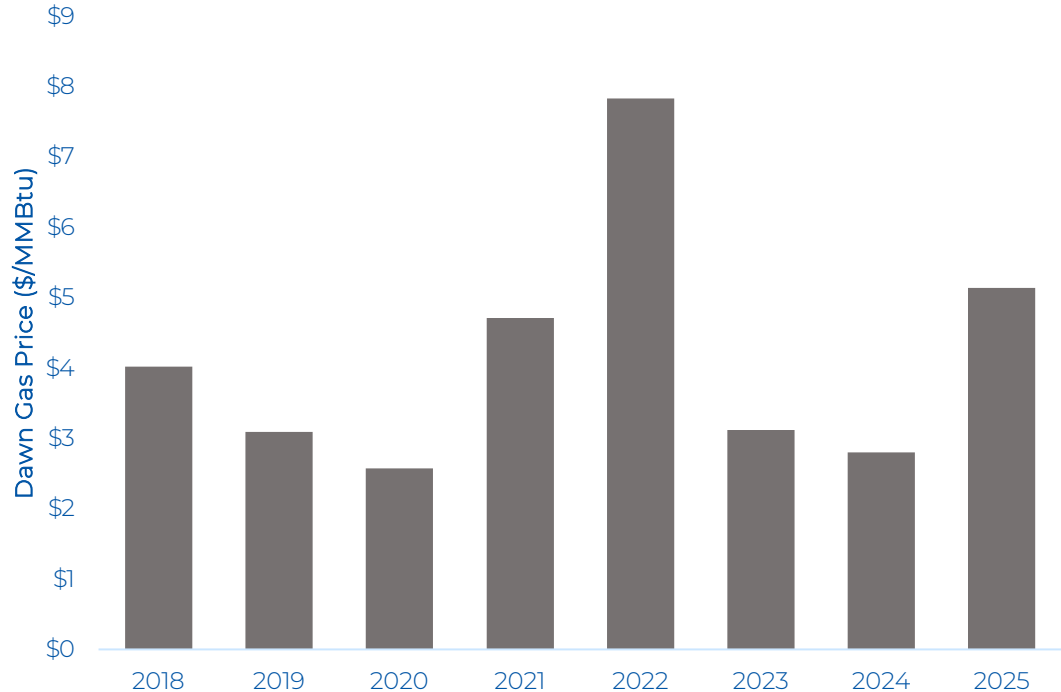
# More Gas-Fired Generation, Less Nuclear Supply

- The combination of higher demand and the retirement/refurbishment of several nuclear reactors has resulted in an increase in supply from gas-fired generation
- With more gas-fired generators being dispatched in the energy market, higher marginal cost (i.e. less efficient) generators will increasingly set the wholesale market price (at a higher level)
- In 2025, there was more than 30 TWh of supply from gas-fired generation – marking the highest amount of gas-fired supply since the wholesale market was launched in 2002

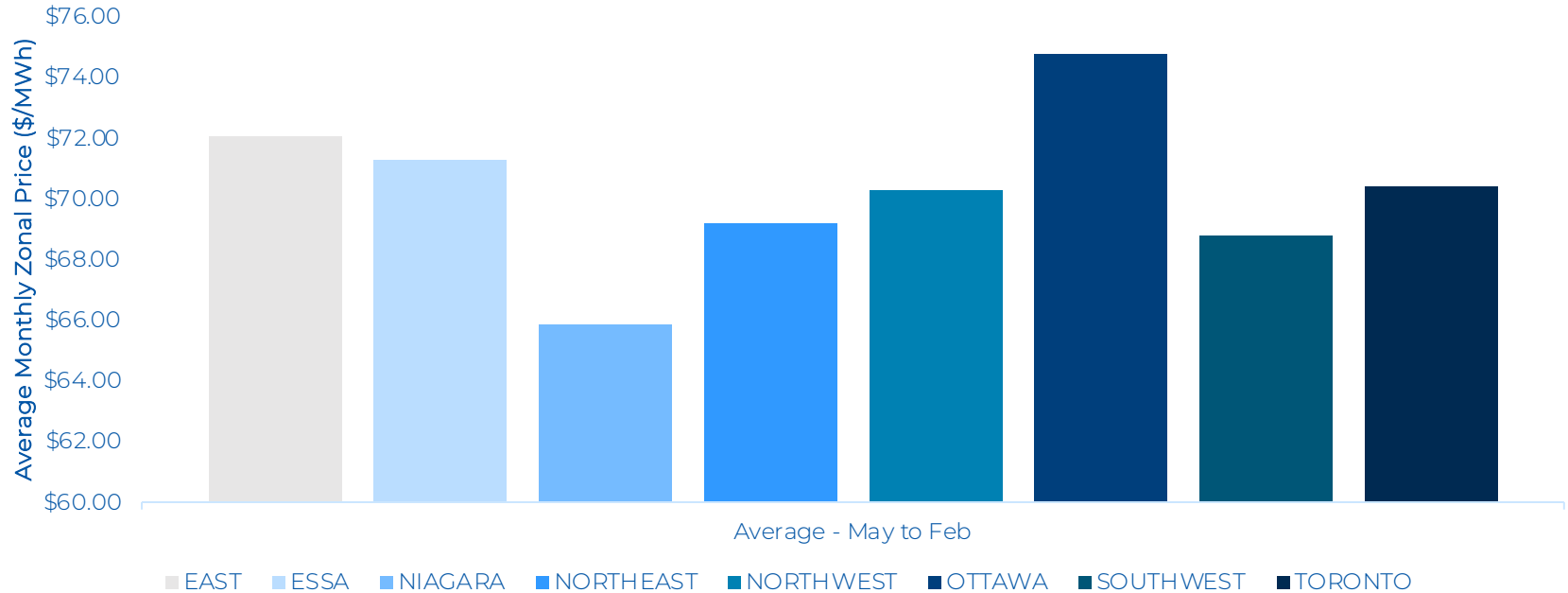


# Gas Prices Have Moved Higher in 2025

- Gas prices have moved higher in 2025 across North America
- With the increase in gas-fired generation in combination with higher gas prices, this has put upward pressure on wholesale electricity prices, particularly in 2025 (and 2022 when gas prices spiked due to volatility in the commodity market)
- The carbon price has also been increasing by \$15/tonne, which will put upward pressure on the marginal cost of gas-fired generators



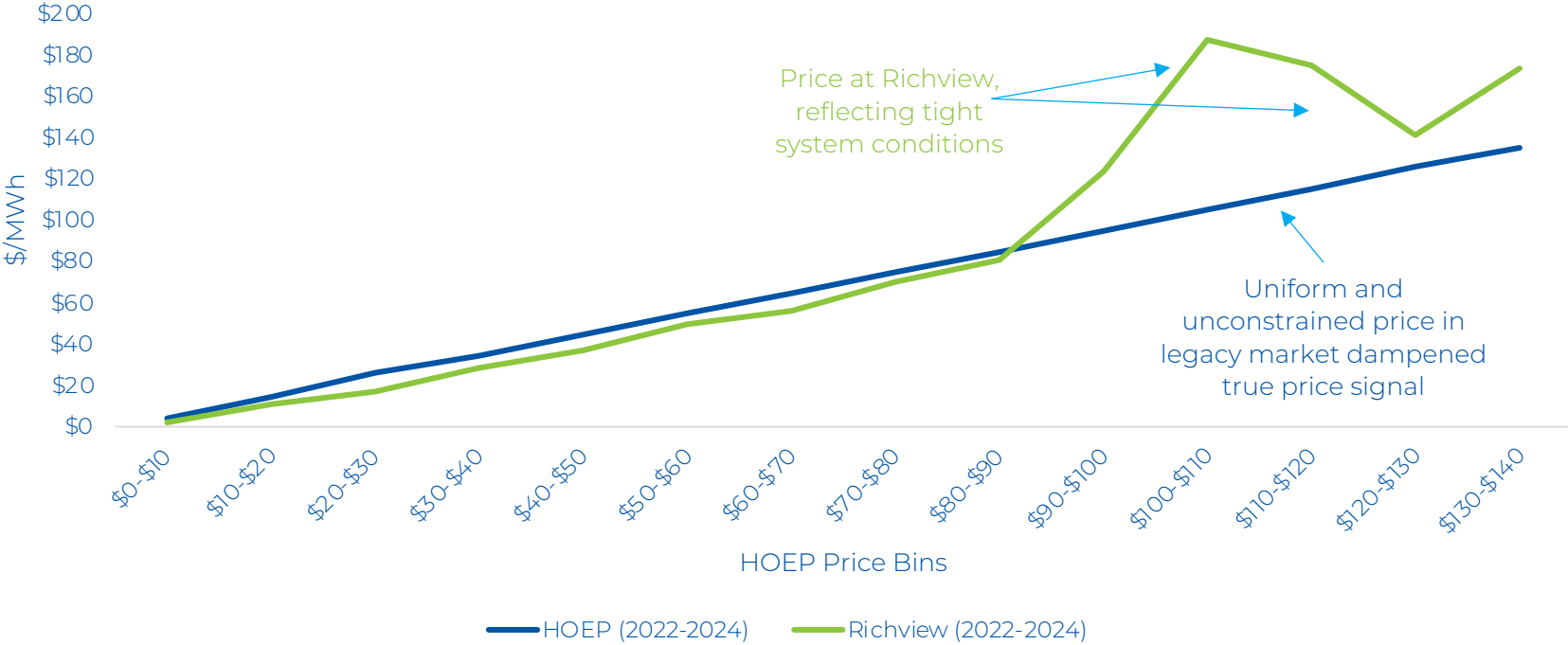
# Impacts of MRP Part 1: Congestion and Losses



- The impact of transmission congestion and losses are now included in the wholesale price – meaning this is no longer recovered through an uplift and may result in higher wholesale prices, particularly in zones where there are transmission constraints or large loads

# Impacts of MRP Part 2: Legacy Market Hid Congestion

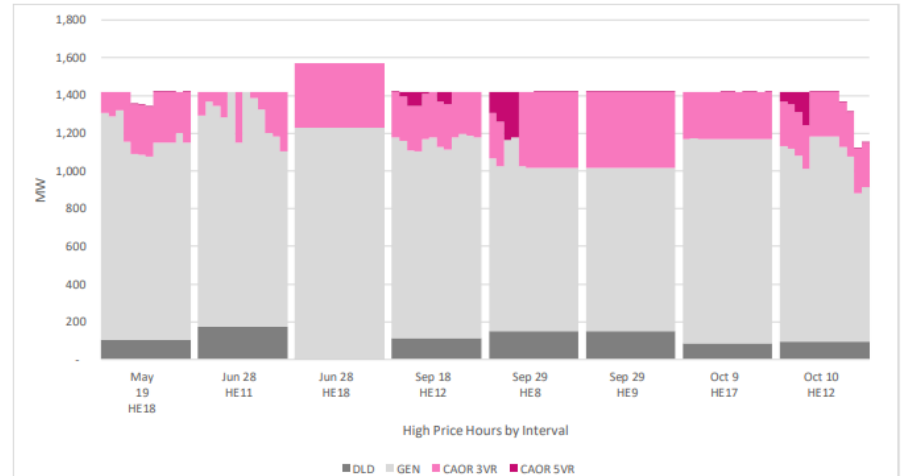
Pre-MRP Price Suppression: HOEP vs Richview



# Impacts of MRP Part 3: A New OR Market

- The legacy market included an Operating Reserve (OR) market design that structurally suppressed OR prices
- In the graph to the right, we can see that the legacy market used to include something call Control Action Operating Reserve (CAOR), which is – at its most basic – fictional OR, as it would not be used
- The IESO would include this fictional OR at a low price (around \$30/MW) and this would keep OR prices moderate at times when the system was tight
- In the renewed market, this fictional OR is no longer included and, instead, the price will move to much higher levels (\$600/MW or higher) when the system is tight

Figure 2-8: OR Schedule (Unconstrained) by Interval for 8 High Price Hours



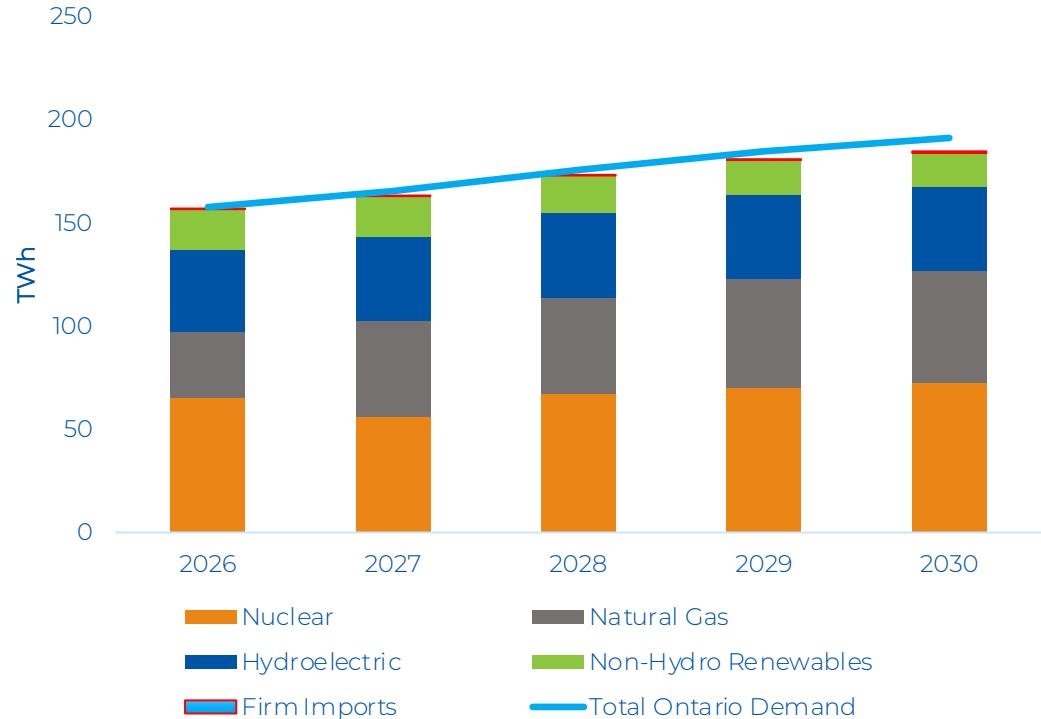
# 3. Trends and Expectations

# What's Expected Going Forward

- Supply/demand balance in Ontario's electricity grid is expected to get even tighter over the next five years
  - Demand is expected to grow by more than 32 TWh by 2030
  - Four units at the Pickering Nuclear Generating Station (PNGS) will be taken offline at the end of this year for refurbishment – removing more than 2,000 MW of baseload, non-emitting supply for nearly a decade
  - Carbon pricing is expected to continue to increase based on current federal policy
  - Pricing dynamics in the renewed market are expected to remain broadly the same until new supply and capacity is added
- At the same time, there are several significant new costs that are expected to be added to the system over the next five years
  - OPG has filed a rate application to the OEB that will see the regulated nuclear rate increase from around \$100/MWh today to more than \$200/MWh in 2027
  - The regulated hydroelectric rate is expected to increase from \$43/MWh to more than \$64/MWh by 2031
  - Several new capacity contracts for energy storage will be added
- The result is that wholesale prices may move higher along with the total cost of the entire system

# Ontario's Supply/Demand Balance to Remain Tight

- Ontario's electricity grid is expected to remain tight for at least the next five years, particularly in 2027 when the Pickering Nuclear Generating Station (PNGS) is taken fully offline for a refurbishment (removing more than 2,000 MW of baseload supply)
- The combination of less nuclear supply and an increase in demand will result in more gas-fired generation and higher wholesale prices



# Part 1: Q&A

# Part 2: Billing the Global Adjustment and the Industrial Conservation Initiative – *Hydro One CICR*

# Billing the Global Adjustment - Class B Methodology

- Class B Billing Methodology:

$$\begin{aligned} & \text{Total adjusted for loss consumption (kWh) for the billing period} \\ & \quad \times \\ & \quad (1^{\text{st}} \text{ Estimate of Global Adjustment}) \\ & \quad = \\ & \quad \$ \text{ Amount showing on your invoice} \end{aligned}$$

The 1<sup>st</sup> Estimate is comprised of three components:

1. Estimate of the GA costs based on the preceding month
2. Estimate of Ontario's demand for the given month
3. A true-up for the difference between the previous month's 1<sup>st</sup> Estimate and the Actual rate

# Billing the Global Adjustment - Class B Methodology

Example:

Billing Period is February 11 to March 14 and total usage is 497,094.65 kWh

- 10.559 ¢/kWh – 1<sup>st</sup> Estimate February
- 8.409 ¢/kWh – 1<sup>st</sup> Estimate March

Billing Period:	Total kWh	1st Estimate	Total
February 11 to 28	355,196.82	\$ 0.10559	\$ 37,505.23
March 1 to 14	141,897.84	\$ 0.08409	\$ 11,932.19
<b>February 11 to March 14</b>	<b>497,094.65</b>	<b>\$ 0.09945</b>	<b>\$ 49,437.42</b>

# Billing the Global Adjustment - Class A Methodology

- The ICI is designed to help large energy users manage their Global Adjustment costs through reducing demand during peak hours
- Class A customers are assessed and billed based on their % contribution to the five highest system peaks
- The more accurately that a Class A customer can predict the top five peak hours and shift their demand accordingly, the more they will be able to benefit through this initiative

# Determination of Top 5 Peaks



- The top 5 peaks are determined using the **Ontario Demand** (i.e. the 5 hours during the base period in which the greatest volume of electricity was dispatched through the IESO-administered markets for the purpose of supplying Ontario demand).
- The IESO is required to publish the total volume of electricity dispatched in an hour within 60 minutes after the end of that hour and must be based on the information and data available to the IESO at the time.
- The associated hourly quantities that are used to determine the system-wide consumption during the five peak hours are based on the adjusted AQEW (allocated quantity of energy withdrawn), embedded generation (MWh) and energy storage injections (MWh).

Base Period: May 1, 2025 to April 30, 2026

Original Rank	Date	Hour Ending	Allocated Quantity of Energy Withdrawn (MWh)	Embedded Generation (MWh)	Energy Storage Injections (MWh)	Total* (MWh)
1	June 24, 2025	19	23,446.783	546.899	148.082	23,845.600
2	August 11, 2025	18	23,659.008	708.575	251.131	24,116.452
3	June 23, 2025	19	24,080.402	743.410	223.072	24,600.740
4	July 24, 2025	17	23,700.363	1,327.163	129.753	24,897.773
5	July 28, 2025	16	23,613.160	1,328.488	84.936	24,856.712

# ICI Eligibility

## Eligibility Assessment:

1. Average of your monthly adjusted for loss peaks during the Base Period of May 1 to April 30
2. By Calendar Month, not billing periods
3. By adjusted for loss peak kW, not kVA (which takes power factor into consideration)
4. Facility must be in service by start of Base Period (by May 1)
5. Facility must not be a net generator

# ICI Eligibility



<b>Assessed Facility Size</b>	<b>Industry Classification Restrictions</b>	<b>Response Required</b>
>500 kW <1000 kW	Service must be classified under NAICS code commencing with: "31", "32", "33" - manufacturing "1114" - greenhouse, nursery, floriculture production	Opt-In
>1000 kW	N/A	Opt-In
>5000 kW	N/A	Opt-Out

NAICS code must be self-declared by the customer

<https://www.statcan.gc.ca/eng/subjects/standard/naics/2017/v3/index>

# ICI Eligibility

**Assessment: > 1000kW  
No Industry  
Classification  
Restrictions**

	Month	Peak Demand kW
Prior year	May	2335.393
	June	2318.320
	July	2211.104
	August	2068.556
	September	2063.960
	October	2184.214
	November	2169.559
	December	2277.361
Current year	January	2399.308
	February	2370.279
	March	2276.139
	April	2325.564
	<b>Average Demand</b>	<b>2249.980</b>

**Assessment: > 500kW  
< 1000kW  
Industry Classification  
Restrictions Apply**

	Month	Peak Demand kW
Prior year	May	586.501
	June	582.742
	July	597.310
	August	589.979
	September	575.880
	October	580.392
	November	564.884
	December	735.383
Current year	January	739.612
	February	750.609
	March	763.862
	April	747.225
	<b>Average Demand</b>	<b>651.198</b>

## Load Facility Aggregation:

- Peak demand is determined at the aggregate of all interval meters at the load facility level. A load facility may comprise multiple meter points and buildings as long as they are located on the same property and associated to the same consumer.
- A single load facility may straddle a property line and may have more than one municipal address. A property cannot however, be bifurcated by an alternate parcel of land or public roadway.
- The aggregate demand as measured by all interval meters at a load facility must be used to determine if the facility is eligible as well as in the calculation of the Peak Demand Factor

# ICI Eligibility

## Common Business Purpose:

- A load facility for purposes of ICI eligibility may comprise multiple “loads” which may be contained across multiple buildings and metered electrical services.
- It is imperative that all loads serve a *common business purpose* and are part of an *integrated operation*.
- Example: Use of a “load bank” or temporary construction load for purposes of gaining eligibility to the ICI of an eventual business purpose are prohibited.

## Continued Status:

- Existing Class A customers that participated in one or more of the programs specified in Section 6.2 of [O. Reg 257/22](#) (adjustments under Section 25.33 of Ontario Regulation 429/04) and dropped below the peak demand threshold during a base period for an adjustment period may be eligible to opt back into the initiative.
- Any existing Class A customer that has fallen below the eligibility threshold will be contacted to determine if they have participated in any applicable conservation programs.

# Peak Demand Factor

- Sum of Customer's five coincident peaks divided by sum of five Ontario system peaks

## How We Calculated Your Peak Demand Factor

Your Peak Demand Factor (PDF) is calculated by dividing your total five coincident peaks by the total five system peaks over the period

<b>Date</b> Highest Peaks for Ontario from May to April	<b>Hour (EST)</b> Hour Ending for the Highest Peak	<b>Coincident Peak (kW)</b> Customer's Coincident Use	<b>Coincident Peak (MW)</b>	<b>Ontario System Peaks (MW)</b>
Date 1	Hour	Customer Coincident Peak 1	Customer Coincident Peak 1 (in MW)	Ontario System Peak 1
Date 2	Hour	Customer Coincident Peak 2	Customer Coincident Peak 2 (in MW)	Ontario System Peak 2
Date 3	Hour	Customer Coincident Peak 3	Customer Coincident Peak 3 (in MW)	Ontario System Peak 3
Date 4	Hour	Customer Coincident Peak 4	Customer Coincident Peak 4 (in MW)	Ontario System Peak 4
Date 5	Hour	Customer Coincident Peak 5	Customer Coincident Peak 5 (in MW)	Ontario System Peak 5
<b>TOTALS</b>		<b>Sum of Coincident Peaks (in kW)</b>	<b>Sum of Coincident Peaks (in MW)</b>	<b>Sum of Ontario System Peaks (in MW)</b>
<b>Peak Demand Factor</b>		<b>Sum of Coincident Peaks (in MW)</b>	<b>divided by</b>	<b>Sum of Ontario System Peaks (in MW)</b>
<b>JULY to JUNE (Adjustment Period)</b>		<b>Customer Peak Demand Factor</b>		

- Top 5 System Peaks will be determined using the "Ontario Real-time Demand" (dispatched through IESO)

# ICI Key Dates



- **April 1 – April 19:** LDCs submit their embedded generation and energy storage injection volumes through the Coincident Peak form in Online IESO
- **April 30:** Current base period ends
- **May 3:** The IESO will post the total volume of electricity withdrawn from the IESO controlled grid for the peak hours so that LDCs can begin calculating their customers' PDFs
- **May 29:** Deadline for LDCs / IESO to provide eligible customers their PDF
- **June 15:** Deadline for eligible customers to opt-in/opt-out of the ICI
- **June 16 – June 25:** Deadline for LDCs to submit their Class A consumer consumption based on their customers' opt-in / opt-out decisions
- **June 30:** Deadline for IESO to provide LDCs their PDFs
- **July 1:** Adjustment period starts
- **July 31:** Deadline for LDCs to submit their Class A consumer data

# Timeline of ICI

- On an annual basis, eligible customers will be presented the option of Opting in to the ICI

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Previous Year					BASE PERIOD ----->							
Current Year	BASE PERIOD CONTINUED ----->				OPT IN / OUT (By June 15)		ADJUSTMENT PERIOD ----->					
Next Year	ADJUSTMENT PERIOD CONTINUED ----->											

# ICI Customer Notice



By the end of *May*, all eligible customers will be sent an email containing their eligibility assessment and calculated Peak Demand Factor.

## Notice Contents:

- How Eligibility Is Determined
- Peak Demand Factor Calculation
- Estimated Class A vs B Comparison
- How to Opt In or Out via our online form

# Opting In to Class A



- Eligibility notice contains a link to the Online Opt In Form
- Form must be completed online no later than June 15
- Customers with an average peak demand of above 5 MW are automatically considered Class A and must opt-out if they choose not to participate
- Authorization will be required, from the customer, to Hydro One, to release business information such as legal name, facility address, GPS coordinates and NAICS code, to the Ministry of Energy and IESO
- Customers that opt in to Class A will be locked into this methodology for the duration of the adjustment period (July 1 – June 30)

# Information Disclosure



- All Class A opt-in customers must provide written consent to their distributor to provide the following information to the IESO and Ministry of Energy and for this information to be published
  - Legal name and the name under which it carries on business in respect of each of its Class A load facilities
  - The address, geographic location and NAICS code of each of the consumer's Class A load facilities
- All Class A opt-in customers must provide written consent to provide the following anonymized information to the Ministry and IESO:
  - kWh consumption during the base period
  - Average monthly peak demand during the base period
  - Peak Demand Factor
  - NAICS code

# Class A vs Class B Methodologies

- Class A vs B comparison – based on historical data
- Class B: kWh x 1<sup>st</sup> Estimate GA Rate
- Class A: PDF x GA \$ Total

Comparison over Adjustment Period	Class B - Global Adjustment			Class A - Global Adjustment			% Change	
	MWh	Actual Global Adjustment Rate (\$/MWh)	Global Adjustment Bill	Peak Demand Factor	Global Adjustment \$/Month	Global Adjustment Bill		
Prior year	May	253.350	\$134.93	\$34,184.52	0.00001973	\$1,145,572,514.60	\$22,597.66	-33.90%
	June	205.233	\$59.72	\$12,256.51	0.00001973	\$650,792,303.03	\$12,837.59	4.74%
	July	211.687	\$14.38	\$3,044.06	0.00001973	\$178,522,439.81	\$3,521.55	15.69%
	August	218.350	\$30.10	\$6,572.34	0.00001973	\$332,078,423.56	\$6,550.61	-0.33%
	September	235.560	\$61.85	\$14,569.39	0.00001973	\$561,681,522.29	\$11,079.78	-23.95%
	October	222.350	\$48.85	\$10,861.80	0.00001973	\$445,142,198.45	\$8,780.91	-19.16%
	November	256.870	\$18.16	\$4,664.76	0.00001973	\$176,080,190.19	\$3,473.37	-25.54%
Current year	December	277.158	(\$2.92)	(\$809.30)	0.00001973	(\$34,897,822.75)	(\$688.40)	-14.94%
	January	279.597	(\$40.62)	(\$11,357.23)	0.00001973	(\$493,919,230.89)	(\$9,743.09)	-14.21%
	February	229.852	(\$32.81)	(\$7,541.44)	0.00001973	(\$344,601,303.28)	(\$6,797.64)	-9.86%
	March	240.899	\$72.70	\$17,513.36	0.00001973	\$781,435,794.35	\$15,414.67	-11.98%
	April	248.621	\$99.10	\$24,638.34	0.00001973	\$872,432,442.81	\$17,209.68	-30.15%
			\$108,597.09			\$84,236.70	-22.43%	
			<b>Savings on Class A</b>	<b>\$24,360.39</b>				
			<b>Savings Including HST</b>	<b>\$27,527.24</b>				

# Important Items for Consideration

- Reminder: you will be billed on your assessed PDF for the entirety of the adjustment period July 1 – June 30
- Are you expecting your load requirements to decline over the adjustment period?
  - For example:
    - as a result of implementing efficiency measures at the facilities,
    - parceling off a section of the facility for an alternate entity or,
    - an expected general decline in business activities at the location.

# Getting the most out of the ICI



- The more accurately that a Class A customer can predict and reduce their consumption during the top five Ontario peak demand hours, the more they will be able to reduce their overall electricity charges.
- There are certain factors that drive the possibility of system peaks occurring:
  1. Weather/Climate: Peaks tend to occur during “heat wave” conditions in the summer or “polar vortex” conditions in the winter
  2. Time of Day/Day of Week: Peaks tend to occur on weekdays when businesses are in operations and time of day can vary by season:
    - Summer: late afternoon when cooling is most required
    - Winter: early evening when heating required

Note: although historically rare, peaks can occur on weekends/holidays

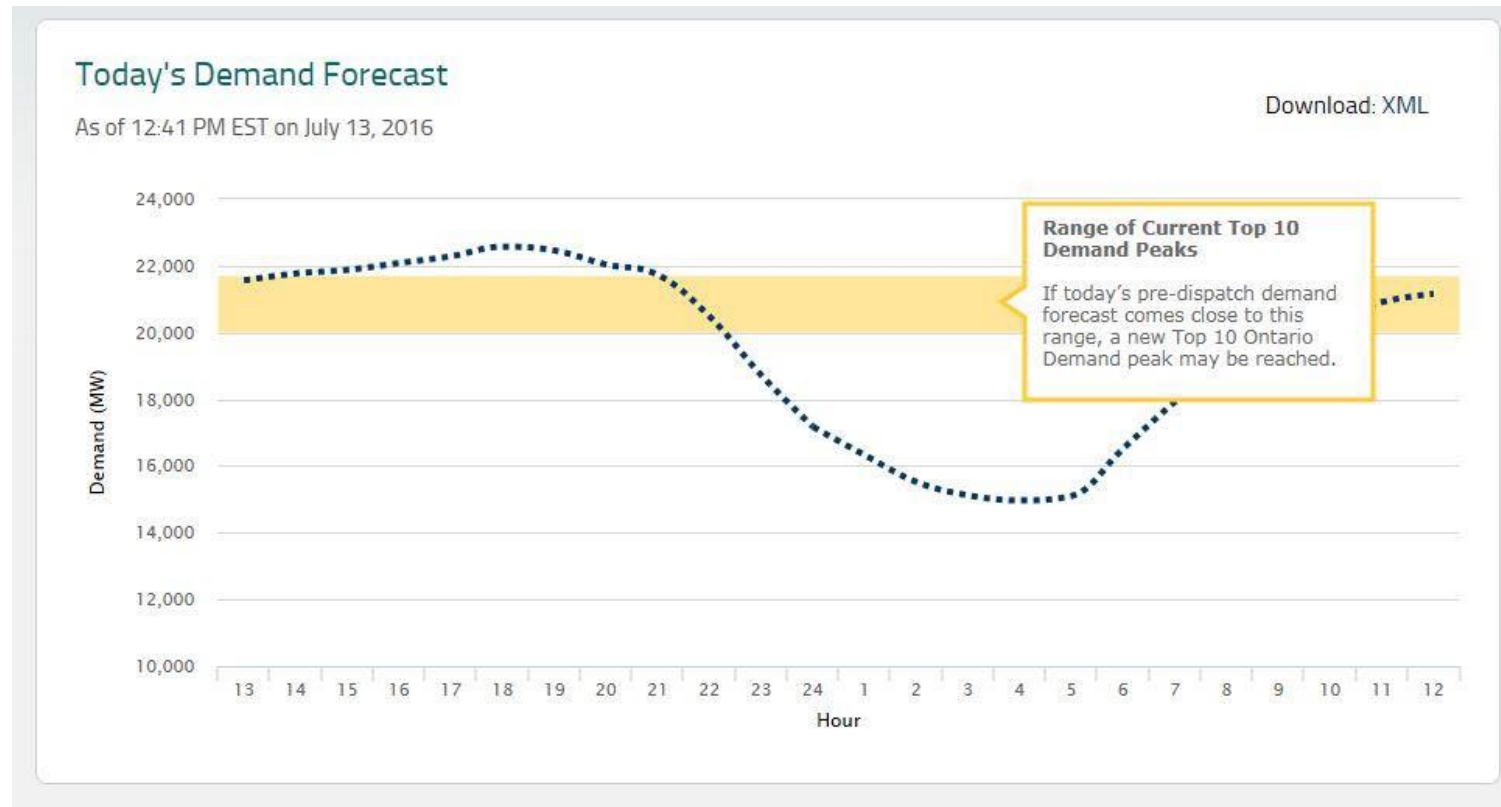
Note that best practice may involve the use of operational curtailment or the use of Distributed Energy Resources (DER's).

# Forecasting Tools

- For Current Base Period, IESO posts:
  - Forecasted Demand for next 24 hours
  - Forecasted Demand for next 6 days (highest hour of each day)
  - Top 10 Demand Peaks to Date
  - ICI Ontario Demand Peak Tracker
    - Provides a real-time snapshot of the top 10 peak hours and ICI Ontario demand values with coincident adjusted AQEW values for the current base period. This information can be used by ICI customers to track ICI Ontario demand peaks and estimate their GA allocation for the peak hour.  
<https://www.ieso.ca/peaktracker>

# Forecasting Tools

- IESO Peak Tracking Tool - Demand Forecast from July 13, 2016 (May 2016 – April 2017 base period)



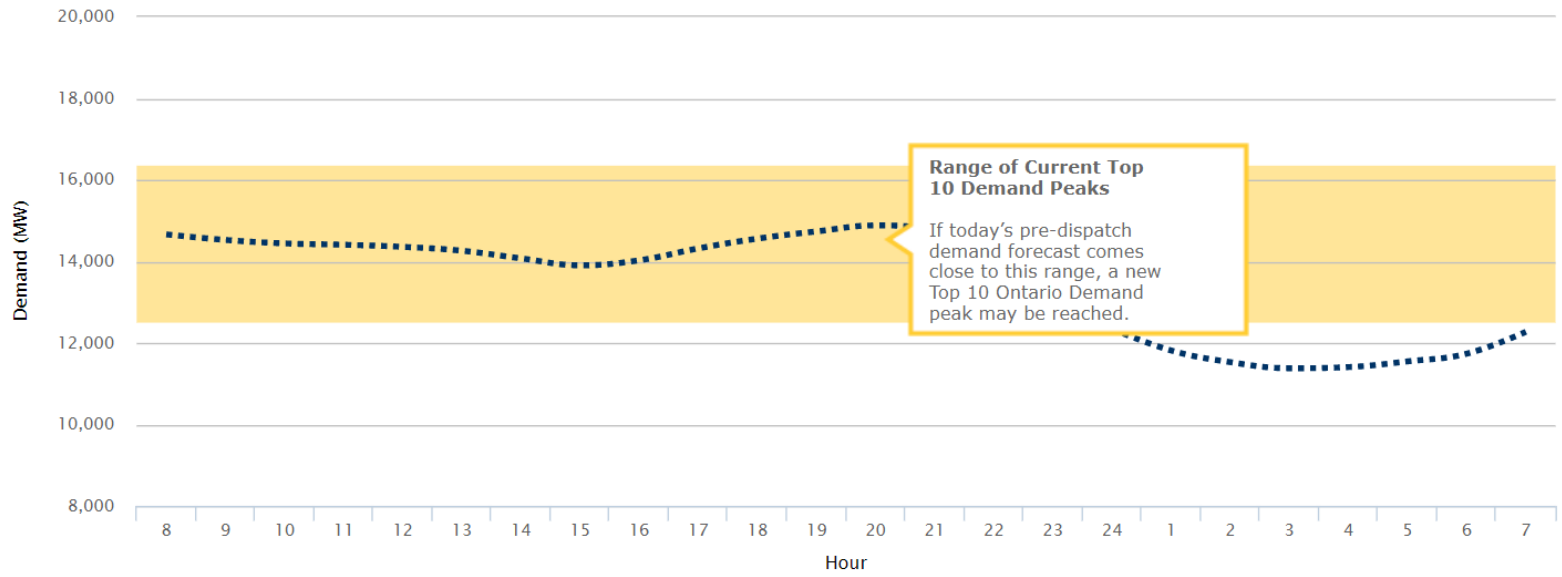
# Forecasting Tools

- IESO Peak Tracking Tool - Demand Forecast from May 6, 2022 (May 2022 – April 2023 base period)

## Today's Ontario Demand Forecast

The graph below identifies the forecasted Ontario demand for the next 24 hours and whether it could be a top 10 ICI Ontario demand peak during the current base period.

As of 7:02 AM EST on May 06, 2022



# Transferring Class A Load Facility



- Transfer of a Class A load facility process:
  - Hydro One requires formal written notice of the Class A change of ownership using a template form. The form includes the following information:
    - The transferor
    - The transferee
    - Date of transfer
    - Address of Class A facilities
    - Request for transferee to assume the PDF of the transferor as well as the potential coincident peaks for the current base period for the following adjustment period
  - Transfer details will be reviewed and customer will receive formal written notice via email from Hydro One
  - Effective date of the transfer is 10 business days after notice is received (there will be no retroactive adjustments to the effective date)

# Transferring Class A Load Facility

- Section 8 of [O. Reg 257/22](#) (adjustments under Section 25.33 of Ontario Regulation 429/04) was amended to allow Class A consumers the ability to transfer a portion of a Class A load facility
- Must apply to a separately metered portion of an existing Class A facility
- In addition to the formal written request for a Class A Load Facility transfer, a copy of a formal written agreement between the transferor and the transferee is required
- The agreement requires the following information:
  - The PDF of the transferor and the transferee for each adjustment period (determined as a percentage of the PDF that would be calculated for the transferor in respect of the load facility for that adjustment period if the transfer did not occur)
  - The sum of the peak demand factor of the transferor and the transferee for each such adjustment period must be equal to the peak demand factor that would be calculated for the transferor in respect of the load facility for that adjustment period if the transfer did not occur.

# Additional Notes



- Customers that move to Class A, will also be moved to Calendar Month Billing (if not already)
- Regulatory Charges – how you bill on Capacity Based Recovery changes from per kWh rate to PDF x Total:

## MONTHLY RATES AND CHARGES - Regulatory Component

Wholesale Market Service Rate (WMS) - not including CBR (see Note 12)	\$/kWh	0.0041
Capacity Based Recovery (CBR) - Applicable to Class B Customers (see Note 12)	\$/kWh	0.0006
Rural or Remote Electricity Rate Protection Charge (RRRP) (see Note 12)	\$/kWh	0.0006
Standard Supply Service - Administrative Charge (if applicable)	\$	0.25

# Part 2: Q&A

# Part 3: Energy Efficiency and Demand Management Programs for Business – *Hydro One eDSM*

# Contents

1. Overview of Available Programs
2. Equipment & System Upgrades Programs (Retrofit, XLerate & Energy Performance Program)
3. Expanded Energy Management Program
4. Peak Performance Program
5. Conclusion/Questions



# Supporting performance, reliability, and growth



- Reduce electricity costs from major processes and systems
- Improve production reliability and throughput
- De-risk capital investments with large incentives
- Unlock deep, long-term energy savings
- Strengthen internal energy management capability
- Support competitiveness and decarbonization goals

Business need	Programs	Best for
Equipment & system upgrades	<b>Retrofit</b>	Small to large capital projects
Deep industrial/large project savings	<b>XLerate</b>	Custom capital projects, process-driven w/ min. savings 600 MWh/yr
Facility optimization	<b>EPP, EBCx, SEM (part of EEM)</b>	Whole-facility performance
Energy management capability	<b>Expanded Energy Management (EEM)</b>	Long-term savings
Quick, low-effort savings	<b>Instant Discounts</b>	Fast deployment
Peak demand reductions	<b>Peak Performance</b>	Earning incentives for contributing to grid flexibility

# Equipment & System Upgrades



Upgrade equipment, lower operating costs.

	Retrofit Program	XLerate Program	Energy Performance Program
<b>Focus</b>	Planned capital upgrades on non-lighting related equipment	Large industrial process / facility improvements with $\geq 600$ MWh annual savings	Rewards participants who are able to make behavioural and operational changes that support capital investment projects on a whole-facility level incentive model.
<b>Typical projects</b>	<ul style="list-style-type: none"> <li>HVAC equipment</li> <li>Motors &amp; pumps</li> <li>Controls</li> <li>Industrial systems (e.g. process &amp; chiller upgrades, compressed air)</li> <li>Rooftop solar for load displacement</li> <li>Sector specific (e.g. horticulture lighting)</li> </ul>	<ul style="list-style-type: none"> <li>Waste heat recovery generators</li> <li>HVAC ventilation</li> <li>Industrial heat pumps</li> <li>Compressed air systems</li> <li>Process optimization</li> <li>Large motors &amp; VFDs</li> </ul>	<ul style="list-style-type: none"> <li>Capital upgrades similar Retrofit but with exceptions:                             <ul style="list-style-type: none"> <li>Solar not eligible</li> <li>Lighting is eligible</li> </ul> </li> <li>Building Automation Systems</li> <li>Process Optimization</li> </ul>
<b>Customer Eligibility</b>	Commercial, industrial, agricultural, institutional & multi-unit residential buildings	Industrial, institutional, large-scale, complex energy-efficiency projects	Commercial, institutional, or industrial facilities able to commit to realize >5% energy savings within 2 years
<b>Complexity</b>	● ● ○	● ● ●	● ● ○
<b>Incentives</b>	<ul style="list-style-type: none"> <li>Up to 50% of eligible project costs</li> <li>Pre-defined, streamlined prescriptive incentives, and</li> <li>Custom incentives for large, more complex projects at the greater of \$0.20/kWh or \$1,800/kW saved</li> <li>Projects at facilities located in electricity-constrained regions may be eligible for <b>double</b> incentives</li> </ul>	<ul style="list-style-type: none"> <li><b>Project Incentives:</b> <ul style="list-style-type: none"> <li>\$0.30/kWh up to 75% of eligible project costs, 1 year payback or \$15 million max</li> </ul> </li> <li><b>Feasibility study funding:</b> <ul style="list-style-type: none"> <li>50% cost share up to \$100K</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>\$0/30/kWh for electricity savings in summer peak hours and \$0.08/kWh for non-summer peak electricity savings</li> <li>Incentives are paid annually on a 3-year term</li> <li>Cannot be incented for the same savings through a different Save on Energy program</li> </ul>

# Expanded Energy Manager Program

Energy management support for long-term savings



	Strategic Energy Management (SEM)	Energy Manager (EM) Support	Monitor & Reporting: Energy Management Information System (EMIS)
<b>Focus</b>	Participate in expert-led coaching cohorts and curriculum to identify and implement long-term energy saving opportunities	Cover up to 50% of salary to hire a dedicated on-site energy manager	Installation of an EMIS to collect, analyze and visualize energy and operational data to support performance optimization
<b>Key Considerations</b>	Participate in workshops, conference calls, site visits and other activities offered by the IESO through cohorts	Must meet program requirements including completing an energy management assessment, developing an M&V approach and participating in coaching support	Limited time funding – <b>must apply before year-end</b> to meet March 31, 2027 installation deadline
<b>Customer Eligibility</b>	<ul style="list-style-type: none"> <li>• <b>Industrial facilities:</b> 12 months of consecutive energy data and &gt;20,000 GJ (all fuels) annual energy consumption each of the past 2 years</li> <li>• <b>Commercial facilities:</b> 12 months of consecutive energy data and &gt;3,000,000 kWh annual energy consumption each of the past 2 years</li> <li>• Participants can <b>combine up to 5 facilities</b> to reach the minimum annual energy consumption criteria</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Industrial facilities:</b> 12 months of consecutive energy data and &gt;50,000 GJ (all fuels) annual energy consumption each of the past 2 years</li> <li>• <b>Commercial facilities:</b> 2025-2027 funding exhausted</li> <li>• EM must complete CEM exam and have pathway to becoming a CEM by end of first year and experience performing EM duties</li> </ul>	<ul style="list-style-type: none"> <li>• Must be an industrial facility</li> <li>• EMIS must meet ISO 50001 requirements</li> </ul>
<b>Complexity</b>	● ● ○	● ● ●	● ● ○
<b>Incentives</b>	<ul style="list-style-type: none"> <li>• Performance incentive of \$0.02/kWh from confirmed non-incented projects up to \$100,000 in any 12-month period</li> <li>• Enabling Incentive up to \$5,000 for the purchase of eligible energy management tools</li> </ul>	<ul style="list-style-type: none"> <li>• 50% of EM salary up to \$100,000 annually</li> </ul>	<ul style="list-style-type: none"> <li>• Up to \$50,000 for facilities with annual energy consumption of &lt;400,000 GJ (all fuels)</li> <li>• Up to \$250,000 for facilities with &gt;400,000 GJ annual energy consumption</li> </ul>

# Peak Performance Program



Turn flexible load into revenue while enabling grid resilience

Peak Performance Program	
<b>Focus</b>	<ul style="list-style-type: none"> <li>• Demand Response initiative for <b>Class B</b> customers</li> <li>• Pays facilities to reduce HVAC &amp; building load during peak summer demand days</li> <li>• Up to 12 DR events June-September, typically 3 hour events between 3-7 PM with day ahead notice</li> </ul>
<b>Customer Eligibility</b>	<ul style="list-style-type: none"> <li>• Must be a Class B facility and must not participate in ICI or the IESO Capacity Auction</li> <li>• Customers who can contribute at least 500 kW of load curtailment can participate directly in the program</li> <li>• Customers who can contribute less than 500 kW can enrol with a participating aggregator</li> <li>• At least 75% of a facility's load curtailment must come from HVAC</li> <li>• Must have technical capacity to monitor, collect, and report energy and performance data (enabling incentive available)</li> </ul>
<b>Incentives</b>	<ul style="list-style-type: none"> <li>• <b>Performance Incentive:</b> <ul style="list-style-type: none"> <li>• Participants can earn \$54,845 for curtailing an average of 1 MW over the season</li> <li>• Incentives are prorated for signing up mid-summer (i.e. after events have already been called)</li> <li>• Future year Performance Incentive amounts will be informed by the IESO Capacity Auction clearing price</li> <li>• Savings for performance incentives will be based on post-season utility meter data.</li> <li>• No penalties for non-performance</li> </ul> </li> <li>• <b>Enabling Incentive:</b> One-time incentive of \$20/kW up to \$20,000 to support the purchase and installation of monitoring equipment or services required for the contributor to participate in the program</li> <li>• Contributor incentives will be based on their Aggregator agreement</li> </ul>

Contact information of participating aggregators can be found on the [Peak Performance website](#)

# Hydro One is here to help



Get personalized support to:

## 1) Identify & prioritize opportunities

- Identify highest-impact projects or performance pathways

## 2) Determine the right incentive path

- Capital, performance-based, or energy management – and the best program fit for your needs

## 3) Apply for Save on Energy incentives

- We'll help get your application started so you can implement your project and realize energy savings

Get started today: [Conservation@HydroOne.com](mailto:Conservation@HydroOne.com)

Learn more at [hydroone.com/saving-money-and-energy/business](https://hydroone.com/saving-money-and-energy/business) and [saveonenergy.ca](https://saveonenergy.ca)

# Part 3: Q&A