

INVESTMENT PRIORITIZATION PROCESS

1.0 OVERVIEW

The investment prioritization process is part of the overall company risk-based planning process (see Exhibit A, Tab 14, Schedule 1). The prioritization process converts Hydro One Distribution business values and key performance indicators in Table 1 into investment criteria and guidelines that are used for managing risk and facilitating trade-offs between investments. At the core of the process is a multi-criteria analysis, which is used to help decision-makers understand and quantify business risks and uncertainties, so that objective decisions can be made respecting priorities.

Capital and OM&A investments are prioritized annually within the context of a five-year planning period. The output of the prioritization process is an Investment Plan proposal. The Investment Plan proposal is composed of a list of prioritized program/project investments, both capital and OM&A, developed in response to asset, customer and business needs. The process incorporates risk tolerances consistent with corporate direction and also considers resource, material, outage availability and other constraints. Once approved, the Investment Plan sets the company's direction with respect to the work programs going forward.

The Investment Plan is approved and in effect at a specific time of the year. The implementation of the Investment Plan is subjected to adjustments as new risks and/or opportunities emerge, or changes in condition or shift in priorities throughout the year. A redirection process described in Section 2.5 of this Exhibit, enables the incorporation of such modifications.

1 **2.0 INVESTMENT PRIORITIZATION PROCESS**

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3 The investment prioritization process was implemented in 2001. This process respond to
4 factors such as aging infrastructure, customer demand for higher reliability, changing
5 regulations, funding pressures, etc. Since 2001, the process has seen continuous
6 improvements using the experience gained each year. For example, the prioritization
7 methodology has been expanded over the years to cover a broader scope of project and
8 program areas. Also, work execution considerations such as resources, materials and
9 outage availability, effective work bundling, etc. are accounted for in the development of
10 the proposed expenditures, which result in investment proposals that balance our asset
11 needs with the various implementation constraints and are more accurate from an
12 implementation perspective.

13
14 The prioritization process considers risk mitigation against the dimensions of the set of
15 business values to select the proposed levels of investment leading to the preparation of
16 an Investment Plan Proposal. This annual process consists of the following steps:

- 17
18 • Refine/validate business values;
19 • Develop multiple levels of investments to incrementally mitigated risks;
20 • Determine and evaluate the cost, benefits and risks for each level;
21 • Prioritize the levels across all areas; and
22 • Assess the results and build the Investment Plan Proposal

23
24 These steps are described in the remainder of this exhibit.

2.1 Business Values

Business Values (“BVs”) are designed by Hydro One to enable the achievement of the Company’s strategic goals, by forming the criteria against which: investments are developed; risks are managed; and trade-offs are facilitated between investments. The Business Values are measured by a set of key performance indicators (KPIs). The BVs represent the objectives that are to be factored into the decision-making process, while the KPIs represent how the impact on the BVs is to be measured.

Table 1 below, shows the BVs and KPIs used in 2009 in the establishment of the 2010 - 2014 Investment Plan Proposal.

**Table 1
 2009 Business Values and Key Performance Indicators**

Business Value	Measure/Key Performance Indicator
Safety & Environment	<ul style="list-style-type: none"> • Employee: workforce safety • Environmental performance • Public safety
Financial	<ul style="list-style-type: none"> • Net income • Credit worthiness • Value of the enterprise
Reputation	<ul style="list-style-type: none"> • Public profile / confidence regarding: effective stewardship of assets • Shareholder confidence
Regulatory Relationship	<ul style="list-style-type: none"> • Credibility with regulators & authorities • Obtaining the required approvals and or permits
Customer / Reliability	<ul style="list-style-type: none"> • Dx/Tx reliability • Dx system security • OEB SQI index • Customer satisfaction: large and mid customers (industrials, LDCs and generators) • Customer satisfaction: residential and small business customers
Business Efficiency	<ul style="list-style-type: none"> • Productivity • Employee skills: attracting, developing and retaining key competencies • Work Program accomplishment, including Dx plan short-term initiatives

The KPIs form the basis of the multi-criteria analysis used to prioritize investments by providing the dimensions for consideration when assessing the degrees of risk and the

1 risk mitigation that each proposed investment level provides against each of the BVs.
2 The process incorporates a probability-severity-of-outcome risk matrix to determine the
3 impact ratings for each BV. The Probability scale ranges from Remote to Very Likely
4 and Severity of Outcome scale ranges from Minor to Catastrophic.

5

6 **2.2 Multiple Investment Levels**

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8 Customer, asset and business needs, risks and objectives guide the ongoing planning
9 activities. Investment proposals are developed to address these needs, risks and
10 objectives, are then incorporated into the prioritization process. The scope and levels of
11 the investment - and the accomplishments those levels of investment deliver - varies
12 depending on the level of risk mitigated.

13

14 Hydro One's work prioritization process is based on a risk mitigation approach and
15 begins with the output from the Investment Plan Development process. A description of
16 Hydro One Distribution Investment Plan Development is provided in Exhibit A, Tab 14,
17 Schedule 5.

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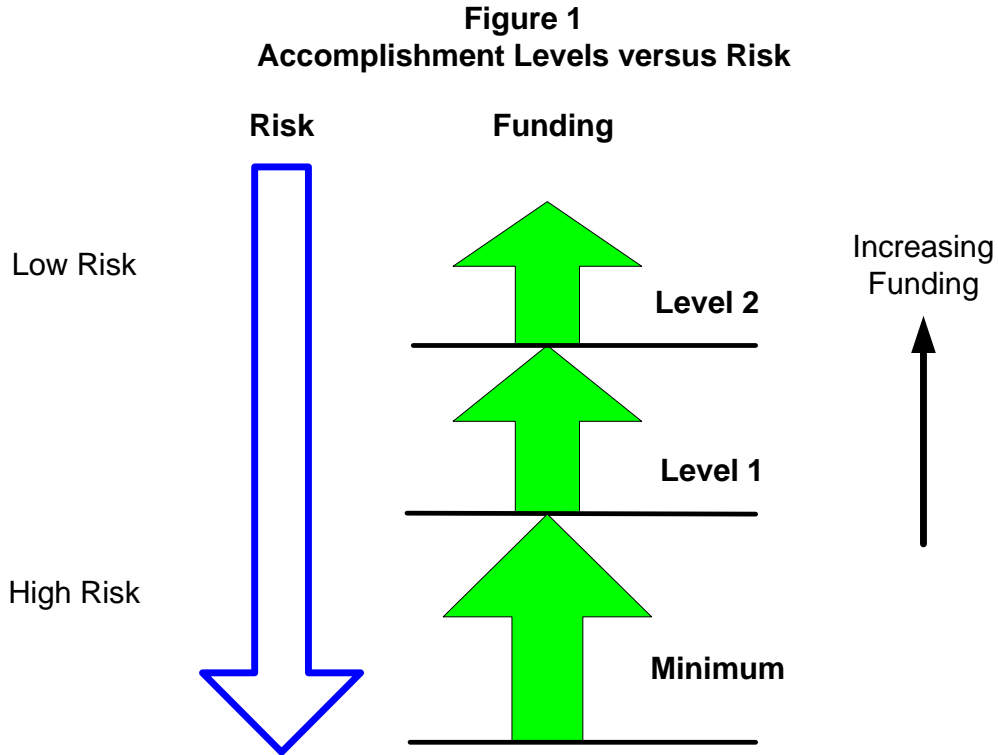
19 This Investment Prioritization Process has been examined in a number of recent rate
20 hearings and is consistent with widely accepted Asset Management Standards such as
21 PAS 55 issued in 2008 by the Institute of Asset Management in collaboration with the
22 British Standards Institute.

23

24 The approved business plan, which incorporates the investment plan, represents an
25 aggregate set of investments which balance needs with constraints with the target of
26 achieving the Corporations business values and objectives

27

1 The approach is illustrated in Figure 1 below.



2 The accomplishment levels are established and evaluated for a period of five years to
3 allow for, among other things the long-term management of resources. However, short-
4 term constraints, such as scheduling of skilled staff, availability of materials, or
5 availability of outages, are also considered when establishing the levels of work that are
6 undertaken.

7

8 Minimum Levels of investment, as illustrated in Figure 1, are those required to avoid
9 unacceptable risk. The Minimum Level of investment is neither a sustainable level of
10 investment nor a desirable target level of investment. The Minimum Level is an extreme
11 lower level boundary condition used for investment planning purposes. This level is used
12 as a foundation upon which additional investments at higher levels are layered with the
13 objective of mitigating risk to a prudent residual level.

1

2 As noted earlier, risk is assessed over a 5-year planning horizon. That is, the Minimum
3 Level of investment is intended to maintain the Company on the horizon of unacceptable
4 risk over and just beyond the 5-year planning horizon. Considerations of risk and risk
5 mitigation are probabilistic in nature. If an area of Hydro One's business were limited to
6 only Minimum Level of investment over the planning period, it is very probable that an
7 unacceptable risk would be realized.

8

9 Further, in the absence of any specific risk tied to a shorter timeframe within the 5 year
10 planning horizon, specific investments may be rescheduled from one time period to
11 another within the 5-year planning horizon. Hydro One Distribution would do so in
12 response to drivers such as execution constraints comprising critical resource limitations
13 or availability of outages and with due care that such a rescheduling would limit any
14 material deterioration of associated risk.

15

16 In the short term, the investment required to mitigate risk to a prudent residual level, may
17 not be achievable, because of factors such as shortages of critical work execution
18 resources. As a result, a lower investment plan may need to be undertaken over the short
19 term while additional resources are secured and brought to bear on the overall investment
20 requirement.

21

22 Increasing levels of accomplishment (which in turn represent decreasing levels of risk to
23 the BVs) are established for each area of the Company. For example, increasing the
24 levels of investment funding, so that 5,000 or 10,000 or 15,000 substandard wood poles
25 are replaced per year, would result in a progressive lowering of risks related to reliability
26 and safety.

27

28 If the accomplishments fall below a certain level for a particular program, meeting the
29 appropriate safety, regulatory and/or legal requirements may be at risk. In other cases,

1 reduced accomplishment levels can create longer term sustainability issues, resulting in
2 higher long-term costs.

3
4 An example which illustrates this is the wood pole replacement program. The Minimum
5 Level would result in about 20,000 fewer poles being replaced over the 5 years as the
6 selected Level of investment. A replacement deficiency of this magnitude would
7 increase the number of substandard poles in the system by this amount. It can be
8 demonstrated, that over a 5-year period this is manageable, as poles usually require a
9 degree of adverse weather to cause failure, even when substandard. However, the
10 Distribution System Code requires that defects be corrected within a reasonable time-
11 frame, and the Electrical Safety Authority requires that safety hazards be removed.
12 Substandard poles can present a safety hazard to our workers and the public under
13 moderate adverse weather conditions or from tree contacts. This would require that the
14 20,000 substandard poles be replaced sooner rather than later after the 5-year period. The
15 20,000 poles represent an increased liability in excess of \$120 million, which is a severe
16 financial risk with a medium likelihood of occurrence. The associated regulatory risks
17 will increase and reliability will deteriorate.

18
19 Considering these factors, delaying the investment in replacing substandard wood-poles
20 to a Minimum Level is not sustainable and does not conform to good utility practices.
21 The risk-based prioritization process is used by Hydro One to quantify risks and to
22 identify the appropriate sustainable levels of investment that will ensure the achievement
23 of the Company's strategic goals.

24
25 In this example, replacing 4,000 fewer substandard wood-poles per year would represent
26 unacceptable financial and regulatory risks after the 5 year period, a deterioration of
27 customer reliability and an unacceptable safety risk to the organization

2.3 Investment Costs, Benefits and Risks

Total funding requirements to carry out the accomplishments established for each level of investment are determined using current year costs as the basis for comparison. Where appropriate, linkages between particular investment areas are taken into consideration. For example, additional vegetation management accomplishments should over time reduce the number and extent of trouble calls and damage during storms, thus reducing the future funding required for trouble calls and storm damage. These linkages are factored into the plans for those investment areas to determine the total net cost used in the resulting Investment Plan.

The benefits of each investment are determined by its ability to mitigate risk to the BVs. The KPIs provide a common set of criteria to measure the impact, or consequence, of the investment for the BV. However, risk is the product of the consequence and the probability of occurrence, so this probability of occurrence also has to be established. BV risk is identified in a two-dimensional table as shown in Table 2. Using this approach, the change in risk for each BV as a result of the investment is established.

Table 2 Business Value Evaluation Matrix

	Minor	Moderate	Major	Severe	Worst Case
Very Likely (>95%)					Unacceptable Risk Zone
Likely (65 to 95%)					
Medium (25 to 65%)					
Unlikely (5 to 25%)					
Remote (< 5%)					

1 **2.4 Investment Prioritization**

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3 The needs, objectives, accomplishments, costs, and risk assessment for each level of
4 accomplishment are documented. This information is then reviewed by asset managers
5 business managers and other stakeholders within Hydro One. The quality control review
6 ensures the full integration of the numerous investments and uniformity in the use of the
7 risk assessment model. Particular attention and challenge is given to the proposed
8 Minimum level of investment, given its significance.

9
10 The information provides the necessary cost and risk mitigation data required to conduct
11 the risk based prioritization process. The prioritization process selects one of several
12 levels of investment for each investment area based on that level's ability to mitigate risk
13 to the BVs. The aggregation of work programs and projects that define the various
14 selected level yields the Preliminary Investment Plan Proposal.

15
16 The Preliminary Investment Plan Proposal is reviewed by Senior Management before the
17 final Investment Plan and associated funding requirements are established. Senior
18 Management's review takes into consideration the associated impacts on customer rates,
19 the ability to accomplish the proposed work in light of known constraints (e.g. labour,
20 material, engineering resources), the financial health of the company, as well as the
21 residual risk to the business (i.e. the risk to the BVs that remains after the investments are
22 made).

23
24 The end product of the 2009 Business Planning process is an Investment Plan that
25 represents an effective balance between these considerations.
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1 **2.5 Investment Plan and Redirection**

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3 While the Investment Plan is the product of extensive planning and analysis,
4 implementation of the plan must be done in a manner that is dynamic and flexible.

5 Redirection of approved investments may be required for a number of reasons, including
6 changing customer needs, changing asset priorities based on new information, changing
7 external requirements and major events (e.g. extensive storms and equipment failures).

8 This is why implementation of the Investment Plan throughout the year may vary from
9 the plan as new risks or opportunities emerge, change in conditions and shifts in
10 priorities. This redirection of work allows appropriate adjustments to be made to the work
11 originally identified in the Investment Plan. As an example, distribution line emergency
12 restoration work required to repair damage caused by storms or equipment failures can be
13 significant in a given year and may necessitate the redirection of funds and field
14 resources from other investment areas to correct the unexpected and significant damage.