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**2024 SUBMISSION**

**EB-2024-0004**

**ONTARIO ENERGY BOARD**

**IN THE MATTER OF** subsection 25 (1) of the *Electricity Act, 1998*;

**AND IN THE MATTER OF** a submission by the Independent Electricity System Operator to the Ontario Energy Board for the review of its proposed expenditure and revenue requirements for the fiscal year 2024 and the fees it proposes to charge during the fiscal year 2024.

**2024 SUBMISSION FOR REVIEW**

1. The Independent Electricity System Operator (IESO) submitted an Amendment to the 2023-2025 Business Plan to the Minister of Energy (Minister) for approval pursuant to subsection 24 (1) of the *Electricity Act, 1998* as amended (Act) and the IESO received a letter from the Minister approving the Amendment to the 2023-2025 Business Plan and the incremental revenue requirements for 2024 and 2025.
2. The IESO hereby submits to the Ontario Energy Board (OEB) its proposed 2024 incremental expenditures and revenue requirement and the revised usage fees it proposes to charge in 2024 pursuant to subsection 25 (1) of the Act (2024 Revenue Requirement Submission).
3. The IESO proposes a 2024 incremental revenue requirement of \$4.5 million. When combined with the 2024 revenue requirement approved through OEB Decision and Order in EB-2022-0318, the total 2024 revenue requirement is \$222.9 million.
4. Pursuant to subsection 25 (1) of the Act, the IESO is seeking the following approvals from the OEB:
  - a. Approval of the proposed 2024 incremental revenue requirement of \$4.5 million.

b. Approval of the proposed IESO usage fees of \$1.4516/MWh for domestic customers and \$1.2549/MWh for export customers to be effective on the next billing cycle following the month in which OEB approval is received.

c. Approval to rely on and use the information provided to the IESO by Local Distribution Companies (LDCs) on the amount of embedded generation in their service territory under O. Reg. 429/04 in calculating the total usage fee to be billed to each LDC each billing period.

d. All necessary interim orders, orders and directions, pursuant to the Ontario Energy Board Act, 1998 and the OEB's Rules of Practice and Procedure, as may be necessary in relation to this 2024 Revenue Requirement Submission.

5. The IESO requests that the OEB approve the 2024 Revenue Requirement Submission without a hearing pursuant to subsection 25(7) of the Electricity Act, 1998, or alternatively, direct that its review of the 2024 Revenue Requirement Submission proceed by way of a written hearing.

6. The IESO may amend its pre-filed evidence from time to time, prior to and during the course of the OEB proceeding. Furthermore, the IESO may seek to have additional meetings with OEB Staff and intervenors in order to identify and address any further issues arising from this 2024 Revenue Requirement Submission, with a view to an early settlement and disposition of this proceeding.

DATED at Toronto, Ontario, this 11<sup>th</sup> day of January 2024

INDEPENDENT ELECTRICITY SYSTEM OPERATOR



By its counsel in this proceeding

Patrick Duffy

**2025 SUBMISSION**

**EB-2024-0004**

**ONTARIO ENERGY BOARD**

**IN THE MATTER OF** subsection 25 (1) of the *Electricity Act, 1998*;

**AND IN THE MATTER OF** a submission by the Independent Electricity System Operator to the Ontario Energy Board for the review of its proposed expenditure and revenue requirements for the fiscal year 2025 and the fees it proposes to charge during the fiscal year 2025.

**2025 SUBMISSION FOR REVIEW**

1. The Independent Electricity System Operator (IESO) submitted an Amendment to the 2023-2025 Business Plan to the Minister of Energy (Minister) for approval pursuant to subsection 24 (1) of the *Electricity Act, 1998* as amended (Act) and the IESO received a letter from the Minister approving the Amendment to the 2023-2025 Business Plan and the incremental revenue requirements for 2024 and 2025.
2. The IESO hereby submits to the Ontario Energy Board (OEB) its proposed 2025 incremental expenditures and revenue requirement and the revised usage fees it proposes to charge in 2025 pursuant to subsection 25 (1) of the Act (2025 Revenue Requirement Submission).
3. The IESO proposes a 2025 incremental revenue requirement of \$5.4 million. When combined with the 2025 revenue requirement approved through OEB Decision and Order in EB-2022-0318, the total 2025 revenue requirement is \$235.1 million.
4. Pursuant to subsection 25 (1) of the Act, the IESO is seeking the following approvals from the OEB:
  - a. Approval of the proposed 2025 incremental revenue requirement of \$5.4 million.
  - b. Approval of the proposed IESO usage fees of \$1.4854/MWh for domestic customers and \$1.4333/MWh for export customers to be paid effective January 1, 2025.

1 c. Approval to rely on and use the information provided to the IESO by Local  
2 Distribution Companies (LDCs) on the amount of embedded generation in their  
3 service territory under O. Reg. 429/04 in calculating the total usage fee to be  
4 billed to each LDC each billing period.

5 d. All necessary interim orders, orders and directions, pursuant to the *Ontario*  
6 *Energy Board Act, 1998* and the OEB's Rules of Practice and Procedure, as may  
7 be necessary in relation to this 2025 Revenue Requirement Submission.

8 5. The IESO requests that the OEB approve the 2025 Revenue Requirement Submission  
9 without a hearing pursuant to subsection 25(7) of the Electricity Act, 1998, or  
10 alternatively, direct that its review of the 2025 Revenue Requirement Submission  
11 proceed by way of a written hearing.

12 6. The IESO may amend its pre-filed evidence from time to time, prior to and during the  
13 course of the OEB proceeding. Furthermore, the IESO may seek to have additional  
14 meetings with OEB Staff and intervenors in order to identify and address any further  
15 issues arising from this 2025 Revenue Requirement Submission, with a view to an early  
16 settlement and disposition of this proceeding.

17 DATED at Toronto, Ontario, this 11<sup>th</sup> day of January 2024

18 INDEPENDENT ELECTRICITY SYSTEM OPERATOR

19 

20 By its counsel in this proceeding

21 Patrick Duffy

## EXECUTIVE SUMMARY

### Introduction

The Independent Electricity System Operator (IESO) is a not-for-profit, non-taxable corporation established pursuant to Part II of the *Electricity Act, 1998* (Act). As set out in the Act, the IESO operates pursuant to a licence (EI-2013-0066) granted by the Ontario Energy Board (OEB).

The IESO's mandate is contained in the Act and other associated Ontario regulations.

The IESO ensures the reliability of the province's power system on behalf of all Ontarians, leveraging its expertise and purposeful engagement to advance energy policy that cost effectively achieves this goal. As part of its mandate, the IESO operates Ontario's electricity grid in real-time, governs electricity markets, prepares for the future to ensure electricity will be available when and where it is needed, and helps inform the decisions that will be critical to shaping the future of the electricity sector.

Through these applications the IESO is seeking OEB approval of \$9.9 million in incremental expenditure and revenue requirement over 2024 and 2025 to support specific initiatives outlined in the Minister's letter to the IESO, dated July 10, 2023 (see Exhibit B-1-1) in support of its *Powering Ontario's Growth: Ontario's Plan for a Clean Energy Future* plan. The government has called upon the IESO to play a significant role in implementing the government's policy objectives of meeting growing demand for electricity into 2030 and beyond while transitioning to a clean electricity system. To ensure the IESO has the resources needed for these initiatives it submitted an amendment to its 2023-2025 Business Plan ("Amendment") to the Minister on September 1, 2023 (see Exhibit B-1-2), which was approved on November 28, 2023 (see Exhibit B-1-3). The 2023-2025 Business Plan remains unchanged (see Exhibit B-1-5).

### 2024-2025 Incremental Revenue Requirement Submission

1 The incremental expenditure and revenue requirements for 2024 and 2025 are \$4.5 million and  
2 \$5.4 million respectively. The incremental amounts represent an increase of 2.0%<sup>1</sup>, and 2.4%<sup>2</sup>  
3 as compared to the expenditure and revenue requirements previously approved for 2024 and  
4 2025 in the OEB's Decision and Order in EB-2022-0318<sup>3</sup>. To calculate the proposed usage fees  
5 for 2024 and 2025 the incremental expenditure and revenue requirements were added to the  
6 approved revenue requirements for 2024 and 2025, allocated by customer class, and divided by  
7 the charge determinants established in EB-2022-0318. See Exhibit C-1-1. With the Minister's  
8 approval of the Amendment, the IESO has filed applications with the OEB for approval of the  
9 incremental expenditure and revenue requirements, and the proposed usage fees for each of  
10 2024 and 2025 fiscal years pursuant to Section 25(1) of the Act.

11 The exhibits filed include the information relevant to the incremental expenditures and revenue  
12 requirements for 2024 and 2025.

### 13 **Forecast Variance and Deferral Account**

14 As per the OEB's Decision and Order in EB-2022-0318, the IESO cleared the amount of the  
15 2022 year-end balance in the Forecast Variance and Deferral Account (FVDA) that exceeded  
16 \$15.0 million and issued a rebate of \$8.7 million to market participants on September 14, 2023.  
17 The IESO will retain an operating reserve of \$10 million in the FVDA; if the year-end balance  
18 exceeds \$15 million for 2023 or 2024, the IESO will rebate an amount to ratepayers to return  
19 the operating reserve balance to \$10.0 million.

20  
21 As per the IESO's Interim Business Outlook submitted to the Minister on September 1, 2023  
22 (see Exhibit B-1-4), in accordance with the three-year Business Plan approval process, the IESO  
23 projects an operating deficit of \$12.4 million in 2023 (year 1 of the three-year cycle), resulting  
24 in a FVDA balance of \$2.6 million at the end of 2023. Further, the IESO projects an operating  
25 deficit of \$12.6 million in 2024 (year 2) and \$19.9 million in 2025 (year 3) of the three-year

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<sup>1</sup> 2024 incremental revenue requirement compared to 2024 approved revenue requirement

<sup>2</sup> 2025 incremental revenue requirement compared to 2025 approved revenue requirement

<sup>3</sup> <https://www.rds.oeb.ca/CMWebDrawer/Record/813433/File/document>



1 cycle, which will lead to year-end deficit balances in the FVDA of \$10.0 million in 2024 and  
2 \$29.9 million in 2025. The principal drivers of these projected deficits are the impact from the  
3 salary and benefit increases awarded through Arbitration to the IESO's Society of United  
4 Professionals (SUP) members and the incremental work required by the Minister's letter to the  
5 IESO to support the *Powering Ontario's Growth* plan.

### 6 7 **Adjustment Mechanism**

8 The IESO's submission does not rely on the adjustment mechanism described in the OEB-  
9 approved Settlement Agreement in EB-2022-0318, which is based on the balance of the FVDA  
10 reducing below zero at the end of year 1 of the three-year cycle because of a material change.  
11 As described above, the FVDA is forecast to reduce below zero in 2024 (year 2) and 2025 (year  
12 3).

13  
14 The incremental expenses over the business planning horizon associated with salary and benefit  
15 increases for SUP members will be managed within the IESO's approved revenue requirement  
16 submission and operating reserve, and any deficit balance over the planning period will be  
17 recovered in the 2026-2028 Business Plan.

18  
19 The IESO views the new initiatives in support of the *Powering Ontario's Growth* plan as a  
20 significant event with cascading effects to the organization that could compromise the IESO's  
21 ability to work within future year's revenue requirements and carry-out the activities in its 2023-  
22 2025 Business Plan. Accordingly, the IESO is seeking OEB approval to recover \$4.5 million in  
23 2024 and \$5.4 million in 2025 to carry out the initiatives outlined in the Minister's letter in  
24 support of *Powering Ontario's Growth* plan on this basis. This will ensure the impact of this  
25 incremental work is well defined and reflected in the fees for the year in which they are  
26 incurred. Accounting for this recovery will reduce the projected deficit balance to \$5.5 million at  
27 the end of 2024 (year 2) and \$20.0 million at the end of 2025 (year 3).

### 28 29 **Revised Usage Fees**

The incremental revenue requirements and expenditures have been combined with those previously approved to determine revised usage fees for 2024 and 2025 for domestic and export customers as follows:

- Proposed usage fees of \$1.4516/MWh for domestic customers including embedded generation (representing an increase of \$0.0313/MWh to the currently approved 2024 usage fee) and \$1.2549/MWh for export customers (representing an increase of \$0.0004/MWh to the currently approved 2024 usage fee) effective January 1, 2024; and,
- Proposed usage fees of \$1.4854/MWh for domestic customers including embedded generation (representing an increase of \$0.0362/MWh to the currently approved 2025 usage fee) and \$1.4333/MWh for export customers (representing a decrease of \$0.0065/MWh to the currently approved 2025 usage fee) effective January 1, 2025.

The IESO proposes to continue charging the approved usage fees in EB-2022-0318 until the OEB has approved the IESO's new 2024-2025 usage fees. The new fees will be effective in the next billing cycle following the month in which OEB approval is received.

For more information, please see Exhibit C-1-1 – Incremental Revenue Requirement and Usage Fee Methodology, and Exhibit C-2-1 – 2023-2025 Incremental Revenue Requirements and Usage Fees.

### **Incremental Operations, Maintenance and Administration (OM&A) Expenditures**

The OM&A budget funds the incremental work necessary to carry out the new initiatives in support of the *Powering Ontario's Growth* plan. This work will involve effort from business units across the IESO and is summarized below:

- Planning for a second Long-Term Request for Proposals
- Support for the development of the post-2024 Energy Efficiency and Conservation Framework
- Developing a competitive transmitter selection framework

- 1 • Planning transmission network requirements to address bottlenecks and accommodate
- 2 new generation
- 3 • Protecting land corridors for future transmission needs
- 4 • Developing a Bruce Nuclear new-build Impact Assessment cost recovery framework

5 In 2024, OM&A expenses are budgeted to increase by \$4.5 million from the approved 2024  
6 expenditures, for a total of \$222.9 million (see Exhibit D-1-1 – Incremental OM&A Overview,  
7 and Exhibit D-1-2 – OM&A Business Unit Detail for a description of the activities).

8 In 2025, OM&A expenses are budgeted to increase by \$5.4 million from the 2025 approved  
9 expenditures, for a total of \$235.1 million (see Exhibit D-1-1 – Incremental OM&A Overview,  
10 and Exhibit D-1-2 – OM&A Business Unit Detail for a description of the activities).

#### 11 **Staffing and Compensation**

12 For 2024, the IESO has budgeted an additional 22 full-time equivalents (FTEs) for the new  
13 initiatives in support of *Powering Ontario's Growth* plan. For 2025, the IESO has budgeted 8  
14 additional FTEs, for a total of 30 FTEs, for the new initiatives in support of *Powering Ontario's*  
15 *Growth* plan.

#### 16 **Capital Expenditures**

17 The IESO is not seeking incremental capital expenditures in accordance with the new initiatives  
18 in support of *Powering Ontario's Growth* plan.

**Ministry of Energy**

Office of the Minister

77 Grenville Street, 10<sup>th</sup> Floor  
Toronto ON M7A 2C1  
Tel.: 416-327-6758

**Ministère de l'Énergie**

Bureau du ministre

77, rue Grenville, 10<sup>e</sup> étage  
Toronto ON M7A 2C1  
Tél. : 416-327-6758



MC-994-2023-537

July 10, 2023

Ms Lesley Gallinger  
President and Chief Executive Officer  
Independent Electricity System Operator  
1600 – 120 Adelaide Street West  
Toronto ON M5H 1P1

Dear Ms Gallinger:

I would like to thank your team at the Independent Electricity System Operator (IESO) for delivering the Pathways to Decarbonization (P2D) report. The P2D demonstrates that Ontario's growing electricity needs will require substantial investments to support a reliable, affordable, and clean electricity system.

In addition, the P2D report provides "no-regret" recommendations that would build on existing actions and ensure Ontario is positioned to build the electricity generation, storage and transmission necessary to maintain a reliable, affordable and clean electricity system for Ontarians and power the province's growth beyond 2030.

In response, the Ministry of Energy has released *Powering Ontario's Growth: Ontario's Plan for a Clean Energy Future*, which outlines early actions to meet the province's growing demand for electricity in the 2030s and beyond while transitioning to a clean electricity system. The actions to secure Ontario's energy future as outlined in the plan include:

- Undertaking pre-development work on new nuclear generators;
- Decision making and supporting initiatives that would lower costs to consumers;
- Designing future competitive procurements to acquire new clean electricity resources including wind, solar, hydroelectric, storage and bioenergy;
- Advancing assessment of the advanced long-duration pumped storage projects in Meaford and Marmora and preparing for a future procurement for additional long duration storage;
- Supporting the development of local markets for distributed energy resources (DERs); and
- Accelerating the development of new transmission infrastructure in Northern Ontario, the Ottawa Region and Eastern Ontario.

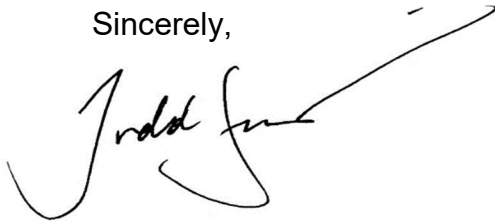
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In conjunction with the release of *Powering Ontario's Growth*, I am asking IESO to work with my ministry on several initiatives in support of our plan. These initiatives, some of which include report backs, are detailed in the Appendix to this letter along with associated timelines. In addition, a request for the pumped storage assessment and report back referenced in the list above will be shared via separate letter.

For initiatives that require report backs, upon receiving IESO's response on these initiatives, the government will determine the most appropriate next steps, including whether to issue Minister's Directives to direct IESO to implement the next steps.

I want to thank IESO in advance for all the work required on these initiatives and for its ongoing work to ensure that Ontario continues to have a reliable, affordable and clean electricity system. I ask that you continue to keep my office and the Ministry of Energy updated on your progress as well as identify any considerations and resources required to complete this critical work through the business planning process.

Sincerely,

A handwritten signature in black ink, appearing to read 'Todd Smith', with a long, sweeping horizontal stroke extending to the right.

Todd Smith  
Minister

c: William (Bill) Sheffield, Board Chair, IESO  
David Donovan, Chief of Staff to the Minister of Energy  
Jason Fitzsimmons, Deputy Minister of Energy  
Shannon Fuller, Deputy Minister of Policy and Delivery

## **APPENDIX**

I ask that the Independent Electricity System Operator (IESO):

### **1) Bruce Nuclear New-Build Impact Assessment Cost Recovery Framework**

- In collaboration with Bruce Power, develop a cost sharing and recovery framework for a nuclear new-build Impact Assessment at the Bruce nuclear site and report back to me by December 31, 2023.
  - The framework should include appropriate mechanisms to balance cost and risk sharing in order to minimize impacts on electricity ratepayers.

### **2) Feasibility Study and Business Case for Future Nuclear Generation in Ontario**

- In collaboration with Ontario Power Generation and Bruce Power, develop a feasibility study and business case for potential future nuclear generation facilities in Ontario. The IESO should report back to the Ministry of Energy following completion of the report by Ontario Power Generation and Bruce Power, which I have asked the companies to complete by December 2024. The feasibility study and business case report-back should include supporting information and analysis relating to:
  - Optimal new nuclear deployment schedule to meet long-term needs;
  - Electricity system impact; and
  - Commercial options for new nuclear generation (e.g., power purchase contracts, rate regulation).

### **3) Second Long-Term Request for Proposals (LT2 RFP)**

- Report back by February 28, 2024 on the proposed approach to potential subsequent procurements to be undertaken by IESO, including the LT2 RFP. The report back should include:
  - A review of the role of existing assets and new non-emitting electricity resources that can be in-service by 2029 including wind, solar, hydroelectric, storage and bioenergy, or when IESO identifies future needs arising.
  - Considerations for a potential separate procurement for resources with long lead times and long lifespans, such as long-duration storage, and hydroelectric generation.
  - An assessment of the implications of a requirement in such procurement initiatives that all new electricity generation and storage resources procured would be required to obtain supportive municipal council resolutions prior to construction as well as a restriction on prime agricultural land.

#### **4) Future Clean Electricity Fund**

- Report back by December 31, 2023 on options for a Future Clean Electricity Fund, that would support the development of new clean electricity projects and/or programs. The report back should include the following:
  - Advice and recommendations on the implementation options for the fund, including considerations for IESO to be the delivery agent of the fund;
  - Considerations for allocation of funds including potential priority areas and possible projects in the electricity sector;
  - Considerations for how the fund might best be used to offset costs in the electricity sector for ratepayers in a timely manner; and
  - Assessment of potential opportunities for participation of Indigenous communities.

#### **5) Energy Efficiency and Conservation Framework**

- Support the Ministry of Energy's consultation on a future energy efficiency framework to inform the Ministry's work on developing a proposed path forward for Conservation and Demand Management (CDM) programming post-2024.

#### **6) Supporting Innovation Through Distributed Energy Resources (DER)**

- Continue to work with the Ministry of Energy and Ontario Energy Board (OEB) to progress DER initiatives underway with a view to derive greater system value from local and market opportunities for DER.

#### **7) Transmission**

- Continue work on the development of a transmitter selection framework, including consideration for commercial options, and report back to me on progress in Summer 2024.
- Report back to me by the end of 2024 on the status of planning work on the transmission network required to support generation projects outlined in *Powering Ontario's Growth Report*, including new nuclear and hydroelectric opportunities. This should include the timing of completing any future transmission work needed to support the Powering Ontario's Growth Report, as well as recommendations on transmission projects that could proceed with early planning and development work, including:
  - The identification of new and existing corridors of land that should be protected for future transmission lines.

Addressing known bottlenecks in the transmission system, including between northern and southern Ontario and within the Greater Toronto Area to unlock opportunities for new nuclear, hydroelectric and renewable generation and support future growth.

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# Amendment to 2023-2025 Business Plan

Independent Electricity System Operator  
September 1, 2023



# Amendment to 2023-2025 Business Plan

Last year, in its 2023-2025 Business Plan, the IESO set out its priorities in a number of key areas, including: Ensuring resource adequacy, enabling new resources, fostering innovation, supporting decarbonization and advancing market renewal. These priorities are grounded in our corporate strategy, which positions the IESO to manage the significant change underway in our sector.

Almost one year later we recognize the impact following the release of our *Pathways to Decarbonization* study last December in shaping our work moving forward. The government consulted the public and released its *Powering Ontario's Growth* report, which outlines a series of important actions that will help address the province's growing electricity needs. This includes work to enable new nuclear power development, procuring additional non-emitting supply, and building out our transmission system; steps that will help the grid decarbonize and remain reliable while encouraging investment and supporting economic growth across the province.

The IESO will have a central role implementing these government policy actions, which will require additional resourcing and expenditures. As a result, the IESO is submitting this amendment to the 2023-2025 Business Plan, which is incremental to the 2023-2025 Business plan and reflects the POG initiatives you have asked the IESO to support in fiscal year 2024 and 2025, for your approval. This request will ensure that this incremental work to support POG is well defined, staffed and prioritized within all the other deliverables of the 2023 -2025 Business Plan, which remains unchanged.

By developing the detailed plans and assessments needed to grow the system in an orderly, co-ordinated and cost-effective manner, this work will underpin the success for the energy transformation. IESO expertise is needed to develop approaches to develop new non-emitting supply projects, identify the transmission necessary to carry that supply to where it is needed, and ensure that our expanding system continues to operate reliably and effectively.

These actions include major inputs into our long-term planning efforts. As a result, the IESO is now pursuing new planning studies and assessing options – informed by previous engagements – to enable the connection of proposed new pumped storage facilities, additional nuclear reactors at the Darlington and Bruce generating stations, and to support opportunities for Ontario Power Generation to optimize its existing hydroelectric generation fleet.

As an initial step, the IESO will work with the Ministry of Energy and Bruce Power on a proposed contractual approach to support pre-development work for the first full-scale nuclear plant in Ontario in three decades. It will report back to government on how to address costs and risk-sharing associated with this pre-development work in a way that minimizes the impact on ratepayers. The IESO will also work to identify transmission options to reduce reliance on natural gas generation in the Greater Toronto Area, as well as enable economic development in the north of the province.

Similarly, as the scheduled decommissioning of Pickering Nuclear Generating Station approaches mid-decade, the IESO is looking at what transmission will be required to integrate new resources and expected demand from electrification. This forward-planning process will also complement the work already underway to develop a competitive transmitter selection framework for future transmission procurements.

The expanse of this effort also calls for extensive engagement with stakeholders, communities and rights-holders. For example, the IESO will be supporting the Ministry's consultations on the future of Conservation and Demand Management and the role it plays to support system reliability. As the sector opens to broader participation beyond its traditional boundaries, ensuring that all Ontarians have opportunities to contribute to a wide range of system needs will be critical to the success of the energy transformation.

Many of these action items were not included in the approved 2023-2025 Business Plan, and are described here for regulatory approval. Based on the reporting and execution timelines established by the Ministry of Energy for the IESO to complete this work, the IESO is prioritizing the following activities for 2023-25:

- Planning Transmission Network requirements; Development of Transmitters Selection Framework; and Transmission Land Protection Outreach for Municipalities and Indigenous Communities
- Reporting back on Bruce Nuclear New-build Impact Assessment Cost Recovery Framework, design for the second Long-Term RFP and Clean Electricity Fund Options
- Supporting the Ministry's Consultation for CDM Program Post-2024
- Operability Studies/Market Assessments/New Technology Research
- Management of Clean Energy Credits in Support of the Future Clean Electricity Fund
- Engagement to assess Clean Electricity Fund opportunities for Indigenous Communities

# Financial Amendment

Included in this Amendment is \$9.9 million in operating expenses for work to support the government's *Powering Ontario's Growth* plan, which was not previously included in the 2023-2025 Business Plan. These funds are necessary to develop a transmitter selection framework, a number of transmission plans to support investment projects and future lines, support for the Clean Energy Credit program, ensuring Ontario's system operability during this transition, and preparing for a new Conservation and Demand Management Framework. An additional \$1 million projected to be spent in 2023 will be managed within approved funding and operating reserve.

For the Year Ended December 31

(in Millions of Canadian Dollars)

<b>Expenses</b>	<b>2024 Budget</b>	<b>2025 Budget</b>
Approved Business Plan	218.4	229.7
Powering Ontario's Growth	4.5	5.4
<b>Amended Business Plan</b>	<b>222.9</b>	<b>235.1</b>

**Average FTEs**

<b>Full Time Equivalents (FTEs)</b>	<b>2024 Budget</b>	<b>2025 Budget</b>
Approved Business Plan	926	900
Powering Ontario's Growth	22	30
<b>Amended Business Plan</b>	<b>948</b>	<b>930</b>

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**Independent Electricity  
System Operator**

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**Ministry of Energy**

Office of the Minister

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Tel.: 416-327-6758



MC-994-2023-885

November 28, 2023

Ms Lesley Gallinger  
President and CEO  
Independent Electricity System Operator  
1600 – 120 Adelaide Street West  
Toronto ON M5H 1T1

Dear Ms Gallinger:

I am writing to provide my concurrent approval of the Independent Electricity System Operator's (IESO) updated Business Plans for each of 2024 and 2025 as part of its Amendment to its 2023-2025 Business Plan ("Amendment"). I am also writing to acknowledge that, in accordance with our Memorandum of Understanding, the IESO's Interim Year Business Outlook 2023-2026 ("Outlook"), submitted to me on September 1, 2023, was deemed to be approved as of October 31, 2023.

I want to thank you and the team at the IESO for the work involved in preparing and sending the Amendment, which reflects incremental changes (for fiscal years 2024 and 2025) to the 2023-2025 Business Plan, which I previously approved and remains otherwise unchanged.

I want to congratulate you on the progress the IESO has made on key initiatives such as the Market Renewal Program; advancing the Resource Adequacy Framework, including concluding the medium term and expedited long-term requests for proposals; launching the Hydrogen Innovation Fund; your work to protect the electricity system against cyber-attacks; and more, as outlined in the Outlook. I further appreciate that the IESO's planned expenses are tracking to budget within \$1 million of what was outlined in the 2023-2025 Business Plan.

I understand that the IESO's Society of United Professionals employees were recently awarded salary and benefit increases that were higher than anticipated in the 2023-2025 Business Plan, and that the IESO is estimating an incremental expense of \$34.5 million over the three-year business plan cycle. Further, it is understood that the IESO will make best efforts to manage this amount within the IESO's approved funding, inclusive of operating reserve.

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-2-

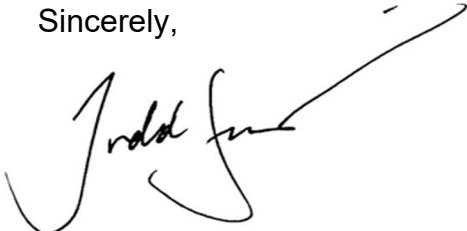
I also understand that the IESO is seeking my approval for an incremental \$9.9 million over 2024 and 2025 to ensure the IESO has the resources needed to carry out specific initiatives outlined in my letter dated July 10, 2023, in support of the *Powering Ontario's Growth* plan. I appreciate the IESO taking on this important work, and believe the plan as outlined in the Amendment is reasonable. I also appreciate that IESO is able to absorb \$1 million of additional costs within the already approved funding for 2023 to carry out this work.

I understand that the IESO's incremental revenue requirements for 2024 and 2025, together with those that I already approved for 2024 and 2025, as part of the 2023-2025 Business Plan, will allow the IESO to continue to deliver on critical initiatives outlined and government priorities, while balancing affordability for consumers.

This letter constitutes my concurrent approval of the IESO's updated Business Plans for 2024 and 2025 and acknowledgement of the deemed approval of the Interim Year Business Outlook 2023-2026.

Thank you for your submission and the continued support of IESO and its staff. Please accept my best wishes.

Sincerely,

A handwritten signature in black ink, appearing to read 'Todd Smith', with a long, sweeping horizontal stroke extending to the right.

Todd Smith  
Minister

c: Bill Sheffield, Chair, Board of Directors, IESO  
Jason Fitzsimmons, Deputy Minister of Energy  
David Donovan, Chief of Staff to the Minister of Energy  
Karen Moore, Assistant Deputy Minister, Ministry of Energy  
Steen Hume, Assistant Deputy Minister, Ministry of Energy

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# Interim Year Business Outlook 2023-2026

Independent Electricity System Operator  
September 1, 2023

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## Letter from the President & CEO

As Ontario's electricity sector undergoes unprecedented transformation, the Independent Electricity System Operator (IESO) continues to work with stakeholders, municipalities and Indigenous communities to ensure Ontario's electricity system remains reliable, affordable and sustainable.

Economic growth, electrification and decarbonization efforts are leading to an increasing reliance on electricity, and Ontario's electricity system could need to more than double in size in response. As such, the IESO's work to drive and guide the sector during this transition continues to grow, and now includes additional work in support of the province's most recent resource development initiatives to meet growing demands and encourage new investment and economic growth.

Last year, in its 2023-2025 Business Plan, the IESO set out its priorities in a number of key areas, including: Ensuring resource adequacy, enabling new resources, fostering innovation, supporting decarbonization, and advancing market renewal. These priorities are grounded in our corporate strategy, which positions the IESO to manage the significant change underway in our sector.

The Business Plan set out the additional revenue requirements needed to support the evolution of our sector, and recently received approval from the Ontario Energy Board. Almost one year later, this Interim Year Business Outlook takes stock of what we have accomplished, and thoughtfully considers new developments in the sector and their subsequent impacts on our resourcing and expenditures.

We are currently on track to deliver on the initiatives that were laid out in the Business Plan within the approved revenue requirements. During the first year of the current three-year plan, we have seen some notable accomplishments.

The IESO completed the largest energy storage procurement ever in Canada and secured upgrades and expansions from existing natural gas generating facilities. These actions are critical to maintaining grid reliability mid-decade and beyond.

We expanded our suite of Save on Energy program offerings to provide Ontario businesses and homeowners with more options to reduce their energy bills and contribute to reliability. We also launched a pilot to integrate hydrogen into the electricity grid and implemented a new Clean Energy Credit Registry to help support corporate environmental and sustainability goals.

Yet we also recognize the impact that recent developments will have in shaping our work moving forward.

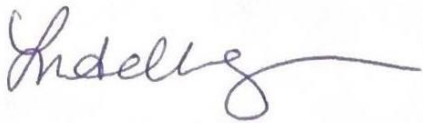
The recent release of the provincial government's *Powering Ontario's Growth* report has set out a number of specific initiatives that require IESO support. The IESO will be preparing the detailed plans and assessments needed to grow the system in an orderly, co-ordinated and cost-effective manner, work that will underpin success for the energy transformation and the continued growth of the economy. Our expertise is needed to set the stage for new non-emitting supply projects, identify the transmission necessary to carry that supply to where it is needed, and ensure that our expanding system continues to operate reliably and effectively.

As a result, concurrent to this Outlook, the IESO is issuing an amendment to its 2023-2025 Business Plan to address the specific resource requirements resulting from the implementation of *Powering Ontario's Growth*.

There are many exciting developments taking place across Ontario. The province is attracting new businesses, including significant investments in the automotive sector, emerging technologies are providing more choice to consumers, and the broader economy is pursuing electrification.

To achieve a sustainable, future-state energy system, we understand that, above all, we cannot do this without input from stakeholders and rights-holders. To this end, our efforts are grounded in working with transmitters, distributors, generators, consumers, municipalities and Indigenous communities to ensure all voices are heard and all perspectives are considered as we undertake such a significant expansion of Ontario's electricity infrastructure.

The IESO is committed to supporting the future prosperity of the province by driving and guiding the sector's future, ensuring system reliability while supporting cost effectiveness, and driving business transformation. While this job is becoming increasingly complex and dynamic, we are confident that by anchoring our work in our corporate strategy and leveraging our skilled workforce, the IESO will continue to deliver the electricity service that Ontarians rely on.

A handwritten signature in blue ink, appearing to read 'Lesley Gallinger', with a long horizontal flourish extending to the right.

Lesley Gallinger

President and CEO

# 2023-2026 Interim Year Business Outlook

## Introduction

The IESO plays a unique and critical role in Ontario's energy ecosystem – setting a course for a future state that is decarbonized, decentralized and digitalized. Although some aspects of this journey cannot be foreseen with complete certainty, the IESO is resolute in its commitment to support Ontario's energy transition – leading change when required, but also facilitating our partners' leadership.

The IESO 2023-2025 Business Plan was the first submission under a new three-year approval process that has provided revenue certainty for the IESO to plan future years and permits flexibility to move work over the planning horizon to achieve the IESO's corporate strategies and address changing priorities.

This new multi-year approach to business planning is included in the Memorandum of Understanding (MOU) between the Minister of Energy and the IESO, which requires the IESO to submit an Interim Year Business Outlook to the Minister for each fiscal year (i.e., 2023 and 2024) during a business plan cycle for approval. As established in section 8.2.4 of the MOU, the Interim Year Business Outlook should identify any changes to the 2023-2025 Business Plan without altering the total revenue requirement and capital budget.

This year's edition is the first Interim Year Business Outlook and provides updates on how the IESO's plans are progressing towards delivering ratepayer value in Ontario in the coming years. The IESO is also submitting a revised 2023-2025 Business Plan to account for additional work that will result from the implementation of the *Powering Ontario's Growth* plan.

## IESO Corporate Strategy at a Glance



### Drive & Guide the Sector's Future

- 1.1** Strengthen Stakeholder and Indigenous Communities Engagement & Relationships via Purposeful, Transparent Outreach
- 1.2** Identify, Anticipate and Respond to Changes in Customer Choice and Policy
- 1.3** Advise on and Actively Participate in Dialogue on the Configuration of the Future-State Sustainable Energy System



### Ensure System Reliability while Supporting Cost-Effectiveness

- 2.1** Renew the Real-Time Markets to Advance Energy Transformation
- 2.2** Adapt the IESO's Short- and Long-term Planning to Meet Evolving System Needs
- 2.3** Cost-Effectively Acquire Services to Maintain Reliability in the Evolving Sector
- 2.4** Champion Cyber Security, Situational Awareness and Best Practices within the Sector



### Drive Business Transformation

- 3.1** Define and Enhance our Desired Culture and Employee Experience
- 3.2** Identify and Build Next-Generation Skills and Competencies
- 3.3** Evolve the IESO's Business Processes, Technologies and Tools

## Updates from 2023-2025 Business Plan

In the first year of the 2023-2025 Business Plan, the IESO has made significant progress in supporting the realization of the energy transformation that is underway in Ontario and addressing future electricity demands driven by economic growth and electrification. In doing so, the IESO is working toward meeting the commitments made in the Business Plan, in line with our refreshed corporate strategy to drive and guide the sector's future, ensure system reliability while supporting cost-effectiveness, and drive business transformation.

### Driving and guiding the sector's future

The IESO continues to prioritize the essential work of engaging traditional sector stakeholders, Indigenous communities and organizations, business and industry leaders, trade associations, academic institutions and various levels of government to connect all of our current and future activities and ensure the province's capacity and energy needs are met.

Evolving consumer preferences and choices are some of the key drivers behind the energy transition that is underway. The IESO is working to remain connected with the driving forces behind changes in customer choice and to use those insights to inform plans and initiatives that move the sector forward.

The IESO is also continuing its active participation in dialogue to help shape Ontario's future-state sustainable energy system. Given our role as system integrator, we are ensuring all voices are heard and all ideas are considered to better enable the integration of new technologies – battery storage, for example – within the current structure of our electricity market.

### Ensuring system reliability while supporting cost-effectiveness

The IESO is helping to drive greater cost-effectiveness by transforming the real-time markets and pursuing competitive procurements to secure energy services.

As part of the planned implementation of the Market Renewal Program (MRP), the IESO is actively working on integrating key resources for the post-go-live period to ensure seamless management of MRP once it is launched.

Since the submission of the 2023-2025 Business Plan, the IESO has continued to secure resources, test new integration models and re-examine our systems and processes to reduce barriers to market entry to ensure we derive the greatest value from new and emerging technologies. This includes launching the Hydrogen Innovation Fund to invest in projects over the next three years to test opportunities for hydrogen and hydrogen storage to be integrated into Ontario's clean electricity system.

At the same time, we continue to adapt our planning processes to meet evolving system needs. This includes identifying and assessing distributed energy resources and other non-wires alternatives, updating our demand forecasting tools and our energy modelling system to ensure we have access to state-of-the-art technologies, as well as increasing the transparency of our transmission planning process to ensure all affected stakeholders, communities, utilities, residents and businesses know what we are contemplating – and why.

The IESO has continued to procure resources under the Resource Adequacy Framework, which was developed to address evolving reliability needs in a cost-effective and flexible manner while balancing ratepayer and supplier risk.

Since the release of the Business Plan, the IESO has concluded the first medium-term RFP and entered into contracts, each with a five-year term beginning between 2024 and 2026, to secure more than 700 MW of capacity to the system and ensure ongoing value from previous investments in supply. It has also concluded its Same Technology Upgrades and Expedited Long-Term 1 procurements to secure almost 900 MW of new storage supply and another 600 MW in natural gas upgrades and expansions.

The IESO will take its learnings from the medium- and long-term RFPs and work to enhance its ability to operate and integrate storage facilities onto the system. This includes incorporating “state of charge” in our dispatch model, so that storage can be leveraged as a stand-alone resource, in conjunction with a generator in a hybrid setup, or within distributed energy resource participation models.

In the short term, the IESO secured through the 2022 Annual Capacity Auction 1,431 MW of supply for this summer and 1,160 MW for winter 2023-24. The IESO has also continued to leverage energy efficiency as one of the most cost-effective mechanisms to meet reliability needs. Under the 2021-2024 Conservation and Demand Management Framework, it launched new and/or enhanced programs to realize 725 MW of peak demand reduction and 3.8 TWh of energy savings by the end of 2024.

Protecting the IESO grid against threats and vulnerabilities remains a high priority, both in the physical and cyber realms. Given the rate at which cyber risks are increasing, the IESO continues to work closely with sector partners to share information and deepen situational awareness, as well as to expand the reach and effectiveness of our flagship Lighthouse program to ensure we enroll as many members of the broader electricity sector as possible. This work will carry on for the foreseeable future.

### **Driving business transformation**

Overall, the IESO continues to drive business transformation through prioritization of employee well-being, business productivity and cost containment. To support the delivery of our strategy and mandate moving forward, work is progressing on an organizational alignment review that the IESO has begun to implement this year.

The IESO also continues to identify and build next-generation skills and competencies to position our employees for the future to deliver on our mandate. At the same time, the IESO is balancing the demographic shift we are experiencing – as is the case with many of our sector partners – with the planned retirement of some long-term employees.

This work is informing our recruitment efforts to attract and retain employees with the knowledge and skills needed to oversee the system of the future. This effort also includes working to improve the employee experience at the IESO and building on our commitment to equity, diversity and inclusion.

As with every aspect of Ontario’s electricity sector, the changes required to optimize our workforce, as well as the systems and processes that support them, are significant and wide-reaching. We

continue to leverage access to our wealth of operational electricity data and make the necessary investments to facilitate this transformation to deliver long-term value to residents, communities, businesses and institutions across Ontario.

### **Looking ahead: Powering Ontario's Growth**

In December 2022, the IESO released the *Pathways to Decarbonization* report. This report catalyzed an important conversation within the sector about potential approaches to eliminating the remaining emissions from Ontario's power system. In response to our report, the Ministry published *Powering Ontario's Growth* in July 2023 issuing a series of action items for the IESO to advance decarbonization and meet economic development priorities.

These actions include major inputs into our long-term planning efforts. As a result, the IESO is now pursuing new planning studies and assessing options – informed by previous engagements – to enable the connection of new pumped storage facilities, additional nuclear reactors at the Darlington and Bruce generating stations, and support opportunities for Ontario Power Generation to optimize its existing hydroelectric generation fleet.

As an initial step, the IESO will work with the Ministry of Energy and Bruce Power on a proposed contractual approach to support the construction of the first full-scale nuclear plant in Ontario in three decades. It will report back to government on how to address costs and risk-sharing associated with this pre-development work in a way that minimizes the impact on ratepayers. The IESO will also work to identify transmission options to reduce reliance on natural gas in the Greater Toronto Area, as well as enable economic development in the north of the province.

Similarly, as the scheduled decommissioning of the Pickering nuclear plant approaches mid-decade, the IESO is looking at what transmission will be required to integrate new resources and expected demand from electrification. This forward-planning process will also complement the work already underway to develop a competitive transmitter selection framework for future transmission procurements.

Many of these action items were not included in the IESO's approved 2023-2025 Business Plan; however, an amendment to the plan is being submitted concurrently with this Outlook for regulatory approval. Based on the reporting and execution timelines established by the Ministry of Energy for the IESO to complete this work, the IESO is prioritizing the following activities for 2023-25:

- Planning Transmission Network requirements; Development of Transmitters Selection Framework; Transmission Land Protection Outreach for Municipalities and Indigenous Communities
- Reporting back on Bruce Nuclear New-build Impact Assessment Cost Recovery Framework, design for the second Long-Term RFP and Clean Electricity Fund Options
- Supporting the Ministry's Consultation for CDM Program Post-2024
- Operability Studies/Market Assessments/New Technology Research
- Management of Clean Energy Credits in Support of the Future Clean Electricity Fund
- Engagement to assess Clean Electricity Fund opportunities for Indigenous Communities



# Financial Outlook

The IESO is progressing well towards delivering on the key initiatives outlined in the 2023-2025 Business Plan, which are critical to maintaining its core operations and supporting the significant transformation of the electricity sector in Ontario.

The current Outlook indicates that the planned expenses included in the 2023-2025 Business Plan are tracking to budget (less than \$1 million variance) over the total three years, with higher net interest income offsetting various higher-than-expected costs, primarily for maintenance of various information technology (IT) systems and for workforce planning including building next generation skills and competencies. Market Renewal Program (MRP) operating expenses are also projected to be within the approved three-year Business Plan. The slight overspend over the three years for the expenses included in the Business Plan is expected to be managed primarily through increases in demand volumes observed as of June 2023.

In addition, the IESO's Society of United Professionals (SUP) was recently awarded – in the context of Bill 124 – salary and benefit increases that were higher than the IESO's 2023-2025 Business Plan assumptions, resulting in \$34.5 million of incremental expenses over the three-year Business Plan horizon. This amount will be managed within the IESO's approved funding inclusive of operating reserve, and any deficit balance over the planning period will be recovered in the 2026-2028 Business Plan.

Included in this Outlook is \$11 million in operating expenses for work to support the government's *Powering Ontario's Growth* plan, which has also been included for approval in the amended 2023-2025 Business Plan. These funds are necessary to develop a transmitter selection framework, a number of transmission plans to support investment projects and future lines, support for the Clean Energy Credit program, ensuring Ontario's system operability during this transition, and preparing for a new Conservation and Demand Management Framework.

Given the significance that this work has in the government achieving its policy objectives of meeting growing demand for electricity into 2030 and beyond while transitioning to a clean electricity system, the IESO decided to submit an amendment to its 2023-2025 Business Plan. Doing so ensures the impact of this incremental work is well defined, staffed and prioritized within all the other deliverables of the 2023-2025 Business Plan.

The 2026 Outlook indicates a potential 19 per cent revenue requirement increase compared with the 2025 Business Plan. This is due to the higher-than-planned salary base and benefits associated with the SUP rate updates, full-year impact of MRP amortization, incremental spending to support *Powering Ontario's Growth* and a return to funding Demand Side Management staff from the IESO usage fee in accordance with the restructuring of the conservation framework expected in 2025.

While in this year's Outlook the total expenses are projected to be higher in 2026, the IESO believes that demand volume would also have a material growth that would mitigate the impact on ratepayers. The IESO will continue to assess the incremental needs and work to find efficiencies to moderate, as much as possible, the projected expenses in future Outlook reporting.



The IESO received approval from the Ontario Energy Board to retain \$15 million as operating reserve in the 2022 Forecast Variance Deferral Account (FVDA) ending balance, and a maximum of \$10 million as the balance going forward. If the year-end balance in FVDA exceeds \$15 million for 2023 or 2024 before the 2026-2028 Revenue Requirement Submission, the IESO will rebate an amount to ratepayers to return the operating reserve balance to \$10 million.

## Detailed Financials

The following table outlines 2023-2026 Interim Year Business Outlook operating revenues and expenses:

For the Year Ended December 31  
(Millions of Canadian Dollars)

(\$ Millions)	2023 Budget	2024 Budget	2025 Budget	3 Year Total	2023 Forecast	2024 Outlook	2025 Outlook	3 Year Total	2026 Outlook
<b>Revenue</b>									
<b>IESO Usage Fee</b>	<b>208.4</b>	<b>218.4</b>	<b>229.7</b>	<b>656.5</b>	<b>209.3</b>	<b>218.4</b>	<b>229.7</b>	<b>657.4</b>	<b>273.2</b>
<b>Expenses</b>									
Expenses Included in Business Plan	208.4	218.4	229.7	656.5	199.5	220.1	237.3	656.9	267.9
Bill 124 - Society Compensation & Benefits	-	-	-	-	21.2	6.4	6.9	34.5	-
<b>Sub-Total</b>	<b>208.4</b>	<b>218.4</b>	<b>229.7</b>	<b>656.5</b>	<b>220.7</b>	<b>226.5</b>	<b>244.2</b>	<b>691.4</b>	<b>267.9</b>
Powering Ontario's Growth	-	-	-	-	1.0	4.5	5.4	10.9	5.4
<b>Total Expenses</b>	<b>208.4</b>	<b>218.4</b>	<b>229.7</b>	<b>656.5</b>	<b>221.7</b>	<b>231.0</b>	<b>249.6</b>	<b>702.3</b>	<b>273.2</b>
<b>Operating Deficit</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>(12.4)</b>	<b>(12.6)</b>	<b>(19.9)</b>	<b>(44.9)</b>	<b>-</b>
<b>Operating Reserve Variance Account Ending Balance</b>	<b>10.0</b>	<b>10.0</b>	<b>10.0</b>	<b>10.0</b>	<b>2.6</b>	<b>(10.0)</b>	<b>(29.9)</b>	<b>(29.9)</b>	<b>(29.9)</b>

## Capital

The capital envelope projection over the 2023-2025 horizon is \$12.6 million, or six per cent, higher than the approved Business Plan, primarily driven by higher spending for the IESO's Back Up Operating Centre (BOC). MRP capital costs are aligned with the approved program spending and in-service date, with a total \$2.0 million, or two per cent, variance over the three-year Business Plan due to timing of spending from 2022 shifting into future years.

The 2026 Outlook includes continuation of multi-year projects initiated within 2023-2025, new and refresh system projects, and \$10 million for Space Needs Program & Facility investments.

**Back Up Operating and Data Centre Relocation Project** – This project is entering the Execution Phase. Costs reflect the need to purchase and renovate a property for the BOC rather than acquire a specialized service provider that was originally assumed when developing the Business Plan. Through the planning phase, the IESO determined that over time the total cost of ownership was less than that of leasing a property to host the BOC, and the market scan revealed that there were no viable service providers to support IESO's specific operating needs. The decision to own and

operate the BOC also provides a number of operational benefits including full operational control, long-term stability and the ability to fully customize the facility to meet the IESO's unique operational needs. The costs for the Backup Data Centre portion remain consistent with the original budget assumptions.

<b>Capital (\$ Millions)</b>	<b>2023 Budget</b>	<b>2024 Budget</b>	<b>2025 Budget</b>	<b>3 Year Total</b>	<b>2023 Forecast</b>	<b>2024 Outlook</b>	<b>2025 Outlook</b>	<b>3 Year Total</b>	<b>2026 Outlook</b>
Core Operations Initiatives	23.0	28.6	30.6	<b>82.2</b>	24.9	25.1	31.0	<b>81.0</b>	30.0
Space Needs Program & Facility Investment	7.0	10.0	13.0	<b>30.0</b>	0.5	12.5	17.0	<b>30.0</b>	10.0
Back Up Operating and Data Centre Relocation	5.0	5.0	-	<b>10.0</b>	8.9	10.6	2.3	<b>21.8</b>	-
Market Renewal Program *	43.9	28.2	28.0	<b>100.1</b>	37.4	36.8	28.0	<b>102.2</b>	-
<b>Total Capital Envelope</b>	<b>78.9</b>	<b>71.8</b>	<b>71.6</b>	<b>222.3</b>	<b>71.7</b>	<b>85.0</b>	<b>78.3</b>	<b>235.0</b>	<b>40.0</b>

\*Budget revised to reflect the approved Baseline 5 schedule (including contingency)

## Full Time Equivalent (FTE) Staffing

In 2023, the average FTEs (funded from the IESO usage fee) of 870 is lower than the budget by 44 FTEs, or five per cent. This is due to the higher-than-planned attrition experienced in 2022, which resulted in a greater-than-anticipated number of headcount to be hired in 2023. The IESO has taken multiple actions to intensify the acquisition of talent and ensure that the planned year-end 2023 headcount is achieved. The lower MRP FTEs has not affected the project deliverables or schedule as the IESO has been able to manage the workload by leveraging existing staff and support from third-party vendors.

Average FTEs for 2024 and 2025 are higher than planned by 37 and 63 FTEs, respectively, due to:

- Thirty additional headcount to be hired between 2023 and 2025 in support of the *Powering Ontario's Growth* plan, with these resources also being required beyond 2025
- SUP grievance that requires the IESO to in-house, by November 2024, one of its large IT contract services for support and maintenance. This will add 16 headcount by 2024 with no material financial impact on the 2023-2026 Interim Business Outlook period
- Decision to restructure the IESO's Security Operation, responsible for security monitoring, detection, remediation and incident response. This adds five headcount by 2024 to address the increase in cyber events, improving timeliness and efficiencies, and aligns with industry best practices
- Additional six headcount to support workforce planning including building next-generation skills and competencies
- Timing variances from the original budget, where headcount to support the Resource Adequacy Framework has been distributed evenly over 2024-2025 and MRP resources have been redistributed in accordance with the latest schedule of work

In 2026, the total FTE average is projected to decline by eight FTEs from the 2025 FTE average outlook, as MRP is completed and some resources return to core operations while others conclude

their temporary employment (as planned), as well as Demand Side Management staff returning to be funded from the IESO usage fee in accordance with the restructuring of the conservation framework.

<b>Average Full Time Equivalents (FTEs)</b>	<b>2023 Budget</b>	<b>2024 Budget</b>	<b>2025 Budget</b>	<b>2023 Forecast</b>	<b>2024 Outlook</b>	<b>2025 Outlook</b>	<b>2026 Outlook</b>
Included in the Business Plan	914	926	900	869	941	933	925
Powering Ontario's Growth	-	-	-	1	25	30	30
<b>Total FTEs</b>	<b>914</b>	<b>926</b>	<b>900</b>	<b>870</b>	<b>963</b>	<b>963</b>	<b>955</b>

# IESO Interim Performance Metrics Results

Provided below is an interim progress update on each of the corporate performance measure. Full-year performance metrics results will be available towards the end of the year, upon receipt of complete data sets.

Strategic Alignment – Outcomes		
<ul style="list-style-type: none"> <li>• Drive and guide the evolution of the system to ensure long-term reliability</li> <li>• Maintain affordability via competition and other mechanisms</li> <li>• Effectively respond to changes in policy and customer choices</li> </ul>		
Measure	2023 Target	Key actions taken to support the measure (Interim Progress)
1. Market Renewal Program delivery: Percentage of key milestones complete according to implementation plan	80%	All 14 of the milestones planned for the first half of 2023 have been completed. These milestones cover work in a number of areas including engagement on Market Rule amendments, market participant readiness and IT solution development and testing.
2. Maintaining Resource Adequacy: Plans in place to ensure that resource adequacy reliability standards are met for the next five years	100%	<ul style="list-style-type: none"> <li>• IESO-led procurements are in flight as per Minister directives (Expedited Long-Term 1 procurement, Long-Term 1 Procurement);</li> <li>• 2022 Annual Planning Outlook was published in December 2022;</li> <li>• 2023 Annual Acquisition Report is currently in development;</li> <li>• Capacity Auctions running on an annual basis;</li> <li>• Actively coordinating nuclear refurbishment outages with facility operators.</li> </ul>
3. Resource Adequacy procurement: Supply offers (MW) in open and competitive mechanisms exceed the target capacity (MW)	20%	<ul style="list-style-type: none"> <li>• The sequencing of the E-LT RFP and the LT-1 RFP is outlined in a manner that drives greater participation and liquidity in order to deliver cost-effective outcomes;</li> <li>• The 2022 Capacity Auction offers for both Winter and Summer exceeded target capacity;</li> <li>• The E-LT RFP received more than 3,550 MW in offers for a target capacity of 1,500 MW. In particular, the offers for storage resources was more than 3,100 MW for a 900 MW storage target. The offers for non-storage resources were 416 MW for a 600 MW target.</li> </ul>
4. Enabling Resources Program delivery: Percentage complete of program plan	33%	<ul style="list-style-type: none"> <li>• As of the end of March 2023, Enabling Resources Program (ERP) has an overall completion of 27% and continues to progress according to plan;</li> <li>• DER design document and stakeholdering is complete as planned.</li> </ul> <p>In addition, we have received funding from Natural Resources Canada's (NRCan) Smart Renewables and Electrification Pathways (SREP) Program for up to \$16.7 M or 50% of total IESO staff, consultant, IT upgrade and other project costs. We are seeking approval to redeploy resources that are currently allocated to foundational ERP projects in order to implement the enhanced ERP models by or before 2027.</p>

*Descriptions have been revised for measures #1 and #3 for readability. The measures and data used to calculate achievement of targets has not changed.*

**Strategic Alignment – Enablers**

- Evolve the IESO's culture enabled by people, tools, and processes to promote a high-performing organization
- Effectively tell the IESO's story to strengthen stakeholders and community connections

Measure	2023 Target	Key actions taken to support the measure (Interim Progress)
5. Employee pulse survey results for specific annual engagement areas of focus	4% average increase	<p>The IESO Director community and the Executive Leadership Team selected the following question as the area of focus for 2023: "I feel a sense of belonging at the IESO".</p> <p><b>Key Updates:</b></p> <ul style="list-style-type: none"> <li>• Offered dedicated, focused sessions in January to provide employees an overview of survey results;</li> <li>• Offered workshops in March on the leader's role in facilitating conversations with teams and connecting actions to employee feedback;</li> <li>• An employee communications campaign and a dedicated internal webpage / resources have been developed to highlight actions the organization has taken in response to employee feedback and in support of an inclusive work environment.</li> </ul>
6. Effectiveness of stakeholder engagement actions through positive survey results (within -2% tolerance range)	80%	<ul style="list-style-type: none"> <li>• To strengthen our engagement activities via purposeful and transparent outreach, the Stakeholder and Community Engagement team is undertaking an external relations engagement framework reset to determine how we can most effectively engage and communicate with our diverse set of customers, communities and stakeholders;</li> <li>• The refreshed framework will be socialized in summer 2023.</li> </ul>

**Strategic Alignment – Key Risks**

- Maintain vigilance on cyber security threats to the IESO and the system, and adapt as required

Measure	2023 Target	Key actions taken to support the measure (Interim Progress)
7. Cyber threat intelligence technology implementation	90%	<ul style="list-style-type: none"> <li>• Procurement of tool is underway; we are currently at the contract negotiation stage of the process with the vendor;</li> <li>• There is the possibility that the current vendor and other applicant proponents may not be able to meet our requirements on product utilization;</li> <li>• The team is accelerating to conclusion negotiation to inform next steps which could entail sole sourcing as an option.</li> </ul>
8. Phishing Metrics Trend	<5%	<ul style="list-style-type: none"> <li>• Issuance of quarterly enterprise and divisional phishing metrics report for all people leaders to help provide oversight on our corporate phishing resiliency and to follow-up with staff who require development in this area</li> <li>• Monitoring of training compliance and phishing metrics to inform training opportunities and focus for IESO staff</li> </ul>
9. Determine pathway for assessment of appropriate regulatory instrument for system cyber risk mitigation	Substantial Completion	<p><i>Context – This is about setting up the "pathway for assessment" and NOT creating the regulatory instrument(s). Any instrument development would occur beyond the 2023 horizon.</i></p> <p>The goal of this measure is to report observable actions, controlled by the IESO, that will, in the post-2023 timeframe, enable pathways for assessment under either:</p> <ol style="list-style-type: none"> <li>a) tracking of audit effectiveness under NERC CIP standards; or</li> <li>b) pursuing development of new rules within the IESO's mandate or advocating for other entities to do so.</li> </ol> <p>For 2023, the deliverable for this measure will be to assess which path to develop – better enforcement of current rules, or development of better rules (followed by good enforcement of those).</p> <p><b><u>2023 Actions:</u></b></p> <p>In-progress</p>

		<ul style="list-style-type: none"> <li>Identify regulatory partners relevant to this measure. (Government of Canada, Federal Energy Regulatory Commission; North American Electric Reliability Corp., Northeast Power Coordinating Council; Ontario Energy Board, Canadian Nuclear Safety Commission).</li> </ul> <p>Planned</p> <ul style="list-style-type: none"> <li>Working with regulatory partners, catalogue existing and emerging frameworks (i.e. OEB – Ontario Cyber Security Framework, Federal Government – Bill C24);</li> <li>Commence sector gap analysis to identify and prioritize strengths and weaknesses and needed regulatory tools and relationships (Rule, and program strength and weakness analysis across the sector);</li> <li>Begin to define and plan IESO-specific actions to enable cyber-security framework (Awareness, support resources, rule, audit programs, etc.);</li> <li>Map out sector engagement strategy to facilitate the introduction of necessary changes.</li> </ul>
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# IESO Enterprise Risk Update

## **New Risk: Ineffective talent strategy responses to post-pandemic labour market**

Risk Assessment: High	Mitigating Actions
<p>Given structural changes in the post-pandemic labour market and a rapidly evolving electricity system towards a decarbonized future, it is imperative that the IESO develops forward-looking talent strategies to attract, retain and train. Talent constraint concerns arise from not having a thorough understanding of the unique skill sets required to implement the IESO's corporate strategy.</p>	<ul style="list-style-type: none"> <li>• Activation of Employee Value Proposition (EVP) in 2024, aligned with the development of IESO's Corporate Brand</li> <li>• Implement tactics to reach the IESO's full 2023 staffing complement</li> <li>• Executive Leadership Team led Enterprise-wide meetings to gain insights into attrition trend and identification of meaningful actions</li> <li>• Management Total Rewards Program Refresh</li> <li>• Expansion of Space Needs Program across all IESO locations to improve employee experience</li> </ul>

## **Removed Risk: Competitive mechanisms not working as intended impairs the IESO's efficiency mandate** (page 24 of the Business Plan document)

Completed the mitigation actions or covered them through other risks; the material impact of this risk was reduced as a result of the development and execution of resource adequacy mechanisms

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# Business Plan 2023-2025

Independent Electricity System Operator  
September 1, 2022

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## Letter from the President & CEO

Ontario's electricity system is undergoing unprecedented transformation. Demand for electricity is forecast to grow substantially over the next two decades, driven by strong economic growth in the industrial, mining and agricultural sectors, as well as electrification of transportation. At the same time, supply conditions are tightening, with nuclear units being refurbished, the Pickering nuclear facility soon retiring, and generation contracts expiring.

Governments at all levels are moving forward with decarbonization policies, driven by community and customer preferences. While Ontario's electricity grid is well positioned to support decarbonization of the broader economy, being one of the cleanest in the world, we will need to be prepared for electrification to potentially double or triple demand over the next 20 years.

Like many jurisdictions around the world, new non-emitting resources are increasingly being integrated into the province's electricity grid. While energy storage and distributed energy resources are already playing a role in Ontario, the stage is set for these resources to take a big leap forward in the coming years.

With the increasing pace and scope of change, we felt it was time to refine and recalibrate our corporate strategy for the next five years to ensure we are well positioned to meet Ontarians' needs and expectations. For this reason, we undertook a thorough visioning process in late 2021 and early 2022 to imagine the sustainable future-state energy system that Ontario will require, and identify a series of concrete steps to deliver on future needs.

The 2023-2025 Business Plan sets out the IESO's revenue requirement and capital spending needed to maintain our critical responsibilities and deliver on our refreshed strategy.

As the system integrator, the IESO is being asked to do more with every passing year. The job of ensuring a reliable and affordable supply of electricity for Ontario's businesses, communities, residents and Indigenous peoples is becoming increasingly complex. Yet it remains crucial to power economic development and support decarbonization of the economy.

Despite the significant change underway, our electricity system is prepared for future growth, and the IESO is continuing to implement a comprehensive plan to procure new generation capacity. In parallel, we are also assessing the technical and human resource requirements to fully integrate these new resources and the energy they will eventually produce. At the same time, the IESO is actively studying how to reduce reliance on gas generation over the long term and transition to a more decarbonized electricity system.

The IESO is also continuing to integrate new non-emitting resources like energy storage and distributed energy resources, learning lessons that we can build on as we transition to a more sustainable electricity grid of the future. In addition, our energy efficiency programs continue to reduce grid demand while helping businesses save on costs, and we are looking at expanding opportunities.

Many of our initiatives are designed to drive down costs for Ontario ratepayers, and one of our integral initiatives to fulfil that goal is our Market Renewal Program (MRP). This project will bring

significant ratepayer benefits and ensure continued reliable operations as the system becomes more diversified, distributed and digitalized.

As we take proactive steps to ensure a reliable and affordable system, we must also remain vigilant to potential cybersecurity threats. Uptake of our cybersecurity services is increasing and cascading across the sector, helping to ensure local distribution companies and generation owners have access to the latest cyber intelligence. These efforts are critical as cyber threats have been identified as our primary risk.

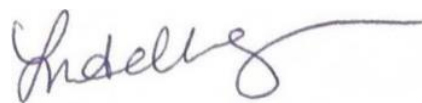
To support our efforts, we are enhancing our engagement efforts and strengthening our outreach to municipalities, Indigenous communities and electricity consumers.

While we continue to carefully review all expenditures and seek out new efficiencies, new investments are needed. To fully prepare the sector for the future and ensure Ontarians' electricity needs are met, we must invest in our people and our systems. As a result, the IESO is proposing increases to its budget to ensure we can continue to meet Ontarians' expectations of an affordable, sustainable, resilient and reliable power system.

To deliver on this plan, the IESO has a revenue requirement of \$208.4 million in 2023, \$218.4 million in 2024, and \$229.7 million in 2025. These figures represent increases of 5.8%, 4.8%, and 5.2% year over year. For the average residential electricity bill, this translates into an increase of 8.3 cents per month over the 2023-2025 planning period.

There are currently many exciting developments taking place across Ontario. The province is attracting new businesses, communities are developing ambitious energy plans, emerging technologies are providing more choice, and the transportation and industrial sectors are undergoing electrification.

The IESO is committed to supporting the future prosperity of the province by driving and guiding the sector's future, ensuring system reliability while supporting cost effectiveness, and driving business transformation. While this job is becoming increasingly challenging, with new investment we are confident that our comprehensive business plan and skilled workforce can continue to deliver.

A handwritten signature in blue ink, appearing to read 'Lesley Gallinger', with a long horizontal flourish extending to the right.

Lesley Gallinger

President and CEO

# 2023-2025 Business Plan – IESO Priorities

## Introduction

A reliable, affordable and sustainable supply of electricity is fundamental to the prosperity and well-being of Ontario's residents, businesses, institutions and communities. Each and every day, they count on the Independent Electricity System Operator (IESO) to ensure electricity is available where and when it's needed.

The IESO is here to ensure the province's power system can deliver this essential resource. By working collaboratively and purposefully with market participants, municipal officials, Indigenous communities, government bodies and a vast range of other partners in the energy sector and beyond, we operate for today, plan for tomorrow and prepare for the future.

Positioned at the heart of Ontario's electricity sector, the IESO's work impacts how electricity is produced and consumed, how it is transmitted and distributed, and how it is managed and planned for in real-time and over the longer term to ensure the province's needs are met at all times.

We play a unique and critical role in Ontario's energy ecosystem – and in the province as a whole. For more than a decade now, the electricity landscape has been experiencing an unprecedented transformation, and the pace of change shows no signs of slowing.

Facing these changes head-on, we are setting a course for a future state that is decarbonized, decentralized and digitalized. Although some aspects of this journey cannot be foreseen with certainty, the IESO is resolute in our commitment to support Ontario's energy transition – leading change when required, but also facilitating our partners' leadership.

In responding to sector transformation, the IESO refined and recalibrated its five-year corporate strategy in early 2022. This business plan is anchored in our refreshed strategy, and adds more specificity and detail to demonstrate how we plan to deliver value for Ontarians in the coming years.

## IESO Corporate Strategy at a Glance



### Drive & Guide the Sector's Future

- 1.1** Strengthen Stakeholder and Indigenous Communities Engagement & Relationships via Purposeful, Transparent Outreach
- 1.2** Identify, Anticipate and Respond to Changes in Customer Choice and Policy
- 1.3** Advise on and Actively Participate in Dialogue on the Configuration of the Future-State Sustainable Energy System



### Ensure System Reliability while Supporting Cost-Effectiveness

- 2.1** Renew the Real-Time Markets to Advance Energy Transformation
- 2.2** Adapt the IESO's Short- and Long-term Planning to Meet Evolving System Needs
- 2.3** Cost-Effectively Acquire Services to Maintain Reliability in the Evolving Sector
- 2.4** Champion Cyber Security, Situational Awareness and Best Practices within the Sector



### Drive Business Transformation

- 3.1** Define and Enhance our Desired Culture and Employee Experience
- 3.2** Identify and Build Next-Generation Skills and Competencies
- 3.3** Evolve the IESO's Business Processes, Technologies and Tools

## Drive and Guide the Sector's Future

We will drive and guide the sector's future by strengthening relationships with stakeholders and Indigenous communities and effectively responding to changes in customer choice and policy, while acting as an advisor and participant in discussions on how to create a sustainable, future-state energy system.

### **Strengthen stakeholder and Indigenous community engagement via purposeful, transparent outreach**

The essential link connecting all of the IESO's current and future activities is engagement. This includes traditional sector stakeholders, as well as a vast and varied array of other parties who influence our planning and decisions, including Indigenous communities and organizations, business and industry leaders, trade associations, academic institutions and various levels of government. Each group has a unique role to play in the system, with its own specific needs, interests and priorities.

At all times the IESO must work to understand the nature of these forces driving transformation and make informed decisions that strike an appropriate balance. In planning for the future, we must carefully weigh diverse interests and plot a course that considers the interplay among them.

To do so requires honest and open dialogue with the parties affected by our decisions. Given the scope and impact of our mandate, we must work closely with a large number of affected interests, often with competing priorities and varying perspectives. For this reason, engagement activities are absolutely essential to informing the IESO's work.

With every passing year, more voices are joining the energy conversation. Through our engagement processes, we strive to make balanced decisions – decisions that are effective and appropriate, and that will stand the test of time. Over the next five years, we will continue to engage in a targeted and transparent manner, consulting and collaborating with different groups through thoughtful means and mechanisms.

Our engagement with Indigenous communities and organizations, for example, is deepening. Our work in this area is focused on powering change – and changing lives.

Now more than ever before, many Indigenous leaders across Ontario are pursuing projects that support greater energy independence and provide new opportunities to create local revenue and jobs. By developing generation and storage systems, becoming equity partners and leaders in major infrastructure projects, prioritizing energy efficiency as a way to demonstrate environmental stewardship, and engaging in important conversations about system planning, Indigenous communities are seeking greater autonomy and becoming catalysts for change.

The IESO is proud to stand beside them on this journey to greater self-determination. While there is still work to be done, developing Indigenous capacity is an important step towards a longer-term goal of achieving economic reconciliation and driving fair, equitable and inclusive participation in the energy sector.

As our electricity system becomes more decentralized, with more choice at the consumer and community level, the IESO is also strengthening its engagement with municipalities. These efforts will ensure municipal input is integrated into IESO decision making, and that municipalities are aware of opportunities available to them to use electricity to achieve economic development and sustainability goals.

Given the scope and volume of new infrastructure that will be required to ensure the province's capacity needs are met, as are the energy needs that emerge later, the IESO will continue to work with transmitters, distributors, generators, consumers, municipalities and Indigenous communities to ensure all voices are heard and all perspectives are considered.

### **Identify, anticipate and respond to changes in customer choice and policy**

Consumer preferences and choices are some of the key drivers behind the energy transition that is underway. As our reliance on electricity increases through economic growth and the transition to non-emitting energy sources, the IESO is supporting this shift while maintaining reliability and affordability.

As a result, our development activities are focused on meeting consumer demand while respecting customer preferences, including new supply options to meet our growing needs. This includes testing concepts such as residential microgrids, local energy markets, aggregated electric vehicle charging solutions, strategic energy management and artificial intelligence, to name a few.

In the meantime, we are accelerating our efforts to integrate distributed energy resources into Ontario's electricity grid and market. These small-scale community-based resources have the potential to deliver flexible and affordable solutions to local supply issues while also meeting regional and provincial needs.

We will continue to prioritize energy efficiency, the cheapest and most sustainable resource available. The IESO's Save on Energy programs have reached homes and businesses in all sectors across Ontario, saving enough energy over the last decade to power 1.7 million homes for a year. Looking ahead, conservation and demand management will play a growing role in meeting our reliability needs with targeted programs that help address provincial and local reliability concerns.

### **Advise on and actively participate in dialogue on the configuration of the future-state sustainable energy system**

Ontario's energy future will be shaped by the conversations and insights shared through our engagement framework. What our electricity system looks like in the years to come will be influenced by our sector's ability to collaborate and contribute to an understanding of what is needed to evolve the system further.

We are actively working to integrate emerging technologies and enable new resources to participate in the IESO markets. Pairing energy storage with wind or solar generation can improve operational efficiency and help meet the province's emerging electricity needs. For this reason, the integration of hybrid storage/generation resources has been designated a priority project within the IESO's Enabling Resources initiative.



Through active engagement with stakeholders and communities, we have already made great strides, as we build a participation model for implementation. We are also working with sector partners to reduce the barriers to storage resources and evolve the relevant policies, rules, processes and tools to better enable the integration of storage resources within the current structure of our market. Enabling more resources to participate in our markets will increase competition, drive down costs, and provide sustainable options.

Looking ahead, we will strive to support the transformation of Ontario's electricity system by driving and guiding the future of the sector. While at times it is best to lead from the front, charting a path for others to follow, it is also important to create opportunities for others to lead and pave the way when appropriate.

While efforts to reduce emissions across all sectors continue to accelerate, the coming decade will see a rapidly-changing electricity landscape in Ontario. As the first jurisdiction in North America to completely eliminate coal-fired electricity generation, today, Ontario's electricity system is among the cleanest in the world, accounting for less than three per cent of the province's GHG emissions.

The IESO has been engaging with stakeholders, technical experts and others to develop a view of Ontario's decarbonized future. Our Pathways to Decarbonization project provides a focus for concrete conversations about how to eliminate greenhouse gas (GHG) emissions from our system while balancing the need to maintain reliability as other sectors of the economy also decarbonize through electrification.

The move towards greater decarbonization is driving Ontario residents, businesses, institutions and communities to seek new opportunities to further reduce GHG emissions. A growing number of consumers are looking for ways to reduce their carbon footprint by investing in technologies that include electric vehicles, heat pumps, induction stoves, smart thermostats and other devices.

Many industrial and commercial customers are exploring ways to electrify their operations and reduce their reliance on natural gas and other fossil fuels, not only to achieve cost savings but also to meet environmental, social and governance-related objectives. At the same time, a number of municipalities across Ontario have established their own emission reduction targets. Many are implementing major energy-efficiency projects and testing electric transit systems as part of their own climate-change mitigation strategies.

The IESO will continue to share its expertise as part of this dialogue, encouraging a common understanding of the issues at hand and bringing a variety of perspectives to the table. Given our role as system integrator, we must ensure all voices are heard and all ideas are considered. Plotting a viable, sustainable and financially responsible course for Ontario's energy future is a shared responsibility. The IESO will remain steadfast in our efforts to bring the right parties together to explore options to meet changing needs and priorities.

## Ensure System Reliability While Supporting Cost-Effectiveness

To ensure system reliability while supporting cost effectiveness, we will transform the real-time markets and adapt our planning processes, cost-effectively acquire services and champion cybersecurity.

### **Renew the real-time markets to advance energy transformation**

As the landscape has changed, so too have our markets. The opening of the wholesale market in 2002 introduced an important new force: competition. By establishing a model where electricity suppliers compete to meet the province's electricity needs, the IESO has ensured Ontarians benefit from a more dynamic and cost-effective system.

Competition is a thread that connects many of the IESO's activities – and is expected to play an even greater role in future operations. The IESO's Market Renewal Program (MRP) is introducing fundamental reforms to the province's electricity markets to improve how we supply, schedule and price electricity to meet Ontario's future needs at the lowest cost.

The market of the future must also accommodate a range of new resource types, often with different strengths and operating characteristics than our existing fleet. Given the ongoing transformation of the system, the market must be flexible enough to support the integration of new sources of supply, accommodate changing policy imperatives and consumer preferences, stimulate investments in new supply as required, and deliver the most economically efficient outcomes. Market Renewal is building the foundation to enable our future needs, decarbonization goals, demand-side participation and new innovations entering the market.

Beyond the wholesale market, competition is expected to dominate other aspects of our business in the years to come, including the procurement of existing and new resources to meet Ontario's rapidly increasing demand for electricity. We are securing resources, testing new integration models and re-examining our systems and processes to reduce barriers to entry to ensure we derive the greatest value from new and emerging technologies.

This essential work will play out over several years, resulting in a system that is more flexible, resilient and diversified. In addition to meeting the IESO's operational requirements, the system must satisfy the needs of ratepayers and communities, as well as asset owners and investors.

In lockstep with the planned implementation of MRP, we are also making great progress on a multi-year initiative to replace our legacy settlement systems to ensure they can support the complex needs of the project. Settling the market is a critical function that requires sophisticated software. Over \$22 billion in transactions occur each year through IESO's administered markets and programs so it is imperative that these transactions be settled accurately.

We will continue to take the necessary steps to ensure reliability by upgrading and replacing core applications, infrastructure and cybersecurity tools. For example, core projects include a refresh of the Transmission Rights Auction platform and the completion of the Supervisory Control and Data Acquisition (SCADA) / Energy Management System (EMS) upgrade. We are also investing in a Market Analysis and Simulation Toolset, a tool to monitor, correct, improve or alter market design or operations over the multiple timeframes once MRP goes live.

## **Adapt short- and long-term planning to meet evolving system needs**

One operational challenge the IESO must manage is that electricity needs are not static. Rather, they are subject to a broad range of forces and variables. The dynamic nature of Ontario's electricity requirements means the IESO must take a flexible and responsive approach to planning the system. We must have the ability to identify, react, and adapt to changing realities.

When it comes to electricity planning, understanding what's important to consumers, communities and businesses at the regional level is critical. Every region of the province has unique characteristics and energy needs, which the IESO must understand, consider and plan for.

Over the next three years, we will continue to adapt our short- and long-term planning processes to meet evolving system needs – not just for the province as a whole, but for its many regions and individual communities. We will identify system needs and opportunities, monitor evolving technologies and supply options, and effectively plan transmission so that electricity is available where and when it is needed. To achieve these objectives, we will update our demand forecasting tools and our energy modelling system to ensure we have access to state-of-the-art technologies.

We are also taking steps to improve how we identify and assess distributed energy resources and other non-wires alternatives as these technologies will undoubtedly become more important as Ontario transitions to a cleaner energy supply mix. There will, however, continue to be situations when transmission solutions (poles, wires and stations) will be the only viable option.

We will focus on increasing the transparency of our transmission planning processes to ensure all affected stakeholders, communities, utilities, residents and businesses know what we are contemplating – and why. Every region has its own specific needs and interests so providing opportunities to gain insight from stakeholders and communities is also of paramount importance to inform our decision-making. To ensure electricity infrastructure gets built in a timely manner, we need all of our partners to understand the big picture and the need to expand the system.

By working closely with our partners, we will proactively identify where in the province new, large customers are likely to connect and then develop transmission plans to supply those sites. This foundational work is critical to enable economic development and ensure the necessary supply chains exist to support the energy transition.

To meet future system needs, the IESO will be recommending a relatively large number of transmission projects in the coming years. Transmission projects can take at least seven to 10 years to build, and for reliability purposes it is imperative that these projects be completed on time. For this reason, we will put more emphasis on monitoring the implementation of our plans, understanding any potential implementation risks, and preparing to take action to ensure long-term reliability, if needed.

## **Cost-effectively acquire services to maintain reliability in the evolving sector**

The IESO has worked with sector stakeholders to develop a Resource Adequacy Framework to address evolving reliability needs in a cost-effective and flexible manner while balancing ratepayer and supplier risk.

We remain committed to the using competitive mechanisms to meet Ontario's resource adequacy needs and are working with stakeholders, communities and others to deliver on the Resource Adequacy Framework.

To facilitate competition and provide business planning certainty, our efforts have been structured around three timeframes: short, medium and long-term. In the short term, capacity auctions will be the primary mechanism to meet needs, while existing resources capable of expansions or upgrades are the focus of our medium-term procurements. For new projects with longer lead times, we will conduct longer term procurements to respect developers' need for certainty and a reasonable return on their investments.

In addition to procuring more capacity from existing and new resources, the IESO is also actively exploring the requirements to fully integrate these assets into grid operations and leverage the critical services they can provide – including, most importantly, energy.

### **Champion cybersecurity, situational awareness and best practices within the sector**

Protecting the IESO grid against threats and vulnerabilities remains a high priority, both in the physical and cyber realms. Cyberattacks are becoming more common and more complex with every passing year. For this reason, the IESO continues to work closely with sector partners to share information and deepen situational awareness. The safe and reliable operation of Ontario's power system is built upon a large, decentralized supply chain – and we are already taking steps to reinforce the weakest links.

Given the rate at which cyber risks are increasing, this work will continue for the foreseeable future. Ransomware, malware, social engineering and phishing are the most common ways that bad actors try to access the grid – but this is not unique to Ontario. In fact, it's a global phenomenon and a broadly shared concern. We will remain vigilant and continue to collaborate with experts from around the world to identify, mitigate and minimize the collective risks to reliability.

In 2019, the IESO became the first system operator in North America to be accountable for providing cybersecurity-related services to the broader electricity sector. Lighthouse, the cornerstone of our cyber offerings, provides a near real-time view into threats and incidents that can impact the power grid. Designed to improve the security and resilience of the system, this detection, assessment and information-sharing service is the result of a one-of-a-kind partnership with the Canadian Centre for Cyber Security, a trusted federal source of cybersecurity information, advice and guidance that builds on the IESO's existing leadership and capabilities.

We will continue to expand the reach and effectiveness of our flagship Lighthouse program to ensure we enroll as many members as possible. A holistic view and understanding of market participants' cybersecurity postures and program objectives is required to develop an informed and coordinated approach to cyber resilience for Ontario's electricity sector.

As cybersecurity events, and ransomware attacks in particular, continue to increase across the sector, the IESO is also focused on bolstering its cyber incident response capability. These initiatives include developing cyber incident response playbooks and conducting regular tabletop exercises to practice response execution in an effort to reduce the potential impact and accelerate resolution timelines.

## Drive Business Transformation

To drive business transformation, we will evolve our internal processes, technologies and tools, identifying and building next-generation skills and competencies while defining and enhancing the IESO culture and employee experience.

### **Define and enhance our desired culture and employee experience**

The IESO's organizational success is underpinned by our employees. For this reason, we are taking concrete steps to modernize our corporate culture and enhance the employee experience. The IESO is on a journey to establish a more inclusive culture where our people can realize their full potential.

Our vision is to create a sense of belonging, where diverse expertise and perspectives are valued. We must operate in a fair and consistent manner, make employees feel safe challenging the status quo, and ensure corporate values are reflected in the attitudes and behaviours of our workforce. IESO employees have a strong sense of purpose, and we are making the necessary investments in our people and our workplace to enable them to deliver results that support it.

We have already taken a number of actions, with more to follow. The IESO is working to support its employees by promoting a clear understanding of our purpose, strategic priorities, and key activities. Leaders must create an environment of inclusivity, enhance their team's connection to support IESO's priorities and encourage diverse perspectives while investing in each other's success.

This evolution requires ongoing organizational focus and change in a number of areas. We must fully align our workforce to common goals and priorities. This shared understanding will help to build a united, cohesive team with a common commitment to achieving our goals.

We are also proceeding with an organizational alignment review that will be implemented in 2023. This review will ensure we have the right organizational structure in place to provide clarity for decision-making through well-defined leadership roles with clear accountabilities. This will support the delivery of our strategy and mandate moving forward.

The review will enable the IESO to identify existing strengths and opportunities for enhancements to our current organizational structure; align roles and accountabilities to the refreshed corporate strategy; clarify accountabilities and decision-making both vertically and horizontally; empower leaders within their scope of authority; and better enable our leaders to successfully guide their teams in implementing the strategic plan and delivering our core mandate.

Before the pandemic, we also launched a program to assess our broader space needs and explore the benefits offered by co-locating more employees at a single location. These benefits included advancing our culture, offering employees more flexibility and choice in how and where they work within the office, and optimizing our real estate footprint with savings realized outside of this business plan's time horizon. While the strategies to achieve our goals have evolved over time, many of our objectives remain the same: a more flexible, inviting and cost-effective workspace that responds to emerging workplace trends and employee feedback, supporting a culture based on teamwork and collaboration, and an improved employee experience overall.

Although the pandemic has provided an opportunity for us to reconsider and reevaluate our space needs, especially in the context of a proposed hybrid work model, we will continue to prioritize employee wellbeing, business productivity and cost containment.

### **Identify and build next-generation skills and competencies**

Ensuring our employees have the skills they need to excel in a changing environment is a high priority. Learning needs change over the course of every career. For this reason, we offer learning and development opportunities for staff at different points in the employee lifecycle. Although some training content is tailored to meet the needs of employees at specific levels in the organization, we firmly believe leadership can be found across the IESO. It is a skill we plan to nurture, as all employees play a key role in helping the IESO achieve its strategic objectives.

Internal capacity building will be even more critical in the years to come. By making strategic investments in learning and development, we are taking steps towards aligning program offerings with corporate priorities and employee interests, which is essential to driving engagement, commitment and loyalty.

We are proactively working to build the necessary capabilities for the future to deliver on our mandate. For example, forecasting demand and ensuring resource availability is a complex task that requires expertise across the organization, including planning, operations, contract management, information technology and market development, among others.

We are also developing plans to attract, engage and retain top-level talent in certain key areas, including cybersecurity, data science, artificial intelligence and machine learning, stakeholder and community relations, contract management, and economics. We will also focus to a greater degree on succession planning and strengthening inclusive leadership capabilities.

As is the case with many of our sector partners, the IESO is experiencing a demographic shift with the planned retirement of some long-term employees. We are actively recruiting from top academic institutions to attract staff with the optimal combination of skills, experience and passion to drive the organization forward.

To deliver the best results, employees need to be future-oriented, solutions-driven and capable of responding positively and effectively to changes in the environment. They also need the right tools and technologies to do their work.

### **Evolve business processes, technologies and tools**

Driving business transformation involves optimizing our workforce as well as the systems and processes that support them. As with every aspect of Ontario's electricity sector, the changes required to make this happen are significant and wide reaching. Today, we are making the necessary investments to facilitate this transformation and deliver long-term value to residents, communities, businesses and institutions across Ontario.

Complex information technology (IT) programs and tools enable us to perform essential tasks that include forecasting demand, dispatching resources and monitoring the grid for cyber threats. After years of deferring investments in a risk-informed way, many of the IESO's IT systems require

renewal as they approach their end of life. Some of these upgrades will be made to control room systems to support the integration of emerging resources, and to improve situational awareness. In the coming years, we will continue to update or replace many of these key IT systems that help us maintain the reliability of the grid.

Good decisions require good data. Given our central role in managing the power system and the scope of our IT tools and systems, the IESO has access to a wealth of operational electricity data stretching back to the opening of Ontario's electricity market in 2002. When fully utilized, this data can provide unique insights into the complex inner-workings of electricity production, usage, planning, forecasting and much more.

Earlier this decade, the IESO embarked on a program of work to evolve our data and analytics maturity level and capabilities. By developing a data strategy and enterprise data catalogue, the IESO is treating organizational data as an invaluable business asset. We continue our work to leverage this data to identify additional market efficiencies, support reliable grid operations and improve our risk management practices.

We are also evolving and enhancing many of the IT systems that support our operations staff to ensure they have maximum visibility into different grid assets.



# Financial Overview

The 2023-2025 Business Plan provides an overview of the resources required to maintain the high levels of performance necessary for the IESO to deliver on its core responsibilities, as well as deliver on the first three years of a refreshed strategy, committed to helping drive and guide a transition to ensure a reliable, affordable and sustainable energy future.

The IESO is moving forward on key initiatives that are critical to maintaining its core operations and to support the significant growth in the industrial, mining and agricultural sectors, as well as major expansion in transportation electrification, which will collectively drive higher electricity demand than Ontario has seen in many years; demand is expected to increase by nearly two per cent per year during the next 10 years. These demand increases are being compounded by nuclear retirements and refurbishments as well as the expiration of a large number of generator contracts, which impacts available supply. Energy needs are emerging as early as 2025.

To achieve this outcome, the IESO is proposing increases to its revenue requirement of 5.8%, 4.8%, and 5.2% over the three year planning period. The rapid increase in the interest rate is forecasted to add \$5.4 million of surplus through interest income to the IESO in 2022 by year-end. This rate of increase was not budgeted thus the surplus is deemed an uncontrollable variance that is excluded from the percentage year over year increase between 2022 and 2023 funding requirements. Over the 2023-2025 planning period, for the average residential electricity bill, this translates to an 8.3 cents per month increase. The IESO has taken steps to manage our exposure to macroeconomic trends and will continue to do so in support of value for ratepayers. The IESO has and will continue to carefully review all expenditures and find efficiencies, where possible, to minimize the impact to ratepayers of Ontario while we invest to support the significant transformation of the sector.

We have identified and leveraged efficiencies in several areas. As noted above, we anticipate a large increase in new generation and other contracts over the next three years and have overhauled some of our contract management and associated registration activities. By introducing contract procurement and registration fees that are paid by the project proponents, IESO expenses are offset and impacts to Ontario ratepayers are reduced. At the same time, further development of systems to track these contracts (Beacon system), automation of contract settlements and energy efficiency processes to streamline approvals have yielded operational efficiencies. Furthermore, we continue to realize efficiencies by examining our long-term office space needs.

In the 2023-2025 Business Plan, the IESO is proposing to:

- Continue work started in 2022 under Resource and Transmission Adequacy and Enabling Resources, furthering incremental investments to secure additional supply and expansions needed to address electricity needs emerging and the unprecedented transformation of the electricity system over the next decade.
- Deliver on government initiative work related to Class B and Interruptible rate pilots, potential program to provide new contracts for existing small hydroelectric generation facilities, enhanced energy efficiency conservation and demand management programs, along with other smaller initiatives.



- Complete the \$233 million Market Renewal Program (MRP) investment, at which time the new market will begin to generate significant ratepayer savings building on the benefits that the market has delivered to consumers over the past 20 years. The program investment will be amortized over a 20-year period. The new market will introduce new features and tools that require additional resources for market operations, monitoring and ongoing maintenance and support. As such, the business plan includes resources for additional staff, technical consultants and support & maintenance to operate the renewed market.
- Strengthen IESO's preparedness to support Ontario's electricity transformation through enhancing cybersecurity posture, reinforcing the resilience and integrity of the electricity grid, sustaining our critical IT systems and enabling the grid transformation program. It will also include strengthening stakeholder and community connections, and continuing to build out workforce capacity and capabilities to promote a high-performing organization.

These investments are necessary to enable the IESO to play a critical role in driving and guiding the energy transformation underway.

The 2022 forecast is below approved budget due to significantly higher interest income, increased electricity demand thus higher revenue and lower expenses driven by project and staff hiring delays. The 2023 higher expenses are driven by incremental initiatives and amortization impacts of assets placed into service in late 2022. In 2024 and 2025, expenses are impacted by transition to post MRP integration functions and services including amortization impacts, and further investments most notably in initiatives to ensure resource acquisition to meet system needs by 2026. The 2023-2025 business plan has significantly higher interest income and revenue from registration fees used to offset the revenue requirement.

After rigorous review, staffing levels will increase in 2023 as a number of strategic positions are added to support key initiatives (including the MRP). For 2023, the IESO anticipates an average of 914 full-time equivalent employees to deliver on core electricity system responsibilities and initiatives, as well as to support the MRP. Staffing levels will remain relatively flat in 2024 as the MRP begins to wind-down, with certain staff returning to core functions, concluding the transition in 2025 when the average full-time equivalent number of employees will be reduced to 900.

As part of its mandate, the IESO operates several programs that are funded from other sources and are not included in this business plan, including: the smart metering entity, market rule enforcement and education, and energy-efficiency programs.

The IESO has approval from the Ontario Energy Board to maintain an operating reserve of \$10 million to manage cost or revenue variances from budgets caused by changes to the external environment that impact the IESO and may not be within its control or reasonably foreseeable. This practice is adopted by similar sector organizations. As the IESO enters into its first three-year business plan, and given the complexity and uncertainty around the transformation of the sector, there is potential for additional unplanned needs that may be material in scope. The IESO will be recommending to the OEB an increase to the operating reserve to a balance of \$15 million, to be funded through its forecasted 2022 surplus, to address these potential needs.

## Detailed Financials

The following table outlines 2023-2025 business plan operating revenues and expenses:

Pro Forma Statement of Operations  
For the Year Ended December 31  
(in Millions of Canadian Dollars)

(\$ Millions)	2022 Budget	2022 Forecast	2023 Budget	2024 Budget	2025 Budget
<b>Revenue</b>					
IESO Usage Fee	201.5	204.1	208.4	218.4	229.7
<b>Expenses</b>					
Baseline Expenses	172.8	171.4	175.4	181.4	187.7
Resource and Transmission Adequacy	1.7	1.4	6.0	8.8	7.3
Enabling Resources	0.4	0.6	0.8	0.9	0.9
Pathway to Decarbonization	1.3	0.9	-	-	-
Other Government Priorities	4.6	4.3	2.9	2.5	2.5
MRP – ongoing operation of new functions	0.5	0.2	1.9	3.0	4.2
Cybersecurity	-	0.9	1.6	1.6	2.1
Strengthening Engagement	-	-	0.7	1.1	1.6
Culture, Employees and Capabilities	-	-	0.8	0.8	1.0
Sustaining Technology, Evolving Processes and Tools	-	-	1.9	2.3	2.2
Operating Expenses sub-total	181.3	179.7	192.0	202.2	209.4
Amortization	20.0	18.5	23.1	22.0	27.0
Net Interest	(5.0)	(10.4)	(11.5)	(9.7)	(9.2)
Registration Fee	-	(0.8)	(0.5)	(0.5)	-
Market Renewal Program	5.2	4.3	5.3	4.4	2.5
<b>Total Expenses</b>	<b>201.5</b>	<b>191.3</b>	<b>208.4</b>	<b>218.4</b>	<b>229.7</b>
<i>Uncontrollable Interest Variance</i>		<i>5.4</i>			
<i>Adjusted Total Expenses</i>	<i>201.5</i>	<i>196.7</i>	<i>208.4</i>	<i>218.4</i>	<i>229.7</i>
<i>Year over year variance</i>		<i>-</i>	<i>5.8%</i>	<i>4.8%</i>	<i>5.2%</i>
<b>Operating Surplus/(Deficit)</b>	<b>-</b>	<b>12.8</b>	<b>-</b>	<b>-</b>	<b>-</b>
Accumulated Operating Surplus	8.7	15.0	15.0	15.0	15.0
Potential Rebate to Market Participants	-	6.5	-	-	-

## Capital

As with previous years, the business planning process establishes an appropriate capital envelope for core operating initiatives over the business planning timeframe, with commitments approved individually, on an ongoing basis.

There will be increased capital investments over the period of the business plan in order to make significant investments in the IESO's facilities (\$30 million) and backup operating and data centres

(\$10.4 million) that are required to maintain our facilities, drive business transformation and maintain reliable system and business operations.

In addition to these major investments, a number of other capital projects will be undertaken to fulfill our mandate and advance our refreshed strategy. Details for the larger initiatives are outlined in Appendix 3.

The Market Renewal Program capital costs for 2023-2025 in the table below are the latest estimate of program spending and are in alignment with the revised schedule and in-service date approved by the IESO board.

Project details and associated descriptions are included in Appendix 3.

<b>Capital (\$ Millions)</b>	<b>2022 Budget</b>	<b>2022 Forecast</b>	<b>2023 Budget</b>	<b>2024 Budget</b>	<b>2025 Budget</b>
Core Operations Initiatives	30.0	30.0	23.0	28.6	30.6
Space Needs Program & Facility Investment	-	-	7.0	10.0	13.0
Back Up Operating and Data Centre Relocation	-	-	5.0	5.0	-
Market Renewal Program	41.2	37.1	51.0	32.3	14.6
<b>Total Capital Envelope</b>	<b>71.2</b>	<b>67.1</b>	<b>86.0</b>	<b>75.9</b>	<b>58.2</b>

## Full Time Equivalent (FTE) Staffing

In 2023, the average core operations FTEs of 805 is higher than 2022 levels by 91 FTEs due to delayed hiring of resources in 2022 and additional resources to support the IESO's initiatives on-boarded throughout 2023. Core operations FTE levels in 2024 increase to 838, mainly due to ramp-up of staff required to support additional energy procurements and prepare for the new market functions/services. In 2025, as Market Renewal Program (MRP) is completed, some resources will be returning to core operations as others conclude their temporary employments, thus the increase to 856 FTEs.

Staffing levels required to support the MRP implementation will reach 109 FTE in 2023, and are expected to decrease slightly in 2024 as the project moves to operations testing activities. In 2025 some staff are retained to provide market participants and internal staff with training, complete internal documentation, make tool changes post go-live and ensure that a framework is in place to measure the benefits.

<b>Average FTEs</b>	<b>2022 Budget</b>	<b>2022 Forecast</b>	<b>2023 Budget</b>	<b>2024 Budget</b>	<b>2025 Budget</b>
<b>Full Time Equivalents (FTEs)</b>					
Core Operations	730	714	805	838	856
Market Renewal Program	97	92	109	88	44
<b>Total FTEs</b>	<b>827</b>	<b>806</b>	<b>914</b>	<b>926</b>	<b>900</b>

# Market Renewal Financials

As of 2021, the Market Renewal Program (MRP) has entered the final phase of the initiative: implementation. This phase of work will ensure both the IESO and market participants are prepared for the launch of the renewed market.

## Market Renewal Program Baseline Schedule, Budget Update and Funding

The IESO has been working with vendors and stakeholders to refine and translate the design into system requirements and rules needed to finalize the delivery schedule for MRP. In August 2022, the IESO Board approved revised program funding and a refreshed schedule, including an in-service date of May 2025. The updated cost estimate for the delivery of MRP is \$233 million, including contingency, and is outweighed by the significant ratepayer benefits from project implementation. A recent review of the MRP business case determined the renewed market will deliver substantial net financial benefits of over \$700 million to Ontario consumers over the first 10 years of operation.

The capital activities for MRP include solution development deliverables and testing, which requires contracting external vendors as well as broad support from across the organization, including a significant complement of IT resources. MRP activities funded through operating costs include the development of market rules and related stakeholder activities, change management planning and coordination, and updates to internal and external manuals.

In 2025, the IESO will require funding post go-live to deliver market participant support and training, complete internal document updates, and start project closure activities while maintaining a capital budget for additional vendor support and internal IT costs for tool changes identified after the in-service date.

The annual MRP project costs from 2023-2025 are consistent with the Board-approved refreshed schedule and funding.

# Appendix 1 – IESO Performance Management – Measures and Targets

The IESO's performance management program provides an important level of oversight for the organization and its stakeholders, and helps to ensure accountability and course correction, as needed.

Measures and targets have been revised to align with the IESO's refreshed strategy and the 2023-2025 Business Plan. Since the strategy update this spring, Directors and ELT members have been engaged in an iterative process to contribute refreshed measures and identify annual targets. This set of measures is intended to help improve engagement and provide clear identification with how work efforts contribute to the IESO's overall strategy success.

Strategic Alignment		Measure	Target			Measure Weight
			2023	2024	2025	
Outcomes	<ul style="list-style-type: none"> <li>• Drive and guide the evolution of the system to ensure long-term reliability</li> <li>• Maintain affordability via competition and other mechanisms</li> <li>• Effectively respond to changes in policy and customer choices</li> </ul>	1. Market Renewal Program delivery: Total actual schedule complete percentage is within planned completion	80%	90%	100%	20%
		2. Maintaining Resource Adequacy: plans in place to ensure that resource adequacy reliability standards are met for the next 5 years	100%	100%	100%	10%
		3. Resource Adequacy procurement: number of supply offers in open and competitive mechanisms exceed the target capacity	20%	22%	24%	10%
		4. Enabling Resources Program delivery: Percentage complete according to program plan	33%	44%	65%	10%

Strategic Alignment		Measure	Target			Measure Weight
			2023	2024	2025	
Enablers	<ul style="list-style-type: none"> <li>• Evolve the IESO's culture enabled by people, tools, and processes to promote a high-performing organization</li> <li>• Effectively tell the IESO's story to strengthen stakeholder and community connections</li> </ul>	5. Employee pulse survey results for specific annual engagement areas of focus	4% average increase	4% average increase	4% average increase	15%
		6. Effectiveness of stakeholder engagement actions through positive survey results (within -2% tolerance range)	80%	81%	82%	15%
Key Risk	<ul style="list-style-type: none"> <li>• Maintain vigilance on cyber security threats to the IESO and the system, and adapt as required</li> </ul>	7. Cyber threat intelligence technology implementation	90%	92%	94%	10%
		8. Phishing Metrics Trend	<5%	<4%	<3%	5%
		9. Determine pathway for assessment of appropriate regulatory instrument for system cyber risk mitigation*	Substantial Completion	TBD	TBD	5%

\* 2023 is to develop a measure. Execution against cyber risk mitigation measure will occur in 2024 - 2025.

## Appendix 2 – Enterprise Risk Management

At the IESO, risk management is an integrated discipline that supports informed decision-making throughout the organization. We recognize the pivotal role it plays in balancing strategic planning with business execution and compliance. This facilitates informed decision-making and a conscious evaluation of the upside opportunity and downside aspect of risk.

Our integrated approach to managing risk recognizes the need for clear, timely direction and support from our Board of Directors and senior, business unit and functional management.

Our starting point for managing risk is our strategic planning process, where key risks are identified from the internal and external threats and opportunities. Risks and opportunities are identified by observing, analyzing and anticipating trends along with macroeconomic, industry-specific, regional and local developments. Senior management assesses the risks to achieving our strategic objectives, and incorporates measures into corporate and operating plans to mitigate these risks if they exceed our target risk levels.

The IESO uses a risk management ranking methodology to assess the key risks specific to our achieving our strategic and business plan objectives. Our top strategic risks, aligned with the IESO's strategic objectives and their associated residual risk assessment, are as follows:

Risk	Risk Assessment: Critical
	Mitigating Actions
<p><b>Material undersupply of energy at a provincial and regional level</b></p> <p>Medium-term timelines are becoming more critical within our strategic planning time horizon. As the province's reliability coordinator, the IESO must comply with, oversee and enforce reliability standards and processes that are set by several regulatory bodies within and outside of Ontario. The concern about undersupply arises from not having sufficient time to address the long lead times needed to build infrastructure or the ability to respond to changes in demand.</p>	<ul style="list-style-type: none"> <li>Advancing initiatives under the Resource Adequacy framework to design and execute procurements to acquire committed and contracted resources</li> <li>Expanding transmission planning programs to ensure new capacity can be connected</li> <li>Enhancing planning and forecasting tools for medium- and long-term energy supply</li> <li>Delivering annual acquisition report and annual planning outlook to provide stakeholders with much-needed insights into opportunities for existing and new resources</li> <li>Building alignment with government on how potential barriers to procurements and challenges to new facility development will be overcome</li> </ul>

Risk	Risk Assessment: Critical Mitigating Actions
<p><b>IESO actions to identify and address supply shortfalls not seen as credible by the stakeholder community</b></p> <p>The stakeholder community authorizes the IESO to take action and provide the resources necessary to create value towards the achievement of cost-effective reliability. Not having credibility with the stakeholder community can impede the IESO's ability to deliver results.</p>	<ul style="list-style-type: none"> <li>• Advancing initiatives under the Resource Adequacy Framework to design and execute procurements to acquire new supply</li> <li>• Consistently delivering on the Enabling Resources Program to introduce new grid-connected resources</li> <li>• Developing and executing a purposeful approach to stakeholder and community engagement</li> <li>• Enhancing external information sharing and reporting processes</li> </ul>
Risk	Risk Assessment: High Mitigating Actions
<p><b>The IESO's information technology systems and data are disrupted by cybersecurity threats</b></p> <p>Cyber attacks on the IESO's information technology systems and data could be highly disruptive to reliability, business systems and data protection through exploiting vulnerabilities across people, processes, and technology. These threats from domestic and foreign threat actors may arise from malicious intent, financial motivation, ignorance and/or complacency. This risk needs to be monitored to protect the business, employees, and safeguard critical data, systems, and facilities from being compromised.</p>	<ul style="list-style-type: none"> <li>• Promoting a culture of cybersecurity awareness through policies and training</li> <li>• Improving incident response capabilities and communications</li> <li>• Implementing targeted solutions to help better identify and mitigate malicious threat actors from launching a successful attack</li> <li>• Enhancing threat intelligence capabilities and upgrade network architecture, data management and security controls</li> </ul>



Risk	Risk Assessment: High Mitigating Actions
<p><b>Cyberattack impacting non-IESO owned assets required for operating the IESO-controlled grid</b></p> <p>As cyberattacks targeting critical infrastructure are on the rise, a sector-wide, concerted cyber response is required from government, regulatory bodies, market participants and the IESO to augment response efforts. A holistic view and understanding of market participants' cybersecurity postures and program objectives is required to develop an informed and coordinated approach to cyber resiliency for the Ontario electricity sector.</p>	<ul style="list-style-type: none"> <li>• Maintain robust reliability practices and contingency plans to respond to significant disruptions</li> <li>• Deliver Lighthouse services under OEB license to promote cyber information sharing and situational awareness across the sector</li> <li>• Conduct sector-wide threat assessments to identify vulnerabilities</li> <li>• Support external activities by developing playbooks and participating in broader groups and forums</li> </ul>
Risk	Risk Assessment: High Mitigating Actions
<p><b>Competitive mechanisms not working as intended impairs the IESO's efficiency mandate</b></p> <p>The IESO is investing considerable time and resources to renew the wholesale electricity markets and operate the grid to drive reliability outcomes. The IESO's strategic priorities could be impacted if competition and supporting market mechanisms are impaired. If competition does not materialize as expected, the loss of stakeholder confidence could drive an emerging narrative that markets don't work thereby frustrating the IESO's efficiency mandate.</p>	<ul style="list-style-type: none"> <li>• Design, development and testing of mechanisms as such as Market Power Mitigation under the Market Renewal Program</li> <li>• General Conduct Rule enforcement guidelines</li> <li>• Next phase of resource adequacy initiatives that involve competitive procurements and capacity auction as acquisition mechanisms</li> </ul>

Risk	Risk Assessment: High
	Mitigating Actions
<p><b>Readiness of our culture, people, processes and tools to rapidly adapt and pivot to address transformation</b></p> <p>To deliver on the organization’s goals and meet the demands of sector transformation, the IESO will need to transform. Meeting the demands of transformation is a complex process involving alignment of leadership, practices and culture. Evolving the maturity of the IESO’s culture, people, processes and tools will require some necessary pre- and co-requisite change readiness supports.</p>	<ul style="list-style-type: none"> <li>• Acquisition of business and grid control tools to support transformation</li> <li>• Resource planning and utilization: roles and accountabilities and workforce planning initiatives</li> <li>• Development of future capability: employee, leadership, technical, and business learning; succession planning</li> <li>• Culture transformation: Equity, diversity and inclusion (ED&amp;I) Annual Plan and employee experience annual areas of focus</li> <li>• Evolve data and information governance practices</li> </ul>

# Appendix 3 – Capital Spending

## Summary of 2023 - 2025 Capital Spending

Change Initiatives/Projects (\$ Millions)	2023 Budget	2024 Budget	2025 Budget
Replacement of the Settlement Systems	4.4	0.8	0.1
Data Excellence Program	0.5	0.8	0.5
Wide Area Visualization Environment (WAVE) - Phase 2	0.5	0.3	
Enabling Resources Program	0.3	0.6	3.3
Addressing Market Surveillance Panel (MSP) Recommendations	1.2	0.4	0.5
Dynamic Limits in Real-Time	2.8	0.2	
Enterprise Antivirus Replacement	0.3		
Resource Adequacy Program	1.0	1.2	1.3
Market Analysis and Simulation Toolset (MAST)	0.5	2.4	1.0
Long Term Demand Forecast Tool Replacement	1.0	0.8	
Core Network Refresh	2.0	0.6	
PMU Integration - Phase 3	1.0	1.0	1.0
Space Needs Program	7.0	10.0	13.0
Backup Operating and Data Centres Relocation Project	5.0	5.4	
Meter Data Management System Replacement (MDMS)	0.3	2.0	3.5
Enabling Grid Transformation Program	0.1	1.1	7.0
Lawson Refresh		0.2	1.9
Firewall Refresh	0.2	2.8	
Data Loss Prevention (DLP) Phase 2		1.5	1.0
Windows Infrastructure Refresh	1.9	0.1	
MIM Technical Refresh	1.1		
LogRhythm SIEM Refresh		2.9	0.1
Network WAN Infrastructure		1.6	0.1
Cybertec Refresh		0.9	0.1
Aspen File Server Refresh			2.1
Intrusion Prevention System (IPS) Refresh			1.4
<b>Capital (1 million and above)</b>	<b>31.1</b>	<b>37.6</b>	<b>37.9</b>
<b>Other Initiatives/Projects (Less than a 1 million)</b>	<b>3.9</b>	<b>6.0</b>	<b>5.7</b>
<b>Total Without Market Renewal Program</b>	<b>35.0</b>	<b>43.6</b>	<b>43.6</b>
<b>Market Renewal Program</b>	<b>51.0</b>	<b>32.3</b>	<b>14.6</b>
<b>Total Including Market Renewal Program</b>	<b>86.0</b>	<b>75.9</b>	<b>58.2</b>

## 2023-2025 Capital Plan Details

Project Name	Project Description
Replacement of the Settlement Systems	In replacing settlement systems that have been in operation since market opening in 2002, this project will address market re-design needs associated with implementation of the Market Renewal Program and enable systems to meet current and future business needs. In 2021, the IESO settled approximately \$22B in the IESO-Administered Markets, Ministry of Energy supported programs, and Global Adjustment through the settlement systems.
Data Excellence Program	To help harness the full value of IESO data, this program establishes an evolved data management and analytics framework to support the IESO's complex business needs. Data governance policies and tools (data catalogue), an updated data warehouse strategy and supporting applications for high-value use cases and a centre of excellence for advanced machine learning applications are in the scope of the program roadmap.
Wide Area Visualization Environment (WAVE) - Phase 2	This project will improve situational awareness and maintain ongoing compliance with NERC IRO standards by expanding modelling to neighbouring power systems (NYISO, PJM and Hydro-Quebec), improving the IESO's ability to monitor and respond to real-time conditions that may affect the IESO controlled grid.
Enabling Resources Program	Through the Program the IESO will prioritize and undertake the work to increase the number of resource types (e.g. hybrids, storage) that can participate in the IESO markets to deliver energy, capacity and ancillary services in order to increase options for reliability and competition to drive affordability.
Addressing Market Surveillance Panel (MSP) Recommendations	A portfolio of initiatives to develop, evolve and address inefficiencies in the electricity market in response to observations by the MSP and other stakeholders.
Dynamic Limits in Real-Time	In enabling the continuous assessment of real-time grid conditions, the Dynamic Limits in Real-Time (DLRT) Project will significantly improve the utilization of Ontario's transmission system, resulting in market and system operations efficiencies, and increased system security and resilience.
Enterprise Antivirus Replacement	The current antivirus solution which was commissioned in 2018 has approached end of support by the vendor on the solution lifecycle. The current vendor is moving to a cloud based service offering only, which will not meet the current NERC Critical Infrastructure Protection (CIP) standards. This project will replace the current antivirus solution with a new on-premise solution that will maintain the IESO's security posture and continue to meet the NERC CIP requirements.
Resource Adequacy Program	As part of its commitment to competitive mechanisms to meet Ontario's resource adequacy needs, the IESO is working with stakeholders to implement the Resource Adequacy framework to develop and execute multiple mechanisms, such as the Capacity Auction and Requests for Proposals to acquire products and services needed to maintain reliability cost-effectively.
Market Analysis and Simulation Toolset (MAST)	As the Market Renewal Program (MRP) is introducing wholesale market changes, current tools to monitor, assess and analyze the new market will be insufficient. MAST will deploy a common assessment tool environment that can be utilized in multiple business processes that will monitor, correct, improve or alter market design or operations over the day-ahead, pre-dispatch and real-time periods. The new tools are required after MRP go-live.

Long Term Demand Forecast Tool Replacement	This project will replace the existing Long-Term Demand Forecast tools which have reached end of life and update the end-use load profiles used to develop the long-term forecasts. These tools are essential to support the planning processes that forecast system needs and provide infrastructure investment advice for the next 20 years.
Core Network Refresh	The IESO's Core and Data Centre networks provide the backbone of the IESO's network infrastructure, connecting all systems and locations in a robust and reliable high-performance network. The existing core and data centre infrastructure needs to be refreshed as it is approaching the end of manufacturer support.
PMU Integration - Phase 3	Phasor Measurement Units (PMUs) can continuously deliver high-quality, time synchronized real-time power system data at a high frequency (30-60 samples per second). Obtaining PMU data from across Ontario will improve real-time monitoring of the IESO-controlled grid; obtaining PMU data from other jurisdictions will improve wide-area view; and both will improve the IESO's overall situational awareness. PMUs also provide the IESO the ability to diagnose incidents and to more efficiently comply with several NERC reliability standards. Building on the earlier phases of this work, Phase 3 will integrate PMU data into the IESO's operations support tools and services, as well as live information into the Control Room. The Market Rules to support this change have been implemented and will become enforceable at the end of 2024 to give participants and the IESO sufficient time to implement these changes.
Space Needs Program	IESO owns and leases three office facilities in the Greater Toronto Area. Our primary location in Mississauga, which the IESO owns and operates, was built in 1989 and requires significant investments in its electrical, mechanical and structural systems over the next 4-5 years. Building on the experience from an office pilot project being undertaken in 2022, the results will define the path forward with respect to the IESO's overall office footprint and the modernization of the workspace. The modernization of the workspace will be critical to meet the needs of today's workforce and supports the attraction and retention of IESO staff
Backup Operating and Data Centres Relocation Project	As part of its system operator mandate, the IESO operates a Backup Operating Centre (BOC) and Backup Data Centre (BDC) to ensure continuous operation of Ontario's power system and IESO's business operations in event of an emergency affecting the power system or IESO's control centre. These facilities are also required in order to comply with North American Electric Reliability Corporation (NERC) reliability and critical infrastructure protection standards. The current BOC and BDC are reaching the end of their current lease terms and no longer meet the evolving needs of the IESO. This project will determine and secure a new location for these two critical facilities and make the necessary investments in order to meet both regulatory compliance and reliability needs.
Meter Data Management System Replacement (MDMS)	The current Meter Data Management solution that supports the IESO settlement processes is currently deployed on an application that cannot be upgraded. The business capabilities that the application supports will be delivered as part of an alternative solution through the Meter Data Management System Replacement project.

Enabling Grid Transformation Program	In conjunction with the PMU Phase 3, Wide Area Visualization - Phase 2 and Dynamic Limits In Real-Time projects, this program will implement new technologies, processes, and more dynamic tools to support the operation of the transforming grid with more diverse resource types and a more complex transmission system. This work is critical to support resource retirements/replacements, meet incremental system demand by adding supply resources to the system, as well as provide future options for de-carbonization.
Lawson Refresh	Lawson Financials, the current financial and accounting application that supports both the Market and Corporate accounts has been used at the IESO since 1998. The last Lawson refresh project was completed in 2020 and is approaching end of life. This project will refresh our current financial system to ensure that it continues to meet our future financial accounting needs with a vendor supported tool.
Firewall Refresh	The existing IESO firewalls which provide access control to critical parts of the network such as the DMZ and internal corporate network are nearing the end of vendor support and need to be upgraded. This project seeks to build on the strengths of the existing security architecture by upgrading the key security controls at the firewall perimeter of IESO's data network and allow the IESO to take advantage of features which are used to reduce the risk of evolving cyber attacks and ensure mitigation of security concerns related to the industry.
Data Loss Prevention (DLP) Phase 2	Data loss prevention (DLP) is an approach that seeks to improve information security and protect business information from data breaches. This project will implement a technological DLP solution that will provide features and benefits in a variety of situations, all of which will allow the IESO to better understand how high-value data is handled within the network and will automate the prevention of data sharing with unauthorized personnel.
Windows Infrastructure Refresh	The current version of Microsoft Windows Server operating system is nearing end-of-life at which time Microsoft no longer provides support for the product, including critical security patches. This project will move us to the latest supported version of the Windows operating system and refresh the underlying hardware.
MIM Technical Refresh	The Market Information Management (MIM) system is the IESO solution that receives Dispatch Information (bids/offers) from Market Participants and is the repository for the results of the Day Ahead Optimization System and Market Information System. This project will update the solution to use supported hardware and supported technology components.
LogRhythm SIEM Refresh	LogRhythm is IESO's Security Information and Event Monitoring (SIEM) solution which monitors security events by gathering log data across all IT connected systems. This project will refresh the LogRhythm solution to provide more computing capacity to accommodate the growth of IESO's IT systems.
Network WAN Infrastructure	The IESO Wide-Area Network (WAN) infrastructure is a collection of networks that communicate with one another between all IESO locations, and with Market Participants through a WAN provider. This project will replace all WAN infrastructure which is reaching end of life.
Cybertec Refresh	The IESO collects over 100,000 telemetry data points every two (2) seconds and pushes that data into IESO's Supervisory Control and Data Acquisition (SCADA) systems. The Cybertec gateways support this critical function. This project will refresh the existing Cybertec gateways that have reached the end of their useful life.

Aspen File Server Refresh	Aspen is IESO's corporate fileserver which stores much of IESO's business information. This project will replace the underlying hardware and software with new hardware and software and migrate data to the new platform.
Intrusion Prevention System (IPS) Refresh	The Intrusion Prevention System (IPS) prevents network security attacks such as brute force attacks, Denial of Service (DoS) attacks and vulnerability exploits. IPS continuously monitors network traffic to detect/prevent against known and unknown vulnerability. This project will refresh the current IPS as it reaches end of life.

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## **2023 ANNUAL REPORT AND AUDITED FINANCIAL STATEMENT**

**TO BE FILED AT A LATER DATE**

## **INCREMENTAL REVENUE REQUIREMENT AND REVISED USAGE FEE METHODOLOGY**

The IESO's incremental revenue requirement enables the IESO to fulfill the specific new initiatives outlined in the Minister's letter to the IESO, dated July 10, 2023 (see Exhibit B-1-1), in support of its *Powering Ontario's Growth* plan and set out in its Amendment to the 2023-2025 Business Plan (see Exhibit B-1-2). The IESO developed the proposed incremental revenue requirements and calculated revised usage fees for fiscal years 2024 and 2025, for both domestic and export customer classes, by following the steps below.

### **Business Planning to Establish the Incremental Revenue Requirements**

In its July 10, 2023, letter the Minister asked the IESO to work on several initiatives in support of the government's *Powering Ontario's Growth* plan. The specific incremental resource requirements and revenue requirements resulting from the implementation of this work were defined through the process to develop the IESO's 2023-2026 Interim Year Business Outlook (see Exhibit B-1-4). The business outlook is a requirement of the three-year business planning cycle, as per the Memorandum of Understanding between the Ministry of Energy and the IESO and is developed following the same principles as the enterprise planning framework used to develop IESO business plans. Specifically, this process starts with a review of the progress towards IESO's core strategies and imperatives included in the 2023-2025 Business Plan, and then moves to divisional planning to incorporate updates to ongoing core requirements, as well as new and incremental initiatives or projects that will support the execution of the strategy or government plans.

Based on the outcome of the IESO's 2023-2026 Interim Year Business Outlook the IESO issued an amendment to its 2023-2025 Business Plan to address the specific resource requirements resulting from the implementation of the *Powering Ontario's Growth* plan. Accordingly, the Amendment establishes the proposed incremental revenue requirements.

### **Revised Usage Fees**

The IESO has calculated revised usage fees for 2024 and 2025 for both domestic and export customer classes. The revised usage fees are determined by adding the incremental revenue

requirements to those approved through OEB Decision and Order in EB-2022-0318, allocated by customer class, and dividing by the charge determinants established in EB-2022-0318.

### **Cost Allocation Model Used to Calculate the Revised Usage Fees**

The IESO's revised usage fees for domestic and export customers are calculated for the IESO by Elenchus Research Associates Inc. (Elenchus) using the same methodology approved in EB-2022-0318. This allocation assigns the costs to the appropriate customer class based on functional categories (i.e., business unit and department).

To calculate the 2024 and 2025 revised usage fees, the IESO requested Elenchus to rerun its model used to calculate the usage fees in EB-2022-0318 with updates to include the incremental revenue requirements for 2024 and 2025.

### **Charge Determinants Used to Calculate the Usage Fees**

The charge determinants used to calculate the usage fees in EB-2022-0318 have been used to calculate the revised usage fees for 2024 and 2025 for domestic and export customers (see Exhibit C-2-1).

## 2024-2025 INCREMENTAL REVENUE REQUIREMENTS AND REVISED USAGE FEES

This exhibit presents the incremental revenue requirements and revised domestic and export usage fees that were determined using the methodology outlined in Exhibit C-1-1 Incremental Revenue Requirement and Usage Fee Methodology.

### 2024-2025 Incremental Revenue Requirements

The IESO is requesting an incremental revenue requirement of \$4.5 million for 2024, and \$5.4 million for 2025. The incremental revenue requirements for 2024 and 2025 are in addition to the approved revenue requirements for 2024 and 2025 in EB 2022-0318. Combining the incremental revenue requirements with those previously approved, equates to a total revenue requirement of \$222.9 million in 2024 and \$235.1 million in 2025 respectively. The incremental revenue requirements will allow the IESO to carry out specific initiatives outlined in the Minister's letter to the IESO, dated July 10, 2023, in support of its *Powering Ontario's Growth* plan (see Exhibit B-1-1). The IESO's revenue requirements are provided in Table 1 below and are further described in Exhibit B-1-2 Amendment to the 2023-2025 Business Plan, Exhibit D-1-1 OM&A Overview and Exhibit D-1-2 Business Unit Detail, and corresponding attachments.

**Table 1: IESO's Revenue Requirements (\$ millions)**

	OEB Approved Budget			Incremental Budget per Amendment		Total Revised Budget	
\$ Millions	2023	2024	2025	2024	2025	2024	2025
Revenue Requirement	208.4	218.4	229.7	4.5	5.4	222.9	235.1

**Charge Determinants Used to Calculate the Revised Usage Fees**

The charge determinants used to calculate the revised domestic usage fees for 2024 and 2025 are based on those used to calculate the domestic usage fees in EB-2022-0318. These values are shown in Table 2 below.

**Table 2: Energy Volumes for 2024 and 2025 Usage Fees**

	2024		2025	
	Domestic (TWh)	Export (TWh)	Domestic (TWh)	Export (TWh)
Energy Volumes	144.9	10	150.1	8.4
Total Energy Volume	154.9		158.6	

**Usage Fees**

The revised domestic and export usage fees for 2024 and 2025, respectively, are presented in Tables 3 and 4 below.

**Table 3: 2024 IESO Domestic and Export Usage Fees as Calculated by Elenchus**

	Usage Fee
Domestic	\$ 1.4516/MWh
Export	\$ 1.2549/MWh

**Table 4: 2025 IESO Domestic and Export Usage Fees as Calculated by Elenchus**

	Usage Fee
Domestic	\$ 1.4854/MWh
Export	\$ 1.4333/MWh

## INCREMENTAL OM&A OVERVIEW

### Operating, Maintenance and Administration (OM&A) Overview

The incremental OM&A budget of \$4.5 million for 2024 and \$5.4 million for 2025 will fund additional resources to carry out the initiatives in support of the *Powering Ontario's Growth* plan as per the Minister's letter to the IESO, dated July 10, 2023 (see Exhibit B-1-1). The IESO views these new initiatives as a significant event with cascading effects to the organization that could compromise the IESO's ability to work within future year's revenue requirements and carry-out the activities in its 2023-2025 Business Plan. The incremental OM&A will fund additional resources to prepare detailed plans and assessments that are needed to inform the growth of the system in an orderly and cost-effective manner, underpin the success of the energy transformation, and enable economic growth, as per policy objectives.

The approved budget, the incremental and the revised budget OM&A amounts are provided in Table 1 below.

**Table 1: OM&A Costs (\$ Millions)**

OEB Approved Budget		Incremental Budget per Amendment		Total Revised Budget	
2024	2025	2024	2025	2024	2025
206.6	211.9	4.5	5.4	211.1	217.3

A summary of the Incremental OM&A costs is included in Exhibit D-1-1 Attachment 1 - Summary of OM&A Expenses (Appendix 2-JA). IESO business unit OM&A budgets and their associated work are set out in Exhibit D-1-2 OM&A Business Unit Detail and D-1-2 Attachment 1 – OM&A Business Unit Table.

Summary OM&A Expenses

	2024 Approved Budget	Incremental 2024 Budget per Amendment	Revised 2024 Budget Per Amendment
Markets & Reliability	39.1	1.2	40.3
Planning, Conservation and Resource Adequacy	26.2	2.0	28.2
Corporate Relations, Stakeholder Engagement and Innovation	15.8	0.9	16.7
Information and Technology Services	49.4	-	49.4
Legal Resources and Corporate Governance	30.5	0.4	30.9
Market Assessment and Compliance Division	2.5	-	2.5
CEO	1.5	-	1.5
Corporate Services	30.2	-	30.2
Human Resources	6.4	-	6.4
Corporate Adjustment <sup>1</sup>	0.6	-	0.6
Market Renewal	4.4	-	4.4
Total OM&A Expenses	206.6	4.5	211.1
Interest, Amortization and Registration Fees	11.8	-	11.8
Total Expenses	\$218.4	\$4.5	\$222.9

2025 Approved Budget	Incremental 2025 Budget per Amendment	Revised 2025 Budget Per Amendment
40.7	1.2	41.9
24.9	2.1	27.0
16.9	1.9	18.8
51.6	-	51.6
32.2	0.2	32.4
3.7	-	3.7
1.6	-	1.6
31.5	-	31.5
6.4	-	6.4
(0.1)	-	(0.1)
2.5	-	2.5
211.9	5.4	217.3
17.8	-	17.8
\$229.7	\$5.4	\$235.1

<sup>1</sup> Corporate Adjustment (comprised of the amortization of accumulated deficit resulting from the Public Sector Accounting Standards transition item and other post-employment benefits, as well as the overhead cost recovery)

## INCREMENTAL OM&A BUSINESS UNIT DETAIL

The work required of the IESO to support *Powering Ontario's Growth* plan will be conducted by the business units described below in this exhibit (see also Exhibit D-1-2 Attachment 1 – OM&A Business Unit Table (Appendix 2-JC) and Exhibit D-1-2 Attachment 2 – Organizational Charts).

**Table 1: Summary of OM&A for Business Units**

	OEB Approved Budget		Incremental Budget per Amendment			Total Revised Budget	
(\$ millions)	2024	2025	2024	2025	Total	2024	2025
Markets and Reliability	39.1	40.7	1.2	1.2	2.4	40.3	41.9
Planning, Conservation and Resource Adequacy	26.2	24.9	2.0	2.1	4.1	28.2	27.0
Corporate Relations, Stakeholder Engagement and Innovation	15.8	16.9	0.9	1.9	2.8	16.7	18.8
Information and Technology Services	49.4	51.6	-	-	-	49.4	51.6
Legal Resources and Corporate Governance	30.5	32.2	0.4	0.2	0.6	30.9	32.4
Market Assessment and Compliance Division	2.5	3.7	-	-	-	2.5	3.7
CEO	1.5	1.6	-	-	-	1.5	1.6
Corporate Services	30.2	31.5	-	-	-	30.2	31.5
Human Resources	6.4	6.4	-	-	-	6.4	6.4
Corporate Adjustment	0.6	-0.1	-	-	-	0.6	-0.1
Market Renewal	4.4	2.5	-	-	-	4.4	2.5
<b>Total OM&amp;A Expenses</b>	<b>206.6</b>	<b>211.9</b>	<b>4.5</b>	<b>5.4</b>	<b>9.9</b>	<b>211.1</b>	<b>217.3</b>

### Summary of IESO Work to Support *Powering Ontario's Growth* plan

This section describes a summary of the IESO's work to support Powering Ontario's Growth Plan. The section that follows describes the effort involved from business units across the IESO that will conduct this work.

- Design, and consult on, the next round of long-term competitive resource procurements ("Long-Term 2 RFP" or "LT2 RFP"), focused on new clean energy resources.
- Design options for a Future Clean Electricity Fund that would support the development of new clean electricity projects and/or programs.
- Support the Ministry of Energy's consultation on a future energy efficiency framework to inform the Ministry's work on developing a proposed path forward for Conservation and Demand Management (CDM) programming post-2024. This includes completing detailed



design work on the CDM post-2024 framework including establishing budgets, targets and framework governance.

- Develop a framework for competitive transmitter selection, including consideration of commercial options.
- Develop transmission reinforcement options and recommendations to:
  - Address bottlenecks within the Greater Toronto Area, to support future growth and the phase-out of natural gas fired generation.
  - Unlock new opportunities for growth in Northern Ontario and enable the connection of renewable generation.
  - Accommodate small modular reactors at the Darlington site, enabling 1,200 MW of new nuclear installed capacity.
  - Accommodate a new nuclear generating station at the Bruce site, enabling up to 4,800 MW of new nuclear installed capacity.
- Identify new and existing corridors of land that should be protected for future transmission infrastructure that is needed to address known bottlenecks and accommodate new nuclear and renewable generation.
- In collaboration with Bruce Power, develop a cost sharing and recovery framework for a nuclear new-build Impact Assessment at the Bruce nuclear site.

## Markets & Reliability (M&R)

M&R is responsible for the reliable and efficient operation of the Ontario power system and the administration of Ontario's real-time wholesale electricity market including near-term planning, market development, assessments of connections to the grid, leading sector emergency preparedness and response, and identifying resource acquisition needs.

	OEB Approved Budget		Incremental Budget per Amendment			Total Revised Budget	
(\$ millions)	2024	2025	2024	2025	Total	2024	2025
Markets and Reliability	39.1	40.7	1.2	1.2	2.4	40.3	41.9

The accelerating transformation of the grid, particularly from Powering Ontario's Growth plan, requires dedicated resources to ensure Ontario's electricity system is operable in both the current and future timeframes. This includes examining potential scenarios of resource mixes and system configurations to ensure the system will remain operable. Similarly, resources are required to increase monitoring and evolve the IESO Administered Markets such that they continue to achieve system requirements in the least costly manner and thus continue to provide rate-payer value.

### **Planning, Conservation and Resource Adequacy (PCRA)**

PCRA is responsible for the IESO's forward looking reliability efforts, including power system planning, development of the Annual Planning Outlook, resource procurement, and energy efficiency programs.

	OEB Approved Budget		Incremental Budget per Amendment			Total Revised Budget	
(\$ millions)	2024	2025	2024	2025	Total	2024	2025
Planning, Conservation and Resource Adequacy	26.2	24.9	2.0	2.1	4.1	28.2	27.0

To enable the government's energy transition and economic development policy objectives in *Powering Ontario's Growth* plan, the Ontario electricity system will require significant expansion. This will require transmission planning to identify cost-effective options and recommendations for expanding the transmission system in alignment with the government's policy objectives. This new objective will require additional resources because there are several areas in the province that need to be studied over 2024-2025 with consideration of a number of scenarios and options for expansion. Further, additional resources will be required to develop a framework for competitive transmitter selection, corridor identification and more transmission planning scenarios.

Additionally, a more efficient, long-term model is needed to recognize the role of energy efficiency as a non-emitting resource that better responds to evolving system, market, and customer needs; therefore, the IESO requires additional resources to complete detailed design work on the post-2024 Conservation Demand Management Framework including establishing budgets, targets and Framework governance.

## Corporate Relations, Stakeholder Engagement and Innovation (CRSEI)

CRSEI is responsible for stakeholder and community engagement, government affairs, communications, Indigenous relations, innovation, and the implementation of energy policy.

	OEB Approved Budget		Incremental Budget per Amendment			Total Revised Budget	
(\$ millions)	2024	2025	2024	2025	Total	2024	2025
Corporate Relations, Stakeholder Engagement and Innovation	15.8	16.9	0.9	1.9	2.8	16.7	18.8

The various areas of work outlined in the *Powering Ontario's Growth* plan will require a proportional increase in stakeholder and community engagement, communications and government relations resources, to ensure activities being undertaken are informed by a broad and diverse set of perspectives across the electricity sector and meet government policy objectives.

The development of options for the Future Clean Electricity Fund requires additional resources to research, inform potential program design, develop options for program administration, and lead discussions with potential program users. These resources will also support ongoing Clean Energy Credit policy, design and enhancement activities.

## Information and Technology Services (I&TS)

The I&TS group provides for information technology solutions and strategies, and cybersecurity management.

	OEB Approved Budget		Incremental Budget per Amendment			Total Revised Budget	
(\$ millions)	2024	2025	2024	2025	Total	2024	2025
Information and Technology Services	49.4	51.6	-	-	-	49.4	51.6

No additional budget has been requested because of *Powering Ontario's Growth* plan.

## Legal, Resource and Corporate Governance (LRCG)

LRCG is responsible for legal services, support for the IESO Board of Directors, contract management, maintenance of the market rules and regulatory affairs.

	OEB Approved Budget		Incremental Budget per Amendment			Total Revised Budget	
(\$ millions)	2024	2025	2024	2025	Total	2024	2025
Legal Resources and Corporate Governance	30.5	32.2	0.4	0.2	0.6	30.9	32.4

1

2 Incremental contract management resources and legal services are needed to support  
3 agreement negotiation with Bruce Power to fund the Impact Assessment work for a new  
4 nuclear station at the Bruce Site and to support options for the Future Clean Electricity Fund.

5

## 6 **Market Assessment and Compliance Division (MACD)**

7 MACD is accountable for the enforcement of Market Rules and NERC reliability standards,  
8 compliance, rule interpretations and enforcement guidelines, and support for the Market  
9 Surveillance Panel (MSP).

	OEB Approved Budget		Incremental Budget per Amendment			Total Revised Budget	
(\$ millions)	2024	2025	2024	2025	Total	2024	2025
Market Assessment and Compliance Division	2.5	3.7	-	-	-	2.5	3.7

10

11 No additional budget has been requested because of *Powering Ontario's Growth* plan.

## 12 **Chief Executive Office (CEO)**

13 The CEO is comprised of the President and Chief Executive Officer and staff.

	OEB Approved Budget		Incremental Budget per Amendment			Total Revised Budget	
(\$ millions)	2024	2025	2024	2025	Total	2024	2025
CEO	1.5	1.6	-	-	-	1.5	1.6

14

15 No additional budget has been requested because of *Powering Ontario's Growth* plan.

## 16 **Corporate Services (CS)**

CS is responsible for financial planning and analysis, corporate controllership, treasury and pension operations, market settlements, project management, organizational procurement and facilities management. About one third of the spending of this group is related to IESO's office lease agreements, maintenance, insurance and property taxes.

	OEB Approved Budget		Incremental Budget per Amendment			Total Revised Budget	
(\$ millions)	2024	2025	2024	2025	Total	2024	2025
Corporate Services	30.2	31.5	-	-	-	30.2	31.5

No additional budget has been requested because of *Powering Ontario's Growth* plan.

## Human Resources (HR)

HR is responsible for talent acquisition, learning and development, performance management, succession planning, compensation and benefits, and employee and labour relations.

	OEB Approved Budget		Incremental Budget per Amendment			Total Revised Budget	
(\$ millions)	2024	2025	2024	2025	Total	2024	2025
Human Resources	6.4	6.4	-	-	-	6.4	6.4

No additional budget has been requested because of *Powering Ontario's Growth* plan.

## Corporate Adjustments

Corporate Adjustments is mainly comprised of the annual amortization of the accumulated deficit resulting from the Public Sector Accounting Standards (PSAS) transition item corresponding to change in pension and other-post employment benefits; partially offset by the overhead cost recovery from other funding sources.

	OEB Approved Budget		Incremental Budget per Amendment			Total Revised Budget	
(\$ millions)	2024	2025	2024	2025	Total	2024	2025
Corporate Adjustment	0/6	-0.1	-	-	-	0.6	-0.1

No additional budget has been requested because of *Powering Ontario's Growth* plan.

## **Market Renewal Program (MRP)**

MRP represents a set of enhancements to Ontario's electricity market design, to address known issues with the existing market design and deliver ratepayer value by meeting system needs more cost-effectively. MRP is about improving the way electricity is priced and scheduled in order to meet Ontario's current and future electricity needs reliably, transparently, efficiently and at lowest cost.

	OEB Approved Budget		Incremental Budget per Amendment			Total Revised Budget	
(\$ millions)	2024	2025	2024	2025	Total	2024	2025
Market Renewal	4.4	2.5	-	-	-	4.4	2.5

No additional budget has been requested because of *Powering Ontario's Growth* plan.

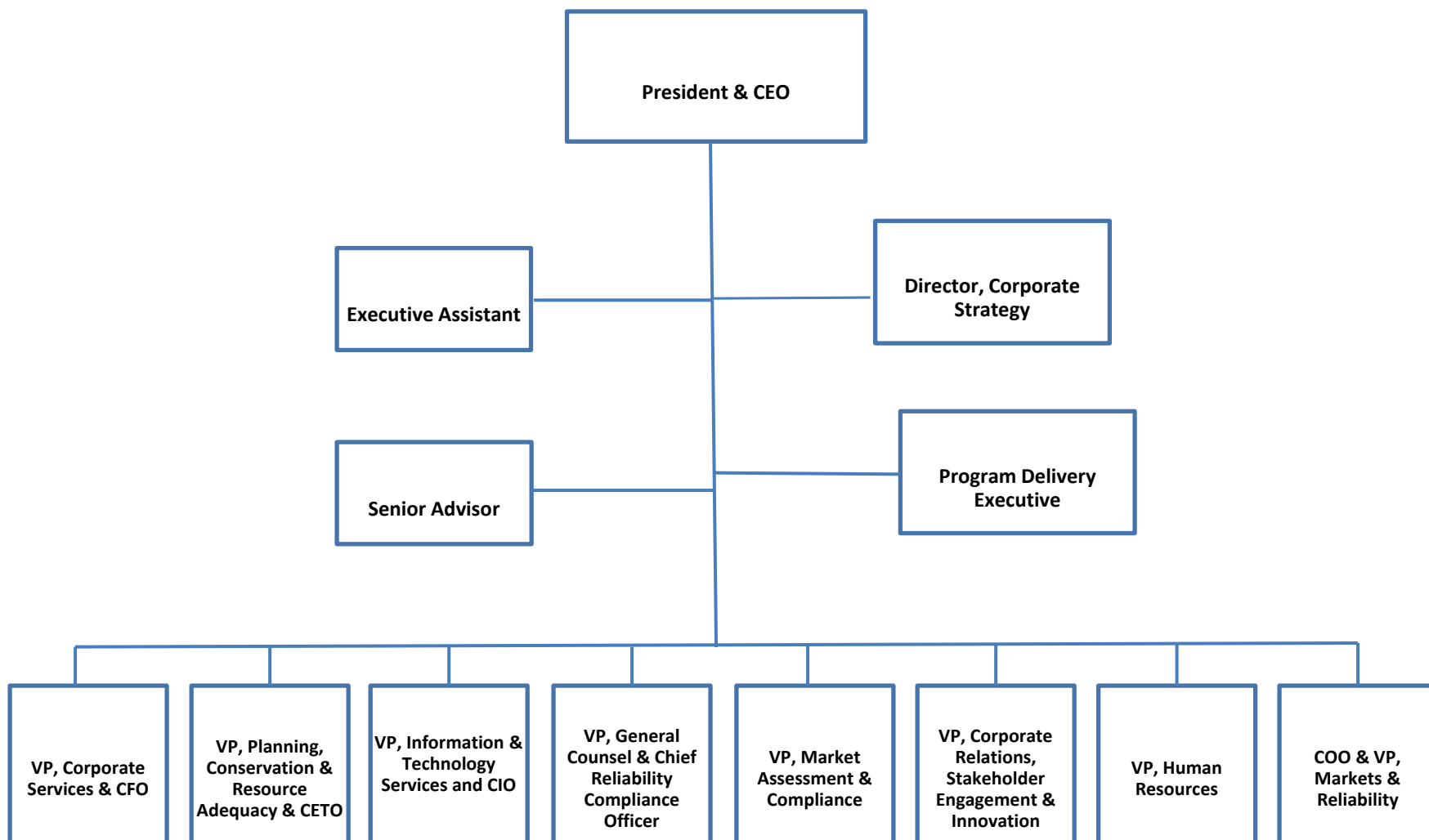
OM&A Business Unit Table

(\$ Millions)		2024 Approved Budget	Incremental 2024 Budget Per Amendment	Revised 2024 Budget Per Amendment
<b>Markets &amp; Reliability</b>		<b>39.1</b>	<b>1.2</b>	<b>40.3</b>
	VP Office	1.1	-	1.1
	Power System Assessments	11.6	-	11.6
	Market Operations	17.2	-	17.2
	Wholesale Market Development	3.7	0.9	4.6
	Reliability Assurance & Operational Assessments	5.5	0.3	5.8
<b>Planning, Conservation and Resource Adequacy</b>		<b>26.2</b>	<b>2.0</b>	<b>28.2</b>
	VP Office and Planning Projects & Sustainability	1.1	-	1.1
	Resource Planning	6.4	-	6.4
	Transmission Planning	5.2	1.7	6.9
	Resource & System Adequacy	7.1	-	7.1
	Demand Side Management	6.4	0.3	6.7
<b>Corporate Relations, Stakeholder Engagement and Innovation</b>		<b>15.8</b>	<b>0.9</b>	<b>16.7</b>
	VP Office	0.7	-	0.7
	Government Affairs	0.5	0.2	0.7
	Corporate Communications	4.0	0.2	4.2
	Stakeholder and Community Engagement	6.3	0.1	6.4
	Innovation, Research & Development	4.3	0.4	4.7
<b>Information and Technology Services</b>		<b>49.4</b>	<b>-</b>	<b>49.4</b>
	VP Office	0.9	-	0.9
	CIO Office (Organizational Governance Support)	2.2	-	2.2
	Information Security	5.6	-	5.6
	Business Services & Solution Delivery	19.1	-	19.1
	IT Infrastructure & Operations (Technology Services)	21.6	-	21.6
<b>Legal Resources and Corporate Governance</b>		<b>30.5</b>	<b>0.4</b>	<b>30.9</b>
	VP Office	1.5	-	1.5
	General Counsel	10.8	0.3	11.1
	Market Rules and Regulatory Affairs	2.9	-	2.9
	Regulatory Fees	0.6	-	0.6
	Board	0.8	-	0.8
	NERC and NPCC Membership	5.3	-	5.3
	Contract Management	8.6	0.1	8.7
<b>Market Assessment and Compliance Division</b>		<b>2.5</b>	<b>-</b>	<b>2.5</b>
	Market Assessment and Compliance Division	1.8	-	1.8
	Regulatory Fees	0.7	-	0.7
<b>CEO Office</b>		<b>1.5</b>	<b>-</b>	<b>1.5</b>
<b>Corporate Services</b>		<b>30.2</b>	<b>-</b>	<b>30.2</b>
	VP Office	0.6	-	0.6
	Corporate Finance	5.9	-	5.9
	Procurement	1.8	-	1.8
	Risk, Performance & Reliance and Internal Audit	2.3	-	2.3
	Settlements	5.9	-	5.9
	Facilities	10.2	-	10.2
	Enterprise Change	3.5	-	3.5
<b>Human Resources</b>		<b>6.4</b>	<b>-</b>	<b>6.4</b>
<b>Corporate Adjustment<sup>1</sup></b>		<b>0.6</b>	<b>-</b>	<b>0.6</b>
<b>Market Renewal</b>		<b>4.4</b>	<b>-</b>	<b>4.4</b>
<b>Total OM&amp;A Expenses</b>		<b>206.6</b>	<b>4.5</b>	<b>211.1</b>
<b>Interest, Amortization and Registration Fees</b>		<b>11.8</b>	<b>-</b>	<b>11.8</b>
	Amortization	22.0	-	22.0
	Interest	- 9.7	-	- 9.7
	Registration Fees	- 0.5	-	- 0.5
		<b>218.4</b>	<b>4.5</b>	<b>222.9</b>

2025 Approved Budget	Incremental 2025 Budget Per Amendment	Revised 2025 Budget Per Amendment
<b>40.7</b>	<b>1.2</b>	<b>41.9</b>
1.1	-	1.1
12.1	-	12.1
18.0	-	18.0
3.7	0.5	4.2
5.8	0.7	6.5
<b>24.9</b>	<b>2.1</b>	<b>27.0</b>
1.0	-	1.0
6.8	-	6.8
5.3	1.7	7.0
5.2	-	5.2
6.6	0.4	7.0
<b>16.9</b>	<b>1.9</b>	<b>18.8</b>
0.7	-	0.7
0.5	0.2	0.7
4.1	0.3	4.4
7.1	1.0	8.1
4.5	0.4	4.9
<b>51.6</b>	<b>-</b>	<b>51.6</b>
0.9	-	0.9
2.3	-	2.3
6.0	-	6.0
20.0	-	20.0
22.4	-	22.4
<b>32.2</b>	<b>0.2</b>	<b>32.4</b>
1.5	-	1.5
11.1	-	11.1
3.0	-	3.0
0.7	-	0.7
0.8	-	0.8
6.0	-	6.0
9.1	0.2	9.3
<b>3.7</b>	<b>-</b>	<b>3.7</b>
3.0	-	3.0
0.7	-	0.7
<b>1.6</b>	<b>-</b>	<b>1.6</b>
<b>31.5</b>	<b>-</b>	<b>31.5</b>
0.7	-	0.7
6.2	-	6.2
2.2	-	2.2
2.1	-	2.1
6.0	-	6.0
10.2	-	10.2
4.1	-	4.1
<b>6.4</b>	<b>-</b>	<b>6.4</b>
- 0.1	-	- 0.1
<b>2.5</b>	<b>-</b>	<b>2.5</b>
<b>211.9</b>	<b>5.4</b>	<b>217.3</b>
<b>17.8</b>	<b>-</b>	<b>17.8</b>
27.0	-	27.0
- 9.2	-	- 9.2
-	-	-
<b>229.7</b>	<b>5.4</b>	<b>235.1</b>

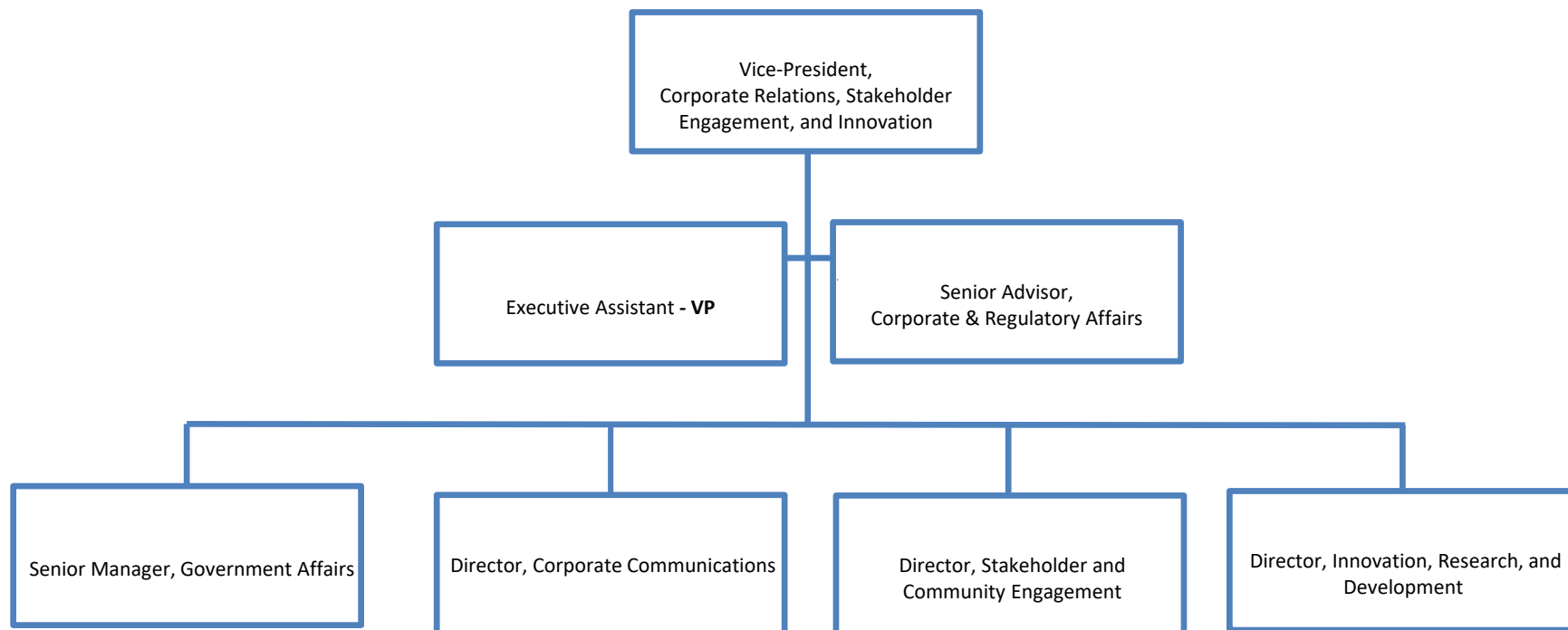
<sup>1</sup>Corporate Adjustment includes the amortization of accumulated deficit resulting from the Public Sector Accounting Standards (PSAS) transition item and other post-employment benefits, as well as overhead cost recovery

# IESO

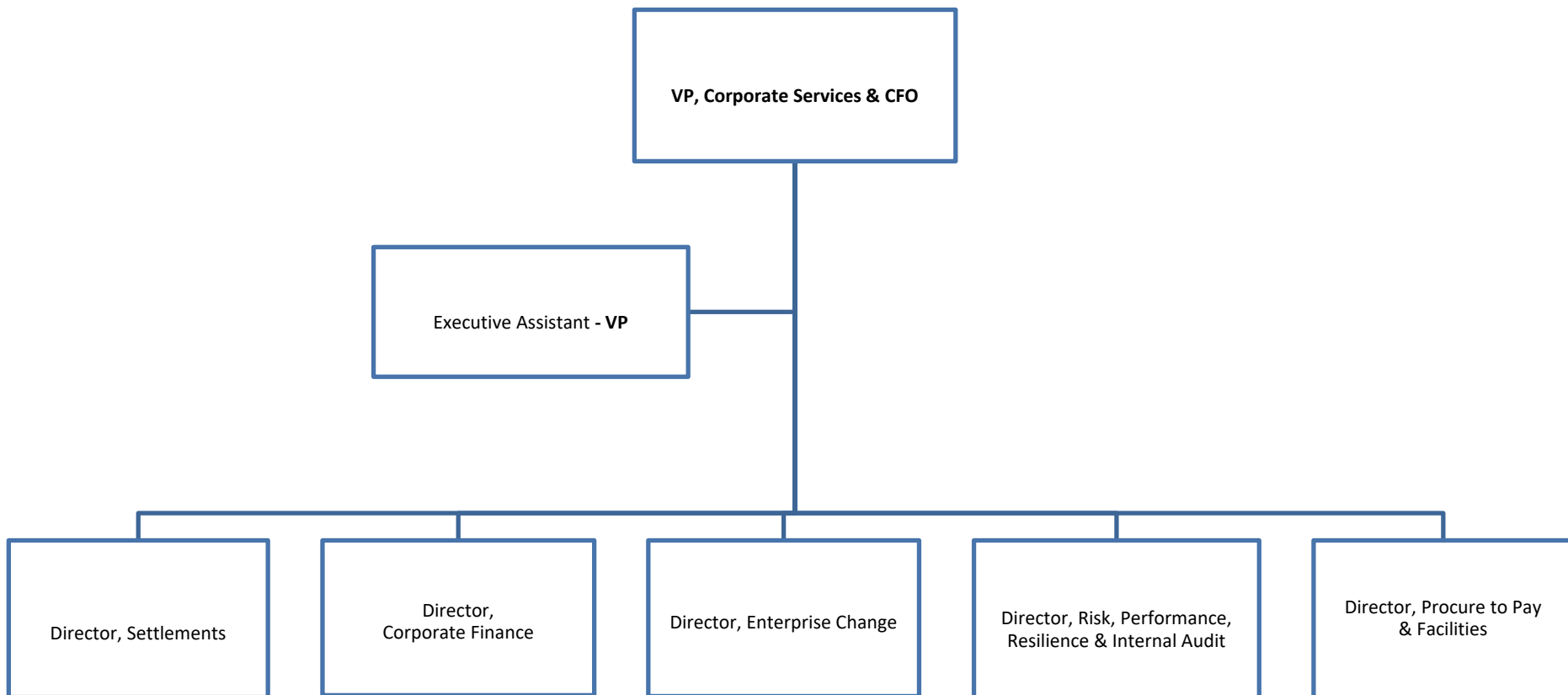




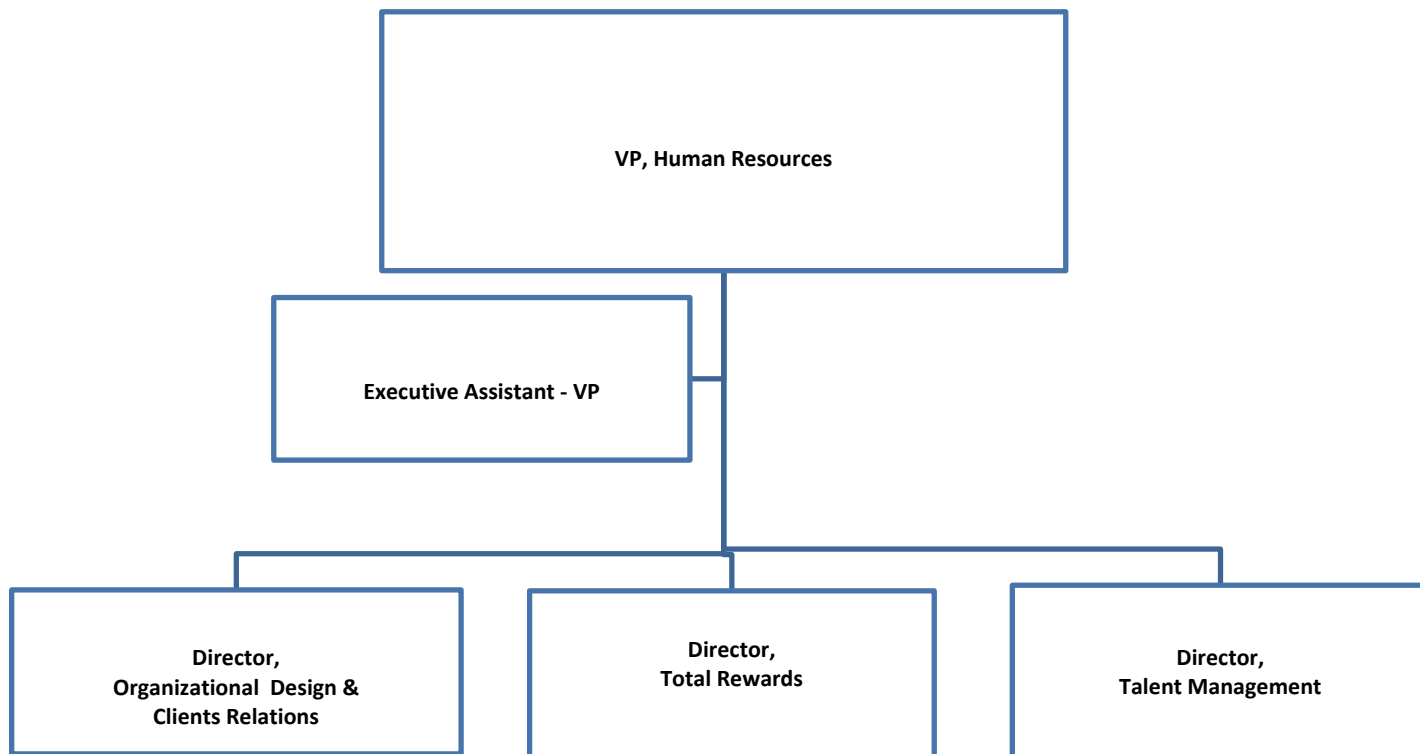
# CORPORATE RELATIONS, STAKEHOLDER ENGAGEMENT & INNOVATION



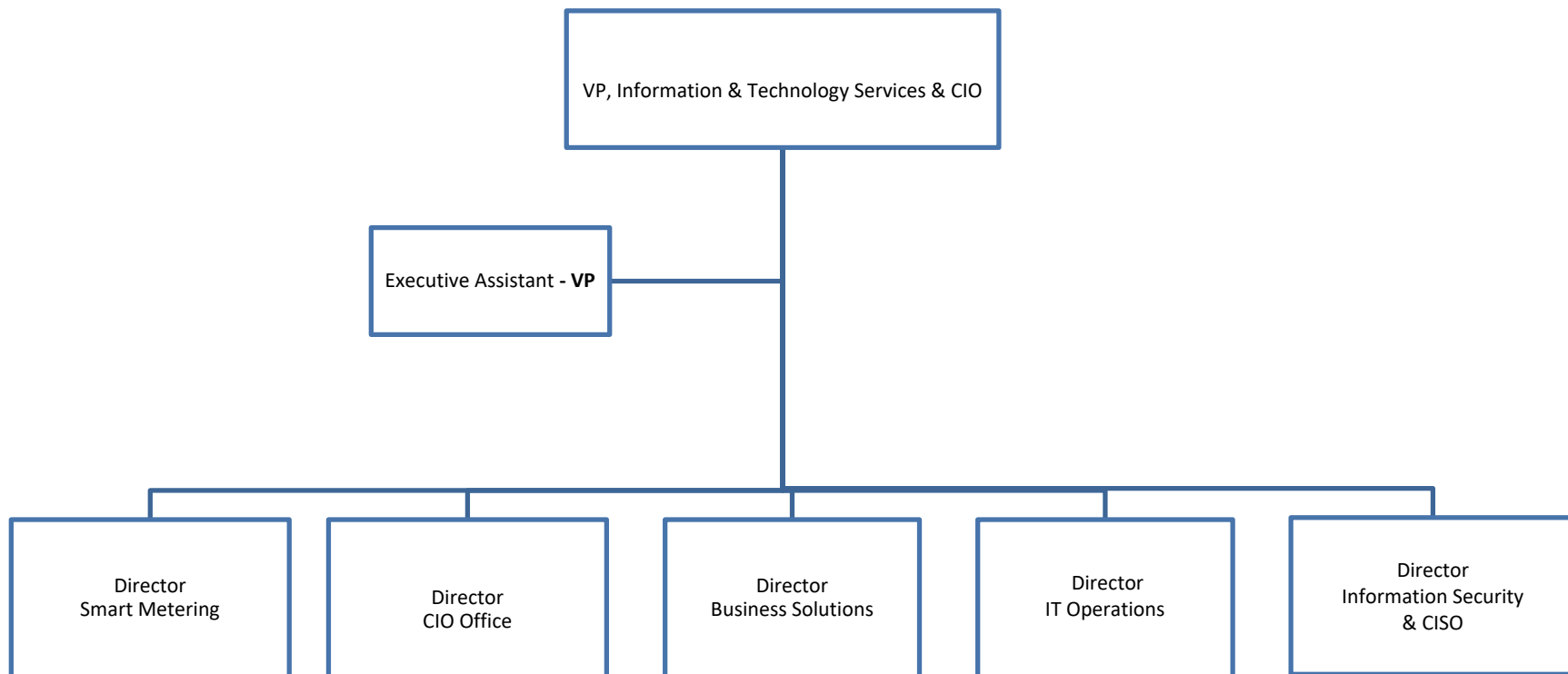
# CORPORATE SERVICES



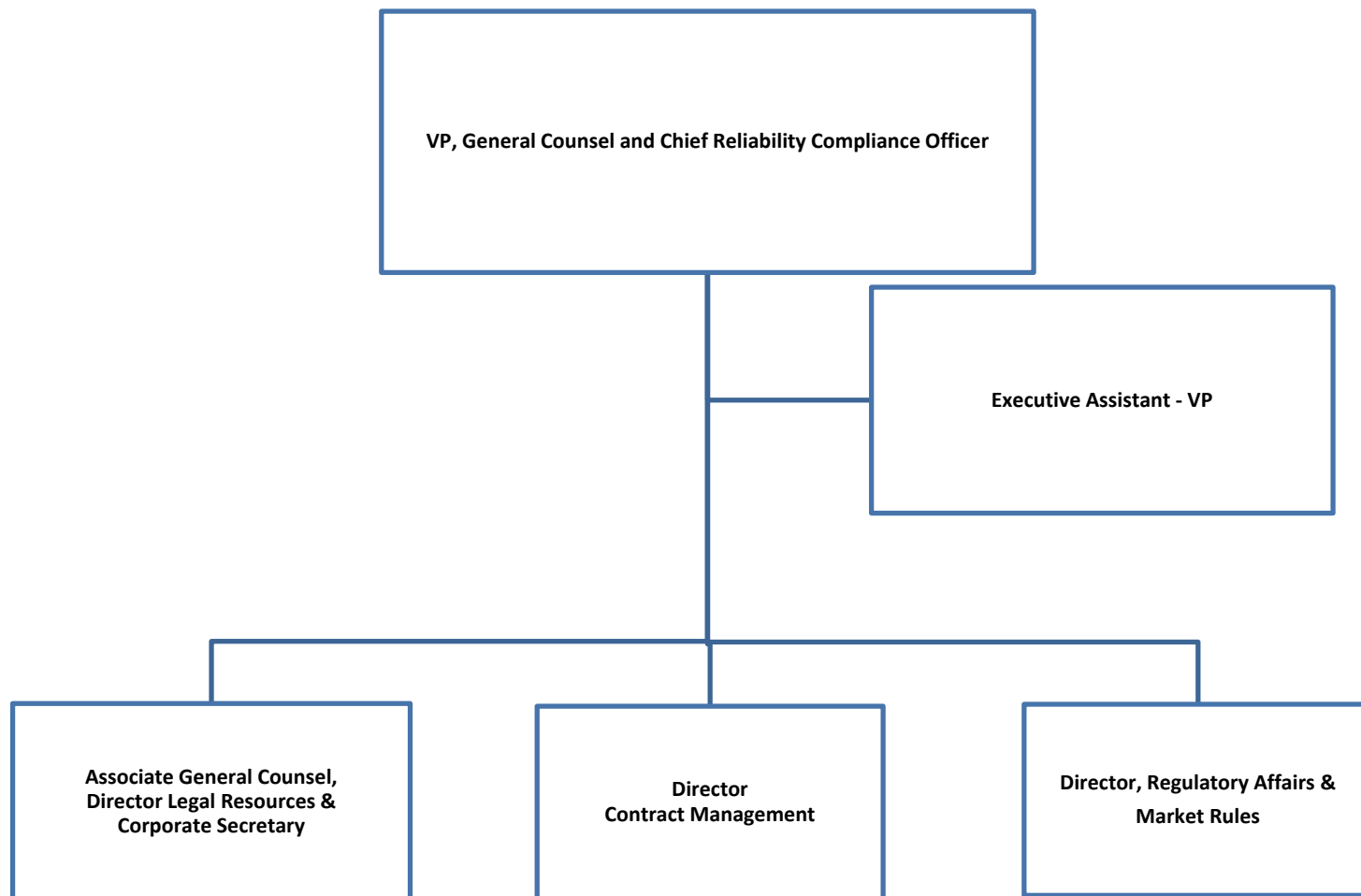
# HUMAN RESOURCES



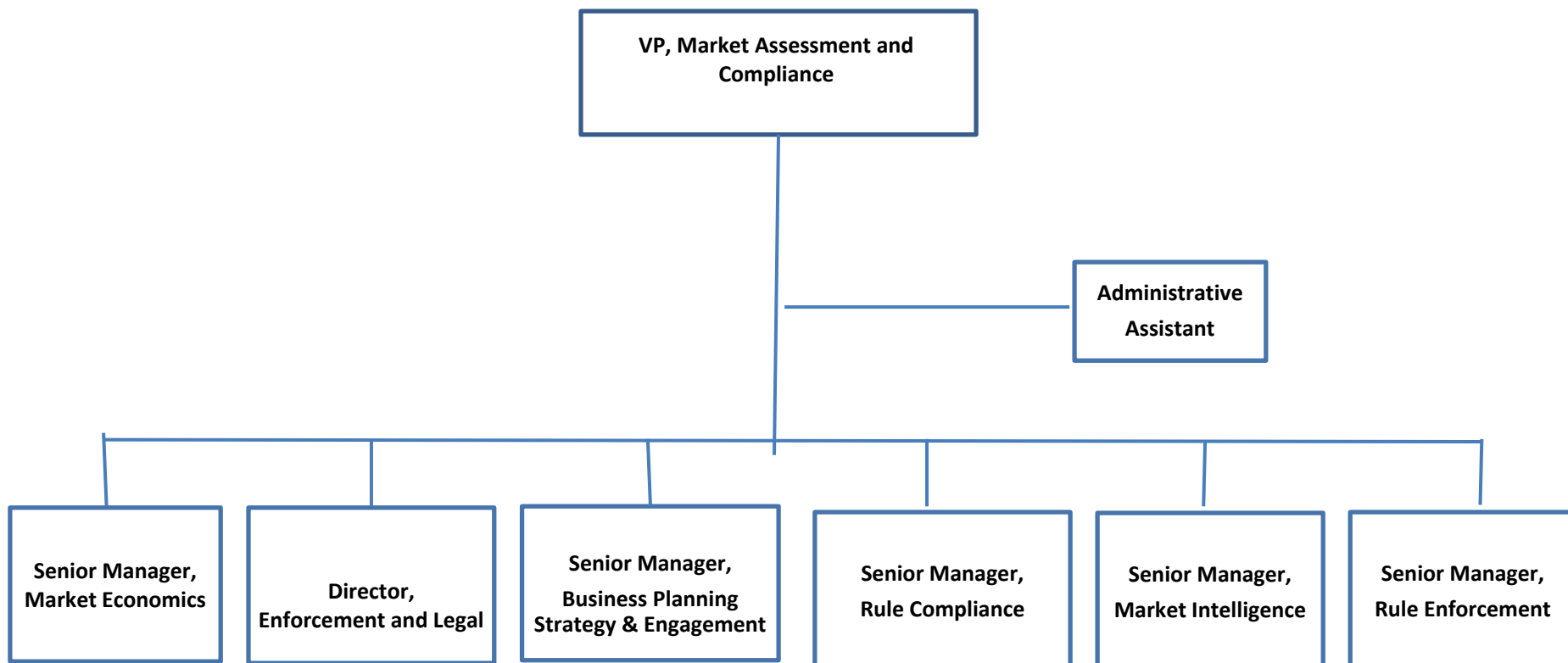
# INFORMATION & TECHNOLOGY SERVICES



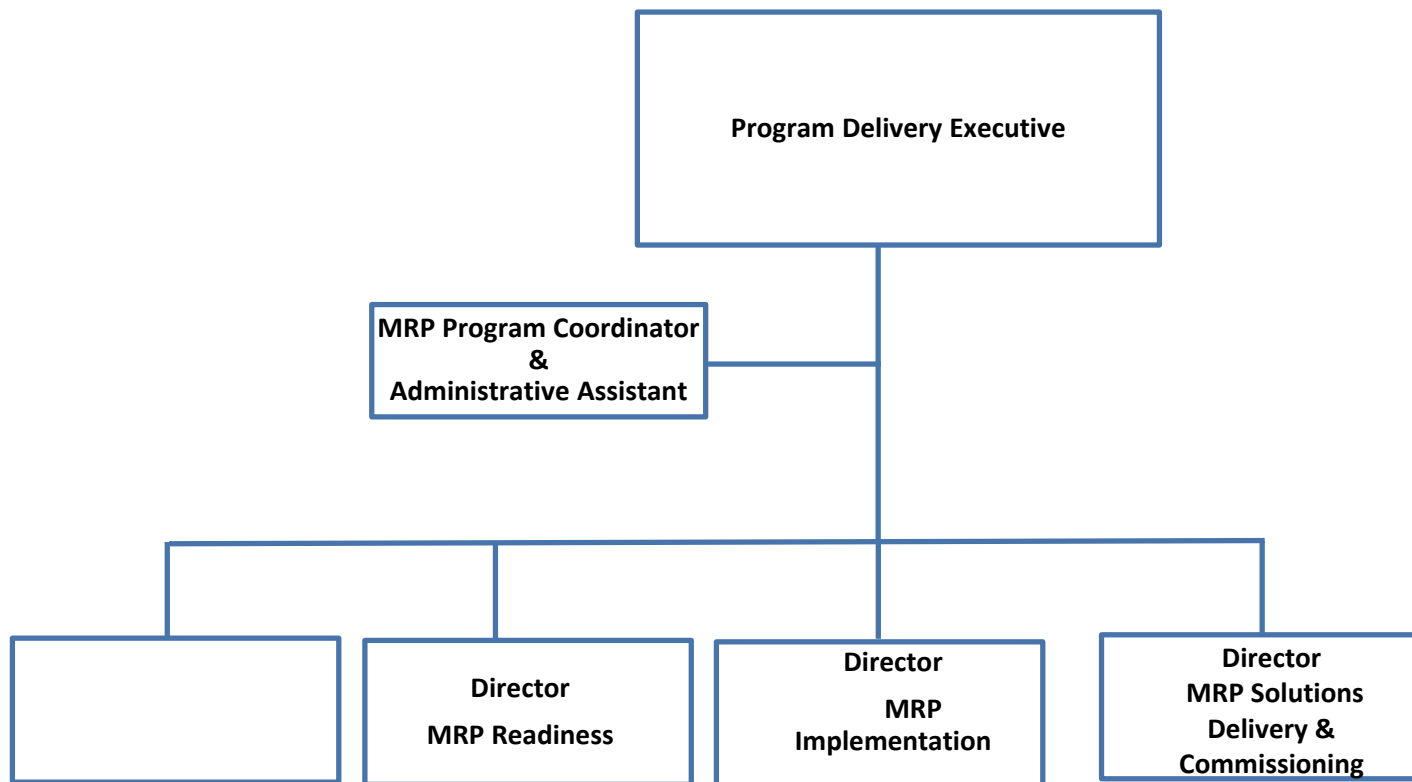
# LEGAL RESOURCES AND CORPORATE GOVERNANCE



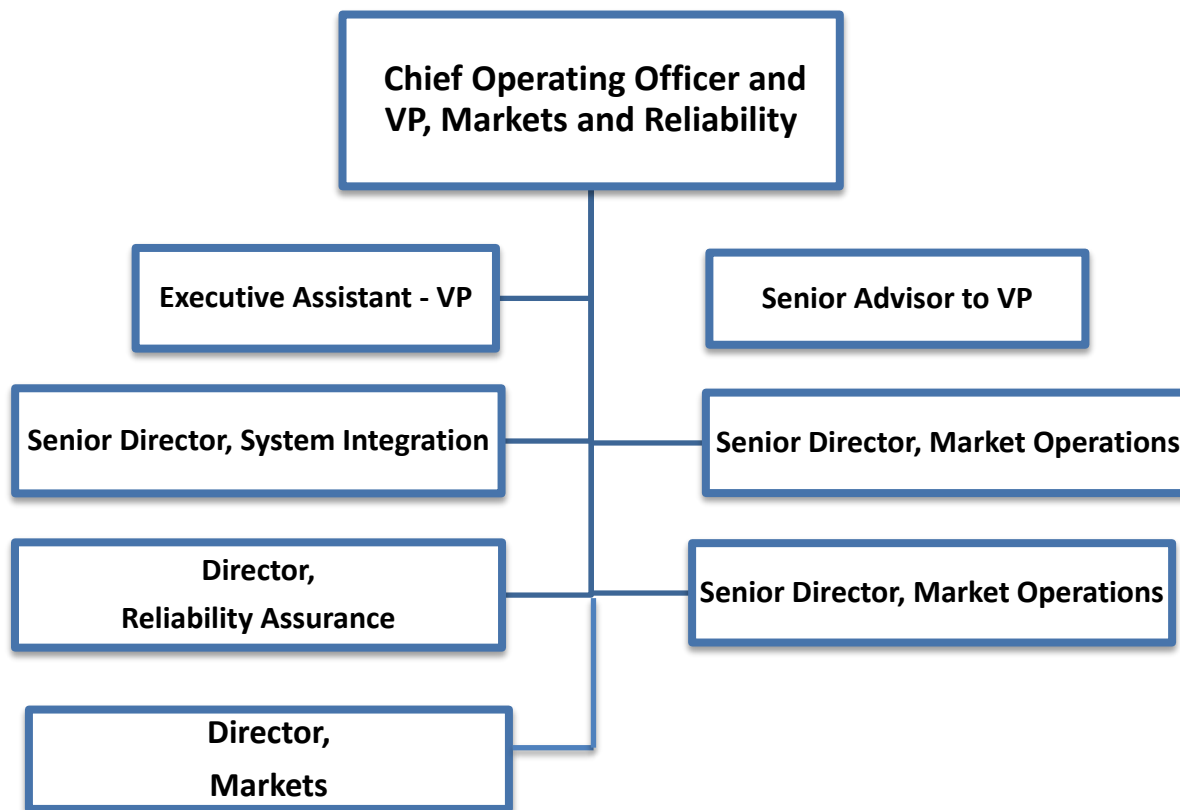
# MARKET ASSESSMENT AND COMPLIANCE DIVISION



# MARKET RENEWAL PROGRAM

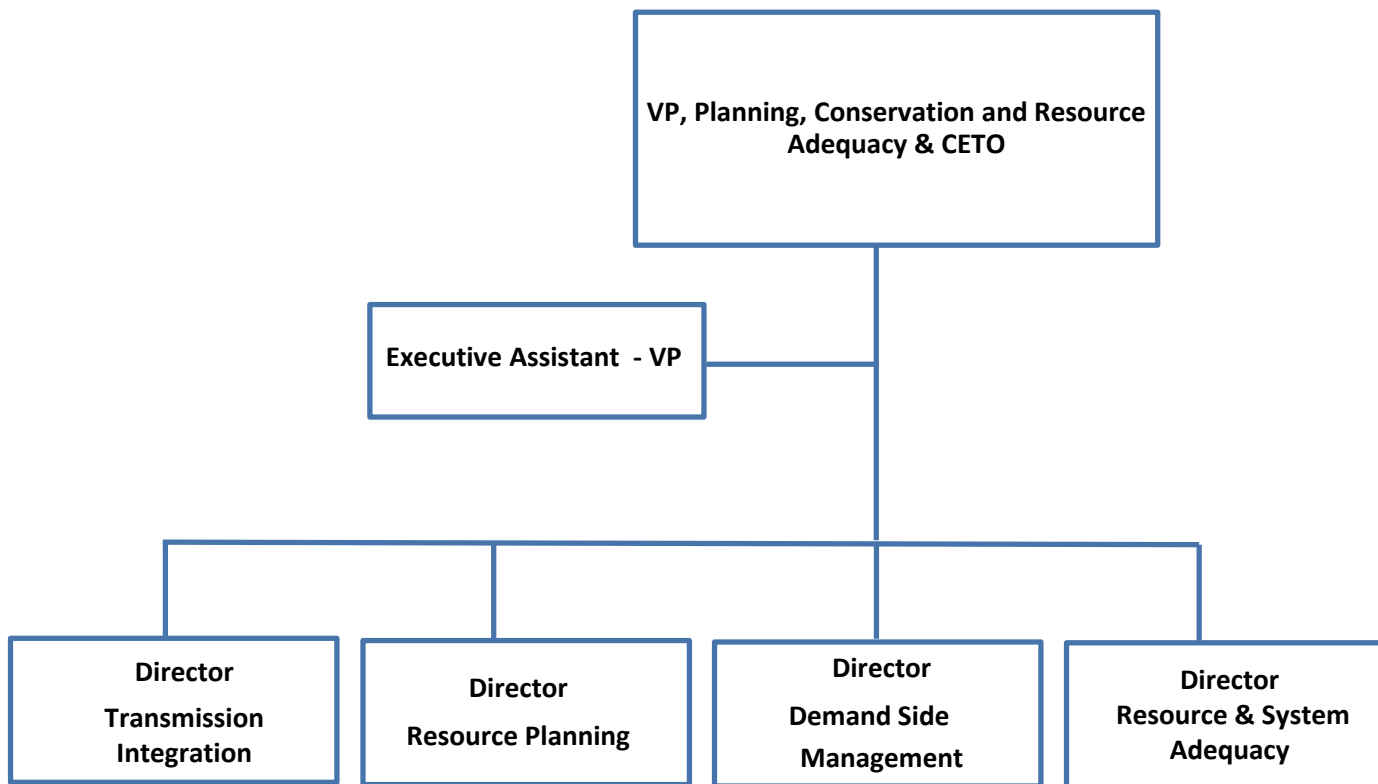


# MARKETS AND RELIABILITY





## PLANNING, CONSERVATION & RESOURCE ADEQUACY



## STAFFING AND COMPENSATION

### Staffing and Compensation

The IESO will need additional staff to implement and deliver the incremental initiatives that the Minister asked the IESO to support in accordance with the government's *Powering Ontario's Growth* plan, while continuing with the previously approved initiatives and work in the IESO's 2023-2025 Business Plan to advance the IESO's Corporate Strategy and the energy transition. The additional staff is projected to be on-boarded throughout 2024 in accordance with the stages of incremental work required and reach full complement by early 2025. For further details, please see Exhibit D-1-3 Attachment 1 – Employee Costs (Appendix 2-K).

**Table 1: Staffing and Operating Compensation Expenses**

(\$ millions)	2024 Approved Budget	Incremental 2024 Budget per Amendment	Revised 2024 Budget per Amendment		2025 Approved Budget	Incremental 2025 Budget per Amendment	Revised 2025 Budget per Amendment
<b>Average Number of Employees (Capital and Operating Expenses FTEs)</b>							
Executive	8	-	8		8	-	8
Management	155	-	155		154	-	154
Non-Management Regular	666	22	688		667	30	697
Non-Management Temporary	97	-	97		71	-	71
<b>Total</b>	<b>926</b>	<b>22</b>	<b>948</b>		<b>900</b>	<b>30</b>	<b>930</b>
<b>Operating expenses figures below are in \$millions</b>							
<b>Total Compensation (Salary, Wages &amp; Benefits)</b>							
Executive and Board	4.9	-	4.9		5.0	-	5.0
Management	32.0	-	32.0		33.1	-	33.1
Non-Management Regular	96.7	3.1	99.8		102.4	4.7	107.1
Non-Management Temporary	11.3	-	11.3		9.3	-	9.3
<b>Total</b>	<b>144.8</b>	<b>3.1</b>	<b>147.9</b>		<b>149.8</b>	<b>4.7</b>	<b>154.5</b>

Given the nature of the work required to support the government's *Powering Ontario's Growth* plan, the incremental resources being requested are Non-Management, Regular staff. An average of 22 incremental Full Time Equivalent (FTE) are included for 2024, equivalent to \$3.1

1 million in total compensation, and an average of 30 incremental FTE are included for 2025,  
2 equivalent to \$4.7 million in total compensation. This amounts to a total of \$7.8 million in  
3 incremental total compensation over 2024 and 2025 combined.

4 The incremental headcount will support the key incremental initiatives identified in Exhibit D-1-1  
5 Incremental OM&A Overview, and Exhibit D-1-2 Incremental OM&A Business Unit Detail.

**Employee Costs**

	2024 OEB Approved	Incremental 2024 Budget per Amendment	Revised 2024 Budget Per Amendment
<b>Average Number of Employees (Capital and Operating expenses FTEs)</b>			
Executive	8	0	8
Management	155	0	155
Non-Management Regular	660	22	682
Non-Management Temporary	103	0	103
<b>Total</b>	<b>926</b>	<b>22</b>	<b>948</b>
<b>Operating expenses figures below are in \$ millions</b>			
<b>Total Salary and Wages</b>			
Executive and Board	4.0	0.0	4.0
Management	24.2	0.0	24.2
Non-Management Regular	72.3	2.4	74.7
Non-Management Temporary	10.6	0.0	10.6
<b>Total</b>	<b>111.0</b>	<b>2.4</b>	<b>113.4</b>
<b>Total Benefits</b>			
Executive	1.0	0.0	1.0
Management	7.7	0.0	7.7
Non-Management Regular	24.4	0.7	25.1
Non-Management Temporary	0.7	0.0	0.7
<b>Total</b>	<b>33.8</b>	<b>0.7</b>	<b>34.5</b>
<b>Percentage of Salary and Wages</b>	<b>30%</b>	<b>0%</b>	<b>30%</b>
<b>Total Compensation (Salary, Wages &amp; Benefits)</b>			
Executive and Board	4.9	0.0	4.9
Management	32.0	0.0	32.0
Non-Management Regular	96.7	3.1	99.8
Non-Management Temporary	11.3	0.0	11.3
<b>Total</b>	<b>144.8</b>	<b>3.1</b>	<b>147.9</b>

2025 OEB Approved	Incremental 2025 Budget per Amendment	Revised 2025 Budget Per Amendment
8	0	8
152	0	152
664	30	694
77	0	77
<b>900</b>	<b>30</b>	<b>930</b>
4.0	0.0	4.0
25.0	0.0	25.0
76.2	3.6	79.8
8.7	0.0	8.7
<b>113.9</b>	<b>3.6</b>	<b>117.5</b>
1.0	0.0	1.0
8.1	0.0	8.1
26.2	1.1	27.3
0.6	0.0	0.6
<b>35.9</b>	<b>1.1</b>	<b>37.0</b>
<b>31%</b>	<b>0%</b>	<b>31%</b>
5.0	0.0	5.0
33.1	0.0	33.1
102.4	4.7	107.1
9.3	0.0	9.3
<b>149.8</b>	<b>4.7</b>	<b>154.5</b>

## **FORECAST VARIANCE DEFERRAL ACCOUNT**

The IESO's operating reserve is maintained to address cost or revenue variances from forecasts that are not always within the control of management nor reasonably foreseeable, a practice that is aligned with the practices of other organizations in the sector. The balance of the operating reserve is recorded in the Forecast Variance Deferral Account (FVDA). Surplus variances are collected in the IESO's operating reserve and recorded in the FVDA. Deficit variances draw on the operating reserve and are recorded in the FVDA.

As per the OEB's Decision and Order in EB-2022-0318, the IESO cleared the amount of the 2022 year-end balance in the FVDA that exceeded \$15.0 million and issued a rebate of \$8.7 million to market participants on September 14, 2023. The IESO will retain an operating reserve of \$10 million in the FVDA; if the year-end balance exceeds \$15 million for 2023 or 2024, the IESO will rebate an amount to ratepayers to return the operating reserve balance to \$10.0 million.

### **Balance of the Forecast Variance Deferral Account**

As per the IESO's Interim Business Outlook submitted to the Minister on September 1, 2023 (see Exhibit B-1-4), in accordance with the three-year Business Plan approval process, the IESO projects an operating deficit of \$12.4 million in 2023 (year 1 of the three-year cycle), resulting in a FVDA balance of \$2.6 million at the end of 2023. Further, the IESO projects an operating deficit of \$12.6 million in 2024 (year 2) and \$19.9 million in 2025 (year 3) of the three-year cycle, which will lead to year-end deficit balances in the FVDA of \$10.0 million in 2024 and \$29.9 million in 2025.

The principal drivers of the projected deficits (\$44.9 million over the three-year business planning horizon) are the impact from the salary and benefit increases awarded through Arbitration to the IESO's Society of United Professionals (SUP) members (\$34.5 million), including the present value of benefit enhancements that was settled in Q1 2023; as well as higher costs of planned work included in the 2023-2025 Business Plan (\$12.8 million) primarily for maintenance of various information technology (IT) systems and for workforce planning;

1 and for incremental work to support the government's *Powering Ontario's Growth* plan (\$10.9  
2 million). These impacts are partially offset by higher interest income (\$11.8 million), associated  
3 with higher market interest rates; upside in demand volumes materialized as of June 2023 (\$1.0  
4 million); and lower than expected amortization (\$0.6 million). Table 1 provides the forecast  
5 operating variances in the FVDA.

## 6 **Adjustment Mechanism**

7 The IESO's submission does not rely on the adjustment mechanism described in the OEB-  
8 approved Settlement Agreement in EB-2022-0318, which is based on the balance of the FVDA  
9 reducing below zero at the end of year 1 of the three-year cycle because of a material change.  
10 As described above, the FVDA is forecast to reduce below zero in 2024 (year 2) and 2025 (year  
11 3).

12  
13 The IESO views the new initiatives in support of the *Powering Ontario's Growth* plan as a  
14 significant event with cascading effects to the organization that could compromise the IESO's  
15 ability to work within future year's revenue requirements and carry-out the activities in its 2023-  
16 2025 Business Plan. Accordingly, the IESO is seeking OEB approval for the incremental \$4.5  
17 million in 2024 and \$5.4 million in 2025 to carry out the initiatives outlined in the Minister's  
18 letter in support of *Powering Ontario's Growth* plan on this basis. This will ensure the impact of  
19 this incremental work is well defined and reflected in the fees for the year in which they are  
20 incurred. Accounting for these incremental expenses will reduce the projected deficit balance to  
21 \$5.5 million at the end of 2024 (year 2) and \$20.0 million at the end of 2025 (year 3), as shown  
22 in Table 1. Note that the expected 2023 expenditures of \$1.0 million in support of the  
23 *Powering Ontario's Growth* plan will be managed within the approved funding and operating  
24 reserve.

25

1                   **Table 1: 2022 -2025 Balances and Forecast Transactions in the FVDA**

	Historical	Interim Business Outlook			Over 3 Years
	2022 Actual	2023	2024	2025	Interim Business Outlook
<b>(\$ Millions)</b>					
Opening Balance	8.7	15.0	2.6	(10.0)	15.0
In-year Surplus (Deficit)	15.0	(12.4)	(12.6)	(19.9)	(44.9)
<b>Closing Balance before rebates</b>	<b>23.7</b>	<b>2.6</b>	<b>(10.0)</b>	<b>(29.9)</b>	<b>(29.9)</b>
Market Participants Rebate	(8.7)	-	-	-	
POG recovery through amended usage fee	-	-	4.5	5.4	9.9
<b>Closing Balance</b>	<b>15.0</b>	<b>2.6</b>	<b>(5.5)</b>	<b>(20.0)</b>	<b>(20.0)</b>

2