OPERATIONS, MAINTENANCE AND ADMINISTRATION SUMMARY

1. INTRODUCTION

This Schedule presents an overview of Hydro Ottawa's operations, maintenance, and administration (OM&A) expenditures, spanning both the 2021-2025 and 2026-2030 rate periods. It details the composition of OM&A costs, key drivers, observed trends, and relevant business environment changes. Furthermore, this Schedule outlines Hydro Ottawa's OM&A planning approach and provides specific details on new information technology expenditures related to the transition to cloud computing, as documented in Attachment 4-1-1(A) - Transition to Cloud Computing. A detailed breakdown of OM&A costs by major program, including a year-over-year variance analysis, is presented in Schedule 4-1-2 - Operations, Maintenance and Administration Program Costs.

The information contained in this Schedule is guided by the *Chapter 2 Filing Requirements for Electricity Distribution Rate Applications - 2025 Edition for 2026 Rate Applications,* dated December 9, 2024. For the OM&A- related appendices that electricity distributors must submit, pursuant to these Filing Requirements, please see the following Excel Attachments:

- Attachment 4-1-2 (A) - OEB Appendix 2-JA - Summary of Recoverable OM&A Expenses
- Attachment 4-1-2 (B) - OEB Appendix 2-JC - OM&A Programs Table
- Attachment 4-1-2 (C) - OEB Appendix 2-L - Recoverable OM&A Cost per Customer and per Full-Time Equivalent (FTE)
- Attachment 4-1-2 (D) - OEB Appendix 2-JB - Recoverable OM&A Cost Driver Table

2. OM&A SUMMARY

2.1. OVERVIEW

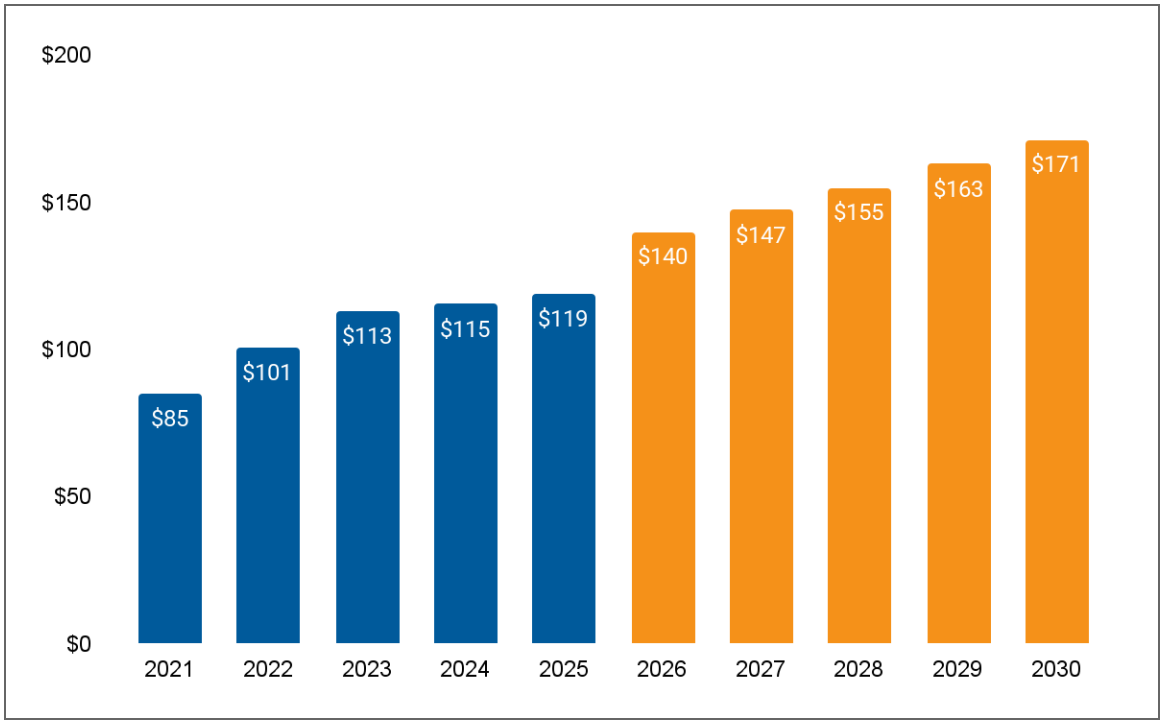
Hydro Ottawa's forecasted OM&A expenses include costs that are incurred to continue providing a safe and reliable electricity distribution system, meeting legislative and regulatory compliance requirements, and satisfying other operational and maintenance needs.

During the 2021-2025 period, Hydro Ottawa faced an unprecedented series of unforeseen challenges that tested its resilience. These challenges included the COVID-19 pandemic and its associated supply chain disruptions, inflationary pressures, a historic storm (the May 2022 Derecho) that caused extensive damage to the electricity grid; eleven other major weather events requiring emergency response; and an 84-day labour strike in 2023 (after a near strike in 2021). Despite these challenges, Hydro Ottawa completed key OM&A-related projects and programs, such as operating and maintaining overhead and underground distribution lines, feeders, transformers, and distribution stations. The utility also incurred operations and maintenance costs for programs designed to invest in proactive measures to avoid long-term OM&A and capital costs. Examples of such programs include vegetation management and asset maintenance.

Hydro Ottawa is seeking approval for $140M in OM&A funding in the 2026 test year. This level of funding is necessary to enable the utility to address the maintenance needs of the distribution system, prepare the system to accommodate emerging needs resulting from customer growth, evolving customer expectations and the energy transition, and proactively adapt to quickly evolving technological advancements and cyber security needs. This request also considers rising prices driven by inflationary increases, additional workforce required both to execute the capital program outlined in the Distribution System Plan (DSP) and to support ongoing maintenance programs, the increased funding necessary to address storm-related costs such as vegetation management, and the growing need for investment in IT costs, including cyber security and cloud computing infrastructure.

Figure 1 below summarizes Hydro Ottawa's OM&A expenses over both rate periods: 2021-2023 Historical Years, 2024-2025 Bridge Years, and 2026-2030 Test Years (2021-2025 are displayed in blue, 2026-2030 in orange). Refer to Section 5 below and Schedule 1-3-1 Rate Setting Framework for details on the 2027-2030 OM&A.

Figure 1 – 2021-2030 OM&A Expenses ($'000 000s)



2.2. SUMMARY OF TOTAL OM&A EXPENDITURES

Hydro Ottawa's OM&A costs reflect the requirements to operate and maintain a safe and reliable distribution grid, provide service levels that are satisfactory to customers, and ensure continued compliance with all legislative and regulatory obligations. The majority of Hydro Ottawa's OM&A costs are labour. See Schedule 4-1-3 - Workforce Staffing and Compensation as well as Attachment 4-1-3(C) - Workforce Growth for further details.

Table 1 below provides a summary view of Hydro Ottawa's Historical, Bridge, and Test Year OM&A expenditures.

Table 1 – OM&A Variances ($'000s)

	Year	OM&A ($)	Variance ($)	Variance (%)
OEB Approved	2021	$ 90,600		
Historical Years	2021	$ 84,737	$ (5,863)	(6.47%)
	2022	$ 100,536	$ 15,798	18.64%
	2023	$ 112,778	$ 12,242	12.18%
Bridge Years	2024	$ 115,320	$ 2,543	2.25%
	2025	$ 118,922	$ 3,602	3.12%
Test Years	2026	$ 140,010	$ 21,088	17.73%
	2027	$ 147,263	$ 7,253	5.18%
	2028	$ 154,891	$ 7,628	5.18%
	2029	$ 162,914	$ 8,023	5.18%
	2030	$ 171,353	$ 8,439	5.18%

For year-over-year variances, please refer to Section 3 in Schedule 4-1-2 - Operations, Maintenance and Administration Program Costs for the total level and by program level.

3. KEY THEMES AND TRENDS

In the current rate period (2021 - 2025), Hydro Ottawa experienced a shift from a historically more predictable and stable operating environment to one that is increasingly dynamic and influenced by growth and change. This shift is driven by increases in customer growth and expectations and the rising frequency and impact of extreme weather events, both of which are intensifying demands on the electricity system. These challenges are further compounded by the impacts of the energy transition that is expanding the role of electricity within the economy.

Schedule 2-5-1 - Distribution System Pan Overview outlines the nearly two-fold increase in capital investments required to address the needs of Hydro Ottawa's distribution system while ensuring the sustainability of existing infrastructure in alignment with good utility practices. To

deliver on this expanding and increasingly complex capital plan, Hydro Ottawa must also prioritize investments in the workforce staffing levels and skillsets, as well as non-staff operational resources. This will be essential to meeting customer needs and ensuring reliable service as the pace and demands of the energy transition accelerate. Investments in the workforce are detailed in Attachment 4-1-3(C) - Workforce Growth.

The proposed OM&A levels are designed to address the observed needs of the business based on trends and data from the most recent historical period that are expected to continue into the upcoming rate term. The majority of the increase is in operating and maintenance expenses, which are required to look after Hydro Ottawa's growing asset portfolio as the capital work progresses and new assets come into service. For additional details on System Operations and Maintenance (System O&M), refer to Section 6 of Schedule 2-5-5 - Capital Expenditure Plan. Table 2 below replicates the System O&M as a percentage of gross capital expenditures as well as Total OM&A as a percentage of capital expenditures. In both cases, the % System O&M and Total OM&A as a percentage of capital expenditures are lower in 2026 than in any of the preceding actual years.

Table 2 – System O&M and Total OM&A Trend

Cost Component / Metric	Historical Years			Bridge Years		Test Year
	2021	2022	2023	2024	2025	2026
System O&M	**$ 31.8**	**$ 43.8**	**$ 48.1**	**$ 48.6**	**$ 48.9**	**$ 63.8**
Total OM&A	**$ 84.7**	**$ 100.5**	**$ 112.8**	**$ 115.3**	**$ 118.9**	**$ 140.0**
Total Gross Capital Expenditure	**$ 138.6**	**$ 137.8**	**$ 123.1**	**$ 173.4**	**$ 189.4**	**$ 309.1**
System O&M as a percentage of Total Gross Capital Expenditure	22.9%	31.8%	39.0%	28.0%	25.8%	20.6%
Total OM&A as a percentage of Total Gross Capital Expenditure	61.1%	73.0%	91.6%	66.5%	62.8%	45.3%

Hydro Ottawa's OM&A Per Customer and OM&A Per FTE are summarized in Table 3 as well Appendix 2-L Recoverable OM&A Cost per Customer and per FTE. For the 2026 Test Year, Hydro Ottawa's proposed level of OM&A is approximately $140M. This represents a Compound Annual Growth Rate (CAGR) of 9.1% relative to the OM&A level approved in the 2021 Rebasing application. On a per-customer basis, the CAGR over this period is 7.1%, while on a per FTE basis, it is 5.9%.

Table 3 – OM&A per Customer and per FTE[1]

	OEB Approved	Historical Years			Bridge Years		Test Year	Test CAGR
	2021	2021	2022	2023	2024	2025	2026	2021-2026
OM&A ($M)	$ 90.6	$ 84.7	$ 100.5	$ 112.8	$ 115.3	$ 118.9	$ 140.0	9.1%
Customers	*344,802*	*349,695*	*356,062*	*361,688*	*367,728*	*373,277*	*377,521*	
OM&A per Customer	$ 262.8	$ 242.3	$ 282.4	$ 311.8	$ 313.6	$ 318.6	$ 370.9	7.1%
FTE	*616*	*585*	*595*	*494*	*628*	*641*	*716*	
OM&A per FTE	$ 147,173	$ 144,843	$ 169,098	$ 228,438	$ 183,631	$ 185,410	$ 195,575	5.9%

For more details on unit cost benchmarking such as Billing O&M, Metering O&M, Vegetation O&M, Lines O&M, Station O&M, Poles, Towers, and Fixtures O&M, see Attachment 1-3-3(B) - Activity and Program-Based (APB) Benchmarking Analysis.

OM&A supports the DSP's investment priorities and focus areas, and there is a natural alignment and some overlap between these priorities and the key themes and trends in OM&A. For example, one DSP investment priority is Renewing Deteriorating Infrastructure. While the renewal itself is not an OM&A theme, the associated expanded testing, inspection and maintenance program is, as described below. Note that while the DSP combines the priorities associated with extreme weather and cyber security under one priority entitled Enhancing

[1]The Customer and FTE counts here are aligned with those in the Chapter 2 Appendices. These numbers may differ from those presented using RRR data such as Schedule 1-3-3 - Benchmarking. Please see the footnotes in Appendix 2L and Appendix 2K for details of the FTE and Customer calculations.

Resilience, for the OM&A themes below, cyber security has been grouped with Technological Innovation, however as noted in the Extreme Weather theme there is a critical element of IT system stability and scalability during extreme weather events. The key OM&A themes are listed below:

1. **Deteriorating Infrastructure:** Many assets are at an advanced age, with a substantial share of the system nearing or surpassing its expected service life. See Section 2.3.2 of Schedule 2-5-1 - Distribution System Plan Overview for details. The level of investment required to replace all assets projected to be in a degraded position by 2030 is impractical, especially considering other priorities like growth. Therefore, enhancing testing, inspection, and maintenance programs is a key component of the overall plan to maintain Hydro Ottawa's strong reliability results.
2. **Growth & Electrification:** Rapid population growth and accelerated electrification are significantly increasing demand on Hydro Ottawa's infrastructure, driving up OM&A costs through expanded customer service needs, increased maintenance, and more complex engineering requirements.
3. **Extreme Weather:** Increased frequency of severe weather patterns and climate change effects, which are expected to amplify in the future, impact key programs such as vegetation management and also resiliency of IT infrastructure and systems to support storm restoration work.
4. **Technological Innovation and Cyber Security:** Shift towards digital, cloud-based, and Artificial Intelligence (AI)-driven operating technology and information technology systems to optimize grid operations and support the energy transition.

Similar to the capital investment priorities, OM&A themes and programs are underpinned by two key focus areas: managing rising costs and inflationary pressures, and investing in the workforce. Developing a skilled workforce is critical for the utility to meet core business objectives and customer needs over the next five years and beyond. Effectively managing rising costs is essential for maintaining affordability and financial sustainability.

3.1. DETERIORATING INFRASTRUCTURE

Hydro Ottawa owns and operates a large, complex distribution network, including nearly 50,000 poles, over 48,600 transformers, 4,800 kilometers of overhead lines, 7,900 kilometers of underground cable, and more than 90 substations. A key operational challenge is the advanced age and condition of many of its assets, with significant portions constructed between the 1960s and 1980s. As highlighted in Section 2.3.2 of Schedule 2-5-1 - Distribution System Plan Overview, many assets are at an advanced age, with a substantial share of the system nearing or having surpassed its expected service life. The plan overview also notes that 54% of Hydro Ottawa's assets have reached the end of their typical useful life and 6% are in degraded condition. Given that the level of investment required to replace all assets projected to be in a degraded position by 2030 is impractical, given other priorities, most notably growth, Hydro Ottawa has been and continues to transition to a data-driven maintenance strategy to optimize investments, reliability and long-term sustainability of the electrical grid. This requires increased OM&A funding to support enhanced inspections, advanced diagnostics, and proactive interventions informed by real-time asset condition data.

This data-driven asset management strategy, combined with a portfolio strategy balancing risk mitigation and levelized investments, aims to support long-term affordability by mitigating system risk, maintaining asset performance, and optimizing portfolio investments. This strategic approach balances cost management with reliability needs by increasing investment in maintenance programs to mitigate risk and extend the useful life of assets not immediately slated for replacement. Hydro Ottawa will introduce advanced inspection technologies, including drone inspections, to gather precise data on overhead distribution assets, enabling targeted maintenance and improved asset health assessments. Advanced techniques like Very Low Frequency Tan-Delta, Partial Discharge, and Time Domain Reflectometry will be used for underground distribution asset maintenance to identify vulnerabilities and optimize investments.

As such, enhancements to the testing, inspection and maintenance programs is a key component to the overall plan to maintain Hydro Ottawa's strong reliability results. These

programs play a critical role in maintaining system reliability and safety as deteriorating infrastructure continues to present operational challenges. The most significantly impacted OM&A programs with respect to deteriorating infrastructure include:

- **Testing Inspection and Maintenance**: Enhanced funding is needed to support more frequent and rigorous inspections, condition assessments, and diagnostic testing of deteriorating assets. These activities enable early detection of potential issues, allowing for preemptive repairs or replacements and reducing the risk of failures.
- **Stations Maintenance**: Aging substations require increased maintenance to ensure reliable operation. Additional resources are necessary to manage wear-and-tear on key components such as transformers, breakers, and protection systems, which are critical to preventing system disruptions and ensuring safety. Notable maintenance activities will include the decommissioning of 4kV station equipment and the assessment of equipment condition for use as a spare to manage the performance of 4kV assets at other stations in a degraded condition.

3.2. GROWTH AND ELECTRIFICATION

Hydro Ottawa faces significant operational challenges driven by substantial community growth and the accelerating energy transition. As detailed in Schedule 2-5-1 - Distribution System Plan Overview, Ottawa's population is rapidly expanding, with projections indicating a continued upward trend, necessitating a surge in residential connections. This growth, coupled with the city's ambitious housing targets and major infrastructure projects like the Light Rail Transit expansion, directly increases the demand on Hydro Ottawa's infrastructure and services.

Furthermore, the rapid electrification of transportation and heating sectors, driven by government mandates and consumer adoption of electric vehicles and heat pumps, is placing unprecedented strain on the electricity grid. The influx of large load requests, including those from major institutions like the Ottawa Hospital and OC Transpo, further exacerbates these demands.

These converging factors—population growth and electrification—are driving a significant increase in Hydro Ottawa's OM&A costs. These factors directly impact several Hydro Ottawa OM&A programs:

- **Customer Billing:** A larger customer base and the introduction of new energy programs increase the complexity and volume of billing processes, requiring system upgrades and additional staffing to ensure accuracy and responsiveness.
- **Customer & Community Relations:** The complexity of customer inquiries, particularly regarding new technologies like EVs, requires improved tools to handle effectively. The Customer Relationship Management project, discussed in Attachment 4-1-1(A) - Transition to Cloud Computing, explains how customer service will be transformed to meet these evolving needs.
- **Underground Locates:** Increased construction and new service connections drive a surge in requests for underground utility locates, requiring more resources to manage demand and ensure safety compliance.
- **Maintenance Related Programs:** The rising number of connections and larger service size requests necessitate continuous expansion of distribution transformer capacity and upgrades to existing infrastructure. As the infrastructure expands to achieve the required capacity, additional resources are needed to operate and maintain it.
- **Engineering & Design:** The Engineering and Design program requires incremental funding to facilitate enhanced grid planning and design to accommodate higher levels of electrification. Specialized expertise in resilient grid infrastructure design, detailed grid modeling, and long-term planning for high electrification scenarios will increase engineering costs for system studies, feasibility assessments, and design activities.

3.3. EXTREME WEATHER

Hydro Ottawa has faced a significant surge in severe weather events, establishing Ottawa as the "weather-alert capital of Canada."[2] This escalating trend, encompassing high heat, high winds, flooding, and ice storms, is placing increasing strain on the electricity grid.

Recent impactful storms include:

- **2018:** Tornadoes, freezing rain, and high winds impacting over 200,000 customers.
- **2022:** The devastating May Derecho, which disrupted power for over half of Hydro Ottawa's customer base (over 180,000 customers), incurred costs equivalent to four years of emergency repairs, and became the 6th costliest natural disaster in Canada's history. A detailed report on the impact of the Derecho storm is provided as Attachment 2-1-1(A) - May 2022 Derecho - After Storm Report.
- **2023:** The April ice storm, affecting over 163,000 customers.

Climate projections from the City of Ottawa, in partnership with the National Capital Commission and Environment and Climate Change Canada, confirm that these severe weather impacts are expected to intensify across the National Capital Region in the coming decades.

Ottawa's high tree canopy, coupled with the long-lasting weakening effects of these storms on vegetation, significantly impacts the distribution system and necessitates a robust vegetation management program. In addition, the importance of IT infrastructure resilience and scalability during extreme weather events has proven to be of critical importance to our customers and those involved in the power restoration. The increasing sophistication and frequency of cyber threats, coupled with the expanding digital footprint of our operations, necessitate additional cyber security resources to protect our critical infrastructure.

[2] Ottawa Citizen, *Welcome to Ottawa the Weather Alert Capital of Canada, (*February 11,2023) https://ottawacitizen.com/feature/welcome-to-ottawa-the-weather-alert-capital-of-canada

Hydro Ottawa requires incremental OM&A funding to both prepare for and respond to severe weather events. The OM&A programs most involved with these efforts are:

- **Vegetation Management**: Extreme weather events, such as high winds and ice storms, often lead to extensive damage caused by fallen trees and branches, underscoring the importance of proactive vegetation management. Increased resources are needed to expand tree-trimming programs, address overgrown vegetation more frequently, and remove at-risk trees near powerlines. Additional resources are also needed to manage the aftermath of storms, including emergency response for clearing debris and restoring safe conditions. Investments in advanced vegetation management tools and geographic information systems can further improve planning and efficiency to mitigate the risks associated with severe weather.
- **Information Management and Technology**: Extreme weather events place a significant strain on information management and technology systems, as utilities must rapidly collect, analyze, and communicate critical data to coordinate emergency responses and restore service. Increased funding for software subscriptions is essential to support the transition to cloud-based solutions that are less impacted by extreme weather events and to implement outage map enhancements.
- **Engineering & Design**: Engineering and design costs increase with the need to adapt infrastructure to withstand more frequent and severe weather events. This includes designing more resilient structures, such as reinforced poles, and reconfiguring sections of the grid to improve reliability and redundancy. Additional resources are also required for post-storm assessments to identify vulnerabilities and develop strategies for future-proofing the system. These efforts necessitate advanced modeling tools, specialized expertise, and closer collaboration with other departments.
- **System Operations and 24/7 Maintenance**: Funding increases are required to enhance real-time monitoring and control, improve outage response times and customer satisfaction, and strengthen system resilience. These investments are essential for the program to ensure the safe, reliable, and efficient management of the electrical

distribution system, including accurate load forecasting and maintaining robust operational protocols.

3.4. TECHNOLOGICAL INNOVATION AND CYBER SECURITY

The operational technology (OT) and information technology (IT) systems that support utilities' performance are rapidly evolving and becoming more complex. Utilities are increasingly migrating towards digital, mobile-friendly, and cloud-based solutions, driven by the rise of automation and the growing potential of AI to optimize grid operations and accelerate the energy transition.

However, these technological advancements bring increased risks, particularly in cyber security. Utilities must address heightened cyber threats which are on the rise across Canada. As the capital city of a G7 country, Hydro Ottawa is a high-value target for malicious actors. Safeguarding against compromises that could impact reliability and put customers at risk is paramount. As detailed in Schedule 2-5-1 - Distribution System Plan Overview, ransomware is a top and growing cyber threat to Canadian critical infrastructure, exacerbated by geopolitical tensions and the increasing connectivity of industrial systems. Therefore, continued strategic cyber security investments and planning are crucial. With a more interconnected and complex digital infrastructure, the exposure to cyber threats is heightened, making Hydro Ottawa a prime target due to its role in serving the capital and a broad customer base with critical data needs.

Hydro Ottawa is committed to enabling the energy transition by modernizing the grid to facilitate customer participation, enable widespread electrification, and optimize the integration of Distributed Energy Resources (DERs). Evolving market forces, regulatory changes, and emerging opportunities are driving a significant push towards grid modernization. Rapid technological advancements are creating a more dynamic and complex operating environment, characterized by increased bidirectional energy flows, growing adoption of DERs, and the integration of variable energy resources. This evolution, combined with rising customer expectations for reliability and interest in energy storage, necessitates a highly flexible and

responsive grid, supported by robust and adaptable IT infrastructure. As a result, Hydro Ottawa must balance the need to harness the full potential of innovative technology with the responsibility of safeguarding against cyber security risks.

While other themes impact multiple OM&A programs, resources for technological innovation and cyber security are primarily allocated to the Information Management and Technology program. Increased costs are projected to address several key factors:

- **Cyber Security Risks**: Rising cyber security threats necessitate the development and maintenance of more robust security infrastructure, including firewalls, threat detection systems, and data protection protocols, driving up IT costs. For more information on the Infrastructure and Cyber Security Program, refer to Section 8 of Schedule 2-5-9 - General Plant Investments.
- **Grid Modernization**: The modernization of Hydro Ottawa's Grid and the proposed AMI 2.0 initiative requires incremental software platforms and data services that will support the controllability and optimization objectives of this program. Expansion of Hydro Ottawa's fibre footprint is required for grid resilience leading to increased maintenance costs. For more information on the AMI system upgrades, refer to Section 2 of Schedule 2-5-9 - General Plant Investments.
- **Enterprise Asset Management:** New systems, software, training, and ongoing maintenance will be required to optimize asset lifecycles, integrate and streamline asset processes to improve the reliability of field assets as outlined in Section 3, Enterprise Asset Management, of Attachment 4-1-1(A) - Transition to Cloud Computing.
- **Customer Relationship Management:** Investments in Hydro Ottawa's Customer Relationship Management (CRM) system will enable Hydro Ottawa to better serve Residential and Commercial Customers and automate internal customer service processes. It will also prepare the utility for the energy transition. The program is outlined in Section 4, Customer Relationship Management, of Attachment 4-1-1(A) - Transition to Cloud Computing.

3.5. MANAGING RISING COSTS AND INFLATIONARY PRESSURES

Hydro Ottawa operates within a complex environment marked by heightened customer sensitivity to electricity costs, persistent inflationary pressures, elevated interest rates, and an increasing reliance on an uninterrupted power supply. The 2021-2025 period proved particularly challenging, characterized by the COVID-19 pandemic, four-decade high inflation, a weakened Canadian dollar, supply chain disruptions, and extreme weather events, notably the devastating May 2022 Derecho storm. Despite this storm and the potential to recover approximately $8.7M in OM&A and depreciation (along with $15.1M in capital additions) via a Z-factor application, Hydro Ottawa chose not to pursue Z-factor recovery, demonstrating its commitment to supporting customers during difficult times.

Rising costs have impacted various aspects of Hydro Ottawa's OM&A. While labour cost increases generally aligned with the OEB's labour inflationary component, achieving this was not without difficulty, evidenced by a near strike in 2021 and an 84 day strike in 2023. The costs of outside services such as vegetation management and technology support, also represent a significant component of OM&A, and have risen substantially, with annual price increases ranging from 2% to 7%. This trend mirrors the increase in OEB fees, which saw a 9.8 % CAGR from 2021 to 2026.

Additional factors have driven up costs for specific operational activities. For example, increased unit costs for underground locates are primarily due to legislative changes under Bill 93, mandating faster turnaround times for locate requests. For a detailed analysis of inflationary pressures on Hydro Ottawa, please refer to Schedule 1-2-5 - Impacts of Inflationary Pressure.

Looking ahead to the 2026-2030 timeframe, prevailing global economic conditions, including trade uncertainties and tariffs, are expected to continue contributing to increased operating costs and overall uncertainties.

Hydro Ottawa actively manages these external factors and rising costs through its procurement policy, as outlined in Schedule 4-2-2 - Purchases of Non-Affiliate Services, which aims to secure favorable prices and maximize purchase value. Furthermore, Hydro Ottawa is committed to fostering a culture of innovation and continuous improvement, detailed in Schedule 1-3-4 - Facilitating Innovation and Continuous Improvement. These initiatives have resulted in $14.5M in avoided costs for the 2021-2025 period and are projected to yield $27.2M in avoided costs for the 2026-2030 period.

3.6. INVESTING IN THE WORKFORCE

Hydro Ottawa's resilience and success are deeply rooted in the expertise and dedication of its workforce. Facing escalating operational demands, rapid technological advancements, and the intensifying impacts of climate change, strategic investment in the workforce is not merely a reactive measure, but a proactive and crucial step to ensure long-term resilience and maintain service reliability. Like many utilities, Hydro Ottawa is experiencing significant workforce challenges, including a wave of retirements among skilled trades and technical roles. While past strategies involving productivity enhancements and automation have provided some relief, the evolving energy landscape necessitates a more comprehensive approach.

Hydro Ottawa recognizes that investment in a skilled workforce is paramount. Recent challenges have underscored this. Hydro Ottawa’s historically lean approach to headcount is no longer sustainable, and not increasing investment in its workforce would result in risks to its ability to deliver necessary services to customers, creating unsustainable workloads for staff and the potential for health and safety concerns. These issues contributed to a near-strike in 2021 and an 84-day labour strike in 2023, where one of the key concerns was workload and its impact on safety.

The 2021-2023 period also saw an unforecasted surge in customer-driven growth projects, amplifying the demand for technical and trade staff. Additionally, the complexity of large load and DER connection requests, the implementation of the Advanced Distribution Management

System (ADMS), and the need for enhanced project oversight have strained engineering and leadership resources.

As such, Hydro Ottawa plans to expand its workforce by 177 full time positions between 2024 and 2030. This represents an increase of 29% from the 2021 OEB approved headcount. Of these new positions, 131 are slated to be filled by the end of 2026, with the remaining 46 to follow by 2030. To account for expected position turnover and recruitment timelines, a vacancy assumption was incorporated as outlined in Table 10 of Attachment 4-1-3(A) Employee Compensation Strategy. Therefore, these 131 positions translate to a projected growth of 100 full-time equivalent positions in 2026 (or 16%), compared to the 2021 OEB-Approved level after the vacancy assumption is applied as shown in Attachment 4-1-3(D) - OEB Appendix 2-K - Employee Costs .

This increased staffing is driven by several key factors:

- **Significant Capital Program Growth:** The near doubling of capital investment necessitates more skilled trades and technical staff for growth, electrification, infrastructure renewal, grid modernization, and resilience projects.
- **Increased Project Complexity:** The rising complexity of grid modernization and DER integration projects requires specialized engineering and technical expertise.
- **Infrastructure Maintenance:** Renewing deteriorating infrastructure and enhancing maintenance programs demand additional skilled trades and technical positions.
- **Enhanced Oversight:** Growth in project volume and workforce size requires strengthening support functions like system operations, contractor management, and leadership.
- **Technological Advancement:** The increasing complexity of IT and OT systems, cyber security needs, and digital customer experience enhancements drive the demand for specialized IT expertise.

- **Regulatory Demands:** Growing safety, compliance, and sustainability requirements necessitate dedicated compliance and policy resources.
- **Strengthening Internal Support:** Increased recruitment, HR technology evolution, and complex financial reporting drive the need for expanded HR and finance support.

4. PLANNING PROCESS

Hydro Ottawa's approach to the OM&A planning and budgeting for the 2026–2030 period is guided by the utility's comprehensive planning and performance management framework. This framework aligns corporate strategies with operational planning, performance objectives, and a commitment to continuous improvement.

The framework ensures that spending aligns with business priorities, achieves performance targets, and supports Hydro Ottawa's core strategic objectives, as outlined in Hydro Ottawa's 2021-2025 Strategic Direction.

Hydro Ottawa's 2026 OM&A budget was developed as a Test Year rebasing budget, based on a detailed forecast of expenditures generated through the utility's budgeting process. The process was guided by the objectives outlined in a 2024–2030 Budget Planning Memorandum issued by the Chief Financial Officer to the Executive Management Team. For reference, see Attachment 1-2-3(A) - Corporate Memorandum - 2024–2030 Priorities and Budget Guidelines.

Hydro Ottawa employed both top-down and bottom-up methodologies to develop the 2026–2030 OM&A budget. Funding requests were evaluated and prioritized based on their alignment with Hydro Ottawa's core strategic objectives and their impact on ratepayers. Adjustments were made to ensure the final budget reflected these priorities while meeting Hydro Ottawa's operational needs to deliver a safe and reliable distribution system. In addition, Hydro Ottawa used customer feedback including the phase one rate application survey to assist in prioritizing programs based on customers' preferences. Please see Schedule 1-4-2 - Customer Engagement on the 2026-2030 Application for details. The approach also ensured compliance

with legislative and regulatory obligations, including the conditions specified in the utility's OEB-Approved license. The OM&A budget was subjected to a review of customer rate impacts by Hydro Ottawa's senior management team and Board of Directors prior to the release of the customer engagement survey.

5. 2027 - 2030 TEST YEARS

For the 2027–2030 Test Years, Hydro Ottawa will adjust OM&A using a Custom Revenue OM&A Factor (CROF), adhering to the principles of incentive regulation set forth in the Renewed Regulatory Framework (RRF). The specific configuration of the CROF is detailed in Schedule 1-3-1 - Rate Setting Framework. Under this approach, Hydro Ottawa assumes the shortfall between revenues collected through rates and incurred costs, with differences addressed through productivity improvements and operational efficiencies. Further details on planned initiatives for the 2026–2030 period are provided in Schedule 1-3-4 - Facilitating Innovation and Continuous Improvement. For further details on all proposed mechanisms to balance customer and shareholder risk while ensuring a safe reliable grid, please see previously mentioned Schedule 1-3-1 - Rate Setting Framework, as well as Schedule 9-2-1 - New Deferral and Variance Accounts and 9-1-3 - Group 2 Accounts for details on utility specific accounts.

While Hydro Ottawa strives to anticipate OM&A funding needs during the 2026–2030 Custom Incentive Rate term, unforeseen costs may arise. In such cases, Hydro Ottawa may leverage the Z-factor application mechanism to recover costs, provided they meet OEB criteria, exceed the materiality threshold, and are the result of unforeseen events such as extreme weather or regulatory changes requiring significant investment.

TRANSITION TO CLOUD COMPUTING

1. INTRODUCTION

This attachment provides details on Hydro Ottawa's investments in software solution implementations that are hosted in the cloud and reflected in the proposed OM&A, namely:

Section 3. Enterprise Asset Management (EAM)
Section 4. Customer Relationship Management (CRM)

The EAM project will implement a new technical landscape to manage assets and automate processes. The CRM project will expand the use of the Salesforce platform to unify customer data and improve customer service. Both projects are included in the OM&A programs as presented in Attachment 4-1-2(C) - OEB Appendix 2-JC OM&A Programs Table and Schedule 4-1-2 - Operations, Maintenance and Administration Program Costs. The EAM project is included in the Engineering and Design Program, and the CRM project is included in the Information Management & Technology Program.

The classification of these cloud-based solutions as OM&A, rather than capital, is governed by International Accounting Standard 38 (IAS 38) Intangible Assets, which dictates that cloud computing arrangements, particularly those involving Software as a Service (SaaS), are assessed based on the rights provided through the contractual agreement. For example, if the arrangement only conveys the right to receive access to the software over the contract term, it is considered a service contract, and costs are expensed in OM&A. Furthermore, IAS 38 also guides the accounting treatment of implementation costs associated with these cloud solutions, determining whether such costs should be expensed or capitalized. For software projects that will be capitalized, refer to Schedule 2-5-9 - General Plant Investments.

2. CLOUD COMPUTING OVERVIEW

The Hydro Ottawa strategic direction notes that the 21st century is experiencing the Fourth Industrial Revolution, marked by the exponential growth and connectivity of electronics and information technology. This revolution is transforming industries and production systems with technological breakthroughs like the Internet of Things (IoT) and Artificial Intelligence (AI). Within this landscape, the Operations Technology (OT) and Information Technology (IT) systems that facilitate utilities' activities are rapidly evolving. The systems and processes supporting frontline operations and back-office functions are steadily migrating towards digital, mobile-friendly, and cloud-based solutions.

A recent Gartner publication states that "[c]loud computing's role as a key driver of technology innovation continues unabated. Infrastructure and operations leaders look to the cloud to drive their initiatives around GenAI, composable applications and sustainability while keeping a keen eye on cloud expenditure and sovereignty challenges."[1]

To improve IT services and manage costs, Hydro Ottawa evaluates various solutions to meet operational and customer needs, including cloud technologies and shared infrastructure. Cloud solutions offer flexibility and scalability for digital initiatives, however, the regulatory treatment of these investments needs to be considered to ensure that utilities have sufficient funding and appropriate incentives to pursue them, especially for large scale cloud projects.

Hydro Ottawa is committed to selecting the optimal solution regardless of whether it is an on-premise or a cloud solution as it believes it is in the best interest of the customer. To that end, in the current rate period, Hydro Ottawa has implemented various SaaS solutions, which are annual subscriptions to cloud-based software rather than perpetual licences of single-use, as-is software installed on local hardware. Although the OEB established a generic deferral account to enable utilities to track the cost of cloud implementations, none of the projects

[1] Gartner, *Unravelling Tomorrow's Cloud Computing Landscape* (February 7,2024) https://www.gartner.com/en/documents/5178763

implemented to date by Hydro Ottawa have met the materiality threshold on an individual project basis.

The SaaS solutions implemented in the current rate period are discussed below and in Schedule 1-3-4 - Facilitating Innovation and Continuous Improvement.

2.1. HYDRO OTTAWA CLOUD IMPLEMENTATION BENEFITS

Cloud solutions can provide improved customer satisfaction, enhanced employee collaboration and innovation, as well as speed, agility, and business continuity by offering scalable resources, improved data access, and integration across tools and platforms. This enables businesses to respond more quickly to changing business requirements and customer needs, foster teamwork and creativity among employees, maintain operations during disruption and drive continuous improvement. Below are examples of initiatives that Hydro Ottawa has implemented to address business needs and achieve these benefits in its operations.

2.1.1. Improving Customer Service

The 2018 tornado event revealed significant weaknesses in Hydro Ottawa's on-premise communication infrastructure, as customer channels collapsed under the strain of high traffic. Recognizing the need for greater resilience and scalability, Hydro Ottawa launched a cloud-hosted outage map within hours of the original system failure and reestablished a key channel for electricity restoration updates. The new cloud-hosted outage map withstood customer traffic during this multi-day outage event, demonstrating the speed and scalability of cloud technology.

Hydro Ottawa continued to improve customer experience by implementing a SaaS Outage Center in 2023 that further ensured customer access to outage information during large-scale events. Part of this implementation moved the data processing required to render the outage map image to the cloud. This new solution eliminated the strain on cellular networks and customer mobile devices to download and render the complex outage polygons. This is

particularly useful since cellular services are often degraded for the same reasons that cause power outages. Making the outage map “lighter” and more easily accessible provides a more reliable and visually appealing experience, ensuring all customers can stay informed, no matter their device or connection capabilities.

The 2023 Outage Center implementation also introduced new capabilities, including the ability for customers to easily report outages directly through the website and receive proactive outage notifications via email or SMS. This enhanced functionality provides our customers with more control and timely information during power disruptions.

As part of its post-tornado actions, Hydro Ottawa also migrated its corporate website to a cloud-based platform in 2019. This change addressed the limitations of the previous locally-hosted site, which couldn't handle traffic spikes. Adopting this platform brought the added benefits of a multi-region, multi-instance architecture enabling a near-zero Recovery Point Objective (RPO) and Recovery Time Objective (RTO), two metrics that assess resumption of normal operations after an outage or data loss. Additionally, it respects best practice concepts such as the “Goldilocks Zone” which relates to the optimal distance between data centers. The 2022 Derecho demonstrated the new cloud platform's effectiveness, as it provided uninterrupted service and rapid response times despite a 12,885% increase in website traffic.

Hydro Ottawa received high scores in the Customer Satisfaction Survey (Attachment 1-4-1(C) - 2024 Customer Satisfaction Survey - Residential and Small Commercial) for proactively communicating changes and issues (84% compared to 76% province-wide) and quickly restoring power (85% compared to 80% province-wide). These scores can be tied, in part, to the improvements Hydro Ottawa has made to keep customers updated during power outages and the implementation of these cloud arrangements.

In addition to the improvements in outage communications, Hydro Ottawa has leveraged the Field Service module of Salesforce to enable real-time updates on work from employees in the

field. Salesforce allows for coordination of resources and assignment of personnel to jobs through one central information hub, minimizing downtime and preventing backlogs by reallocating resources as the priority of requests shifts. As the size of Hydro Ottawa's distribution system grows over the 2026-2030 rate period, these efficiency gains empower its crews to manage their workload.

2.1.2. Enhanced Team Collaboration & Innovation

Research has consistently shown a direct link between employee satisfaction and customer satisfaction.[2] As such, solutions that enhance collaboration, innovation and ease of working have the dual bonus of improving employee morale as well as customer experience. Hydro Ottawa's adoption of Google Workspace in 2020 marked a significant shift towards enhanced collaboration and innovation. Replacing a complex, on-premise Microsoft Exchange solution involving nearly ten servers, each requiring dedicated management, maintenance and security protocols, Google Workspace has streamlined workflows and empowered employees with a self-serve, mobile-enabled platform. This fosters a dynamic work environment where teams can seamlessly collaborate on documents and projects regardless of location, whether in the field, at home, or in the office.

By enabling simultaneous editing and real-time collaboration, Google Workspace has transformed how Hydro Ottawa operates and serves its customers. This agile approach to work has proven instrumental in reducing meeting times, simplifying the on-premise IT infrastructure footprint, and ultimately driving greater efficiency and productivity across the organization.

Further investments have focused on empowering our employees through targeted, topical training. The Best Practice Institute recent publication names Training and Development programs as one of the top five means of improving employee satisfaction.[3] Hydro Ottawa has

[2] Harvard Business Review, Research: How Employee Experience Impacts Your Bottom Line https://hbr.org/2022/03/research-how-employee-experience-impacts-your-bottom-line

[3] Best Practice Institute, The Connection Between Employee Satisfaction And Customer Satisfaction https://blog.bestpracticeinstitute.org/employee-satisfaction-and-customer-satisfaction/#:~:text=Research%20consistently%20shows%20a%20strong,a%20more%20positive%20customer%20experience.

adopted multiple cloud solutions to assist with the speed, ease, and quality of training material development. Adoption of AI tools in this space eliminates the burden of re-recording voice overs when content or material changes, making the ongoing maintenance and refreshment of our training content simpler and easier.

The 2022 Derecho storm underscored the need for a more proactive and data-driven approach to vegetation management. In response, Hydro Ottawa rapidly implemented a cutting-edge cloud-based solution called Overstory. Deployed in just two months, this innovative software introduced capabilities that were previously non-existent within the organization.

By leveraging satellite imagery and advanced analytics, Hydro Ottawa can take a data-driven approach to prioritize high-risk areas, minimize unnecessary trimming, and proactively address potential hazards, ultimately optimizing vegetation management costs. Through this innovative solution, Hydro Ottawa projects a savings of $1.6 million between 2026 and 2030. This is a prime example of how cloud solutions can simultaneously represent net new expenses and also drive significant savings. For more information please refer to Schedule 1-3-4 - Facilitating Innovation and Continuous Improvement.

2.1.3. Speed, Agility, and Business Continuity

Cloud solutions support the company's ability to more quickly find and implement solutions, as shown in many of the previous examples. In addition to the previously supported corporate goals mentioned, cloud solutions have supported the strengthening of Hydro Ottawa’s business continuity program.

The 2018 tornado underscored Hydro Ottawa's need for robust employee communication during crises. In response, a cloud-based Mass Employee Notification Solution was swiftly implemented within three months, transforming the company's emergency response capabilities. This cloud solution allows for immediate contact with all employees across multiple channels, a significant improvement over the previous labor-intensive, and limited reach,

method. This showcases the business continuity advantages of cloud, enabling rapid deployment and creating new, efficient operational capabilities where none existed before.

When the COVID-19 pandemic forced an immediate shift to remote work, Hydro Ottawa's business continuity hinged on rapid adaptation. Recognizing the critical need to maintain communication, the planned Google Workspace implementation was accelerated and deployed overnight. This cloud-based SaaS solution proved vital, preserving employee communication while traditional channels faltered under the unprecedented traffic surge. The intuitive design of Google Workspace enabled swift adoption, even among employees unfamiliar with chat and video conferencing. This rapid, seamless transition, powered by cloud technology, ensured Hydro Ottawa could continue its essential mandate of supplying electricity to the nation's capital, minimizing on-site staff and reducing contagion risks.

3. ENTERPRISE ASSET MANAGEMENT (EAM)

3.1. SUMMARY

Hydro Ottawa's $1.7 billion asset portfolio, projected to reach $3 billion by 2030, necessitates a strategic shift towards integrated asset management. A 2022 assessment highlighted critical gaps—manual processes, technology limitations, and fragmented data—impeding efficient management and ISO audit compliance. To address these challenges and capitalize on growth opportunities in a rapidly evolving industry, Hydro Ottawa will begin deployment of an EAM system. The initial deployment of $7.5 million from 2025 to 2028 will centralize data, automate processes, and enhance analytics, enabling more accurate asset condition assessments, optimized lifecycle management, and improved financial planning.

The EAM system will replace disparate systems with a unified platform, facilitating real-time data collection and Condition Based Monitoring, thereby extending asset longevity and reducing downtime. It will also streamline operations, improve service reliability, and enhance customer satisfaction by minimizing manual tasks and optimizing resource allocation. The program, structured in three phases - Roadmap, Solution Selection, and Implementation - aims to

standardize data, integrate technology, and mature asset management practices. Key risks, including planning, data design, resourcing, and change management, will be mitigated through proactive strategies and robust governance. Ultimately, the EAM system will ensure Hydro Ottawa's infrastructure remains reliable and efficient, meeting the demands of a growing service territory and a dynamic energy landscape.

3.2. CURRENT CHALLENGES

Hydro Ottawa, as a critical infrastructure provider, has an opportunity to significantly enhance its asset lifecycle management by moving from a current landscape of diverse legacy applications and tools. While these tools have served their purpose, the next step involves creating a more integrated and centralized system. This evolution will streamline processes, improve data-driven decision-making, and enable proactive asset management. The current environment, while functional, presents opportunities for reducing manual processes and improving data accuracy. By unifying data sources, Hydro Ottawa can minimize the need for time-consuming error validation and enhance visibility into data standardization. This strategic move is particularly timely, given the evolving demands of the industry, including increased electricity needs, the impact of extreme weather events, and the integration of distributed energy resources. Embracing these changes will position Hydro Ottawa for future growth and resilience.

Specifically, as detailed in Table 1, there are opportunities to improve areas such as data entry across key systems, refine financial decision-making, enhance system integrations, and automate calculations for Asset Health Index (HI) and Asset Management Plans (AMPs). Work dispatch and scheduling can also be optimized through the integration of real-time asset condition information. Addressing these areas will streamline data transformation, creation, synchronization, estimation, forecasting, and project management, leading to greater efficiency across the organization.

Table 1 - Key Challenges Addressed by the EAM System

Challenge	EAM System
Manual data entry and transfer across key systems	Eliminates multiple data locations in favour of a centralized database so that data does not need to be entered multiple times.
Impact on financial decision making (budgeting and forecasting)	One source for all asset cost information eliminates the need to transfer data into a standardized report structure and reduces time required for analysis.
Restrictive system integrations and manual data synchronization	One central database reduces the number of integrations required and eliminates the need to manually synchronize data.
Reliance on Asset Health Index (HI) calculation via spreadsheets	Manual calculations in spreadsheets will be minimized, most instead performed within the EAM system.
Manual maintenance of Asset Management Plans (AMPs)	AMPs will be maintained in the EAM system.
Work dispatch and scheduling inefficiencies	Improved real-time asset condition information will allow optimization of maintenance scheduling for more efficient use of resources.

3.3. BENEFITS OF EAM SYSTEM

Table 2 below outlines the anticipated benefits of implementing a robust EAM system at Hydro Ottawa, directly aligning with the identified opportunities for enhanced asset management. By addressing current areas for improvement, such as data integration and process automation, these benefits aim to optimize operational efficiency, bolster resilience, and support Hydro Ottawa's strategic goals in a rapidly evolving energy landscape.

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Table 2 - Performance Outcomes for the EAM

Area	Outcome
Reliability and Aging Infrastructure	• The EAM system will centralize asset data into a near real-time, accessible repository, improving the outcomes of advanced predictive analytics. This will allow for proactive maintenance scheduling, optimized resource allocation, and informed planning, ultimately extending asset lifespan and improving reliability. • Additionally, by predicting potential failures, the EAM will enable preventative repairs, enhancing safety for employees, contractors, and the public.
Growth & Enhancement	• The EAM system will provide a comprehensive, integrated view of all grid assets, from substations to smart meters. This unified perspective will enable Hydro Ottawa to track asset condition, performance, and maintenance history effectively, supporting the transition to a smart grid. • The EAM will also facilitate efficient scaling of operations by automating processes and providing real-time data to manage the growing asset base due to population growth and electrification initiatives. Furthermore, by integrating with DER monitoring systems, the EAM will enable real-time tracking and optimization of distributed energy resources, improving grid stability and efficiency.
Resilience & Climate Change Adaptation	• The EAM system will integrate diverse data sources, including real-time sensor data and external environmental data, to identify potential disruptions and predict damages. This enhanced visibility will enable targeted risk mitigation strategies, such as reinforcing infrastructure and implementing preventive maintenance. • The EAM will also support ESG goals by providing detailed data capture and analysis capabilities, allowing Hydro Ottawa to quantify and improve its environmental impact.
Workforce Planning and Renewal	• The EAM system will automate work order scheduling and assignment based on employee availability, skillset, and asset location. This will optimize workload distribution and resource utilization, reducing manual intervention and duplicate data entry. The system will also provide a centralized platform for training and knowledge transfer, supporting workforce renewal and skill development.

Area	Outcome
Productivity and Innovation	• By enabling real-time monitoring, data-driven decision-making, and automated workflows, the EAM system will significantly boost productivity. Mobile access and inventory optimization will further enhance efficiency. The centralized data platform will facilitate seamless collaboration across departments, fostering innovation through unified communication, knowledge sharing, and cross-functional problem-solving.
Digitization and Technology Evolution	• The EAM system will serve as a central hub for data integration and automation, supporting the digitization of asset management processes. IoT and sensor data integration, mobile accessibility, and remote monitoring capabilities will enhance operational efficiency. Robust cybersecurity and data protection measures will ensure the integrity and security of the digital asset management environment.
Customer Needs & Preferences	• The EAM system will streamline asset management processes, leading to higher service quality, fewer unplanned outages, and quicker response times. Enhanced asset visibility and proactive maintenance will improve safety and sustainability, ultimately enhancing customer satisfaction and trust.

3.4. TIMING AND COSTS OF EAM

The EAM program implementation at Hydro Ottawa will be rolled out in phases from 2025 to 2028. This phased approach is designed to ensure a strategic and systematic rollout, beginning with a comprehensive roadmap and culminating in the full deployment of the EAM system across all asset classes. Each phase focuses on building upon the previous one, progressively enhancing system capabilities and integrating key functionalities to optimize asset management practices. The rollout, initiated upon completion of the 2025 roadmap, will be guided by the insights gained during the initial planning phase, with costs allocated accordingly. The program is expected to follow the timeline in Table 3, subject to vendor and resource availability.

Table 3 - Proposed Timeline of the EAM Program

Year	Activity
2025	● Roadmap to outline priorities and initiatives ○ Outcome: EAM platform and Implementation partner selection ● Contracting and Project Setup
2026	● Identification of key configurations and integration of EAM technical architecture system to stand up core system. ● Implement EAM foundational base repository with data and best practices for asset management analysis and reporting, where applicable. ● Core system setup
2027	● Expand system capabilities around process automations and system integrations, reports and analytics. ● Subsequent releases with expanded asset class data.
2028	● Enhance system capabilities around process automations and system integrations, reports, and analytics. ● Final go-live with all asset classes.

Implementation of the proposed scope of the EAM roadmap will require an approximate $7.5M OM&A investment over the term as noted in Table 4 below. Key program costs include the following:

- Acquisition of an EAM technical architecture solution: $0.5M subscriptions/licenses per year;
- System Integrator or vendor services to implement the software: $5.0M professional services; and
- Internal labour costs: Hydro Ottawa will augment the System Integrator or vendor services team by staffing the project with four temporary positions.

Table 4 - EAM Project Expenditures ($'000 000s)

	Historical Years			Bridge Years		Test Years				
	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Subscription	-	-	-	-	-	0.5	0.5	0.5	0.5	0.5
Implementation	-	-	-	-	-	2.0	2.0	1.0	-	-
Internal Labour	-	-	-	-	-	0.5	0.4	0.5	-	-

3.5. EAM PROGRAM SCOPE

The EAM program will unfold through a carefully structured, multi-year implementation, beginning in 2025. This strategic timeline is designed to ensure a smooth transition and maximize the benefits of the new system. Each phase builds upon the previous one, progressively introducing functionalities and integrations while minimizing disruption to ongoing operations. The initial phase, commencing in 2025, is critical for laying the groundwork and establishing the program's direction, and will be centered around the creation of a comprehensive roadmap.

3.5.1. Phase 1: Roadmap (2025)

The focus of the roadmap activity will be to align functional business processes, data governance, and systems that will drive the organization into the future while minimizing impact to current operational goals. All processes that are handled under work execution and work planning will be included as part of the roadmap exercise. It will also include a review of previous assessments and workshops to reiterate system enhancements.

The roadmap will also include an assessment of the current state vs desired state and data/process gaps for all business functions related to EAM, including current and future ERP connections. The roadmap will identify KPIs to measure success and detail the foundational elements, data migration, data governance, and planning. Results from this exercise will be leveraged by Hydro Ottawa to inform optimal allocation of the EAM budget.

Hydro Ottawa will form a steering committee as part of the roadmap exercise to ensure alignment with broader goals, including the eventual ERP system replacement. To ensure proper project governance, this steering committee will continue through to completion of the project.

3.5.2. Phase 2: Solution Selection

Upon completion of the roadmap exercise, Hydro Ottawa will identify an EAM platform that best meets business requirements and retain an implementation partner to configure the software platform.

The selection of the EAM solution will involve the following three layers of assessment, modeled after The Open Group Architecture Framework (TOGAF):

- **Business/Functional Architecture**: organizational objectives and functional requirements.
- **Information System Architecture**: systems and applications used by the organization to support the organizational objectives.
- **Data Architecture:** data collection, storage, usage, and governance used by the organization to support the system architecture.

Employing the TOGAF framework for all the business functions across these three dimensions will enable a comprehensive approach, incorporating all business processes in the maturity assessment.

3.5.3. Phase 3: Implementation

Once the priorities have been identified from the roadmap activity, Hydro Ottawa will be able to generate a workflow and timeline to centralize foundational data and enhance business processes to align with a technology implementation. Following the establishment of the repository, process automations and system integrations will follow throughout the remainder of

the project timeline based on business priorities, technical feasibility, and other factors. Implementation will address Reports, Interface, Conversion, Enhancements, Forms, and Workflow across asset management subject areas and technical capabilities:

- Asset Tracking & Inventory Management
- Asset Performance Management
- Work Order Management
- Preventative Maintenance
- Reporting & Analytics
- Mobile Access
- Integrations to other systems

3.6. KEY RISKS

Successful delivery of this project will enable Hydro Ottawa to address existing operational bottlenecks in processes and technologies, both in their current state and as they further compound with increasing demand. Risks to completion of this project are outlined in Table 5, along with the mitigation strategies in place to address them.

Table 5 - Key Risks of Enterprise Asset Management Program and Mitigation Strategies

Risk	Mitigation
Planning and scope definition	Develop a comprehensive set of project plans with clear objectives, deliverables, timelines, and a risk management strategy.
Data Design and Availability	Plan for data availability, transformation and integration challenges early in the project and allocate sufficient resources to address them.
Resourcing	Ensure that the project team has the necessary technical and functional expertise to support project deliverables and ongoing support.
Level of change for employees and customers	Implement change management strategies to address employee responsibilities to ensure smooth transition of customers to new features and functionality.
Executive Support and Stakeholder Engagement	Maintain open communication with champions, stakeholders and steering committees to address concerns promptly.
Vendor Management	Selection and renewal of vendors with proven track records and establish clear expectations within contractual agreements.

4. CUSTOMER RELATIONSHIP MANAGEMENT (CRM)

4.1. SUMMARY

Hydro Ottawa is seeking to expand on its CRM program currently utilizing the Salesforce platform. The purpose of this initiative is to build a unified CRM platform that provides a comprehensive, 360-degree view of each customer. The platform will consolidate customer data across various departments and touchpoints within the company, including information such as transactions, projects, interactions, preferences, profiles, programs, and more. Additionally, the Customer 360 platform will serve as a central hub for agent interactions, empowering customer service professionals to address and respond to customer needs more efficiently.

Currently, customer data resides in disparate systems and departments, hindering a holistic understanding of customer behavior and needs. Having centralized customer information and consolidated customer data will provide valuable insights that power effective outreach,

enhance personalization, and aid data-driven decision-making. A Salesforce-powered solution also offers a more intuitive interface that empowers agents with easy access to data, reduces training times, enables more efficient customer service interactions and leads to faster resolutions and improved customer satisfaction. Overall, the adaptability and scalability of the Salesforce platform will be instrumental to Hydro Ottawa's ability to adapt and respond to the growing and evolving needs of customers and to optimize customer engagement and outreach efforts in the next rate period and beyond.

Objectives of the program will center on the following:

Operational Effectiveness: Single unified view of customer data across the organization and an agent console designed for efficient interaction management and a reduction in agent ready/training time. Optimize resource allocation, streamline processes, and improve efficiency across customer service, field operations, and billing. Data-driven decision-making will empower the organization to make more informed choices, innovate, streamline operations, and deliver higher-quality services to customers.

Customer Focus: Improve customer experience and increase satisfaction through personalized interactions, proactive issue resolution, and streamlined service across all touchpoints. Understand customer behaviors and preferences to create more targeted customer outreach campaigns that better resonate with customers. Understand common customer pain points, predict potential issues, and identify opportunities to improve the experience before they become problems or complaints.

4.2. CURRENT CHALLENGES

Some of the current challenges and opportunities are identified below:

- Integrating siloed data to create a comprehensive customer view will enable more consistent and personalized communication, fostering greater customer satisfaction.

- Limited ability to segment customers for marketing and information campaigns, hindering optimal impact.
- Streamlining customer data access, CIS navigation, and interdepartmental workflows would improve productivity and resource allocation.
- A centralized, intuitive interface will improve agent workflows and improve customer experience.
- A holistic view of the customer would enable more optimal business decisions.

4.3. BENEFITS OF CRM

A unified CRM platform will drive improvements in key areas of Hydro Ottawa's Strategic Direction, as outlined in Table 6 below.

1 **Table 6 - Performance Outcomes for the CRM**

Area	Outcome
Reliability and aging infrastructure	**Improved communication and collaboration** with customers and stakeholders will keep them informed about maintenance activities and address their concerns.
Resilience and climate change adaptation	Make informed, **data-driven decisions and adapt operations** in response to climate change challenges, customer concerns, promoting resilience and sustainability.
A growing service territory	**Scale efficiently** as population growth and climate goals drive major electrification infrastructure developments increasing Hydro Ottawa's assets and service obligations.
Grid modernization	Grid modernization projects often involve disruptions and changes for customers. **Improved communications** around project updates, outages, and alternative energy options to customers ensure transparency and build trust.
Productivity and Innovation	All customer information will be stored in a **centralized** location, eliminating the need to search through multiple systems. Teams can **share information and collaborate** more effectively within the CRM, improving communication and reducing duplication of effort. Improved customer insights, **key performance indicators and analytics** will enable managers to identify areas for improvement and track progress towards goals. The tracking of customer interactions and preferences will allow Hydro Ottawa to create **targeted marketing campaigns** and personalized experiences.
Digitization and Technology Evolution	Enables a **customer data centralization hub** and integration capabilities, automation and optimization of customer relationship management processes. Automate ticket routing, self-service portals, and chatbots, **enabling faster and more efficient customer support.** **Track customer interactions** on social media, enabling Hydro Ottawa to monitor brand sentiment, engage with customers, and identify opportunities. **Leverage AI and machine learning** to analyze customer behavior, personalized recommendations, and automate complex tasks, driving innovation and improving customer experience.

Area	Outcome
Customer Needs & Preferences	**Single view of the customer** enables Hydro Ottawa to understand individual customer needs and tailor its service offerings accordingly. Enables Hydro Ottawa to **advance its customer portal** where customers can access their information, track service status, and manage their preferences, providing greater control and autonomy. **Segmenting customers** based on their preferences and behavior will result in personalized marketing campaigns, recommendations, and offers, increasing relevance and engagement.

4.4. TIMING AND COSTS OF CRM

Hydro Ottawa selected Salesforce as its CRM platform beginning in 2018 and has continued to invest in the platform to improve operational efficiency, drive customer experiences, and build a 360 degree view of the customer. Implementation of the CRM roadmap will see an approximate $4.2M OM&A investment over the term as noted in Table 7.

Table 7 - CRM Project Expenditures ($'000 000s)

	Historical Years			Bridge Years		Test Years				
	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Project expenditures	-	-	-	-	-	0.7	1.2	1.1	0.6	0.6

The implementation will predominately rely on external vendors for software and support. Key program costs include:

- Incremental subscriptions / licenses;
- Professional services where necessary; and
- Internal labour.

4.5. CRM PROGRAM SCOPE

The work will center on the following initiatives:

- **Customer Profile**: Build a comprehensive and unified profile of each customer, aggregating data from all sources and formulating a plan to consolidate this information into Salesforce.
- **Customer Journey Mapping**: Understand and capture the customer's interactions across various touchpoints and channels throughout their relationship with Hydro Ottawa.
- **Segmentation and Personalization**: Group customers based on shared characteristics and tailor interactions for a more personalized experience.
- **Predictive Analytics, Dashboards and Insights**: Utilize data to anticipate customer needs, predict behaviors, usage patterns, trends and empower customer service agents.
- **Customer Experience Management**: Leverage insights to deliver superior customer experiences across all channels.
- **Integrations and Automations**: Data from CIS, ERP, marketing automation, customer service, and any other systems that store customer-related information.

4.6. KEY RISKS

Successful delivery of this project will enable Hydro Ottawa to better serve its customers through increased intelligence and streamlined operations on a single unified platform. Risks to completion of this project are outlined in Table 8, along with the mitigation strategies in place to address them.

Table 8 - Key Risks of Customer Relationship Management Program and Mitigation Strategies

Risk	Mitigation
Planning and scope definition	Develop a comprehensive set of project plans with clear objectives, deliverables, timelines, and a risk management strategy.
Data Design and Availability	Plan for data availability, transformation and integration challenges early in the project and allocate sufficient resources to address them.
Level of change for employees and customers	Implement change management strategies to address employee responsibilities to ensure smooth transition of customers to new features and functionality.
Executive Support and Stakeholder Engagement	Maintain open communication with champions, stakeholders and steering committees to address concerns promptly.
Vendor Management	Open dialogue and regular touchpoints with vendors to ensure project deliverable timelines and address any concerns promptly to minimize interruptions.

OPERATIONS, MAINTENANCE AND ADMINISTRATION PROGRAM COSTS

1. INTRODUCTION

This Schedule describes Hydro Ottawa's operations, maintenance, and administration (OM&A) costs by major program and provides a year-over-year variance analysis. Variance explanations are provided for program costs with variances greater than $1M, consistent with the materiality threshold that the utility is employing for purposes of this Application.[1]

The information contained in this Schedule is guided by the *Chapter 2 Filing Requirements for Electricity Distribution Rate Applications - 2025 Edition for 2026 Rate Applications,* dated December 9, 2024.

For the OM&A-related appendices that electricity distributors must submit, pursuant to these Filing Requirements, please see the following Excel Attachments:

- Attachment 4-1-2 (A) - OEB Appendix 2-JA - Summary of Recoverable OM&A Expenses
- Attachment 4-1-2 (B) - OEB Appendix 2-JC - OM&A Programs Table
- Attachment 4-1-2 (C) - OEB Appendix 2-L - Recoverable OM&A Cost per Customer and per Full Time Equivalent
- Attachment 4-1-2 (D) - OEB Appendix 2-JB - Recoverable OM&A Cost Driver Table

2. OM&A VARIANCE ANALYSIS

This section provides a high level year-over-year variance analysis for Hydro Ottawa's total OM&A expenditures followed by program level analysis in Section 3. Table 1 provides a year-over-year summary of Hydro Ottawa's OM&A expenditures, variances and the Compound Annual Growth Rate (CAGR) of the 2026 Test Year OM&A expenditures over the 2021 OEB approved amount.

[1] As described in Schedule 1-1-4 Administration.

Table 1 – Summary of OM&A Variances 2021-2026 ($'000 000s)

	OEB Approved	Historical Years			Bridge Years		Test Year	CAGR
	2021	2021	2022	2023	2024	2025	2026	Test vs. OEB Approved
OM&A	$ 90.6	$ 84.7	$ 100.5	$ 112.8	$ 115.3	$ 118.9	$ 140.0	9.1%
Variance ($)		$ (5.9)	$ 15.8	$ 12.2	$ 2.5	$ 3.6	$ 21.1	
Variance (%)		(6.5%)	18.6%	12.2%	2.3%	3.1%	17.7%	

Hydro Ottawa's proposed test year OM&A expenditures are approximately $140M, representing a CAGR of 9.1% relative to the OM&A levels approved in the 2021 rebasing application. This funding is essential to address the key OM&A themes as detailed in Schedule 4-1-1 - Operations, Maintenance and Administration Summary. The increased OM&A is driven by the need to enhance testing, inspection, and maintenance programs for deteriorating infrastructure, manage the increased demand from growth and electrification, bolster extreme weather response capabilities including IT system stability, and invest in technological innovation and cyber security. These themes, which are closely aligned with the Distribution System Plan's (DSP's) priorities, are underpinned by the critical need to manage rising costs and inflationary pressures, as outlined in Schedule 1-2-5 - Impacts of Inflationary Pressure, and to invest in workforce development, as described in Attachment 4-1-3(C) - Workforce Growth. This strategic allocation of OM&A ensures Hydro Ottawa can maintain reliability, affordability, and adapt to the evolving energy landscape.

Table 2 below identifies the year-over-year cost drivers impacting Hydro Ottawa's OM&A. Explanations for each year's change in cost by cost driver are provided thereafter. Excel Attachment 4-1-2 (D) - OEB Appendix 2-JB - Recoverable OM&A Cost Driver Table also contains the cost driver information.

Table 2 – OM&A Cost Drivers 2021-2026 ($'000 000s)[2]

Cost Driver	Historical Years			Bridge Years		Test Year
	2021[3]	2022	2023	2024	2025	2026
OPENING BALANCE	**$ 91**	**$ 85**	**$ 101**	**$ 113**	**$ 115**	**$ 119**
Inflation[4]		$ 3	$ 4	$ 5	$ 4	$ 4
COVID Impact	$ (6)	$ 2				
Labour costs[5]				$ 4		$ 6
Proactive Distribution Maintenance						$ 5
New IT Programs		$ 1				$ 6
Major Weather Events		$ 8	$ 8			
Labour Strike			$ 6			
Other Costs[6]		$ 2	$ (6)	$ (7)		$ 1
Total Change	$ (6)	$ 16	$ 12	$ 3	$ 4	$ 21
CLOSING BALANCE	**$ 85**	**$ 101**	**$ 113**	**$ 115**	**$ 119**	**$ 140**

2021 Actuals vs. 2021 OEB Approved

2021 actual OM&A expenditures were $5.9M lower than OEB-approved amounts, largely due to the impacts of the COVID-19 pandemic and management's decisions and actions. The forecast included in the 2021-2025 Rate Application was compiled prior to the COVID-19 pandemic and did not account for the pandemic's impacts. Refer to Schedule 1-2-4 - Impacts of COVID-19 Pandemic for additional information. Hydro Ottawa observed the following impacts resulting from the COVID-19 pandemic:

- $(5.5)M related to reduced compensation costs as Hydro Ottawa employed several tactics to ensure employee safety during this time as well as control costs given the

[2] The figures in Table 2 are net of quantifiable productivity gains as detailed in Schedule 1-3-4 Facilitating Innovation and Continuous Improvement and growth factors.
[3] The 2021 Opening Balance represents the OEB Approved amount.
[4] Inflation is based on the OEB parameters.
[5] Labour costs are net of allocation beyond the OEB inflation parameters.
[6] Other Costs includes reversals of non-recurring costs.

financial uncertainty, which included a hiring freeze; termination of temporary, contract, and part-time employees; and cancellation of the summer student program.

- $(0.4)M of other net reductions related to decreased levels of travel, cancellation of corporate events, and suspension of other non-critical expenditures, offset by COVID-19 related costs incurred.

2022 Actuals vs. 2021 Actuals

2022 actuals were $15.8M higher than 2021 actuals primarily as a result of:

- $7.7M in storm restoration costs were incurred following the May Derecho storm, the most devastating storm in Hydro Ottawa's history. Further details on the impacts of the Derecho storm can be found in Schedule 2-1-1 - Rate Base Overview as well Attachment 2-1-1(A) - May 2022 Derecho - After Storm Report. Total costs of the storm, $23.8M, include $15.1M capital expenditures, $7.4M in reactive maintenance expenses, $1.0M in asset derecognition, and $0.3M other OM&A costs.
- $2.3M in other cost increases, primarily distribution maintenance, resulted from the post-Derecho storm activity.
- $1.8M in increased bad debt expenses due to increased write-offs. This increase was primarily driven by economic challenges and inflation resulting from the COVID-19 pandemic, which placed financial strain on customers. As noted above, further details on the impacts of the COVID-19 pandemic can be found in Schedule 1-2-4 - Impacts of COVID-19 Pandemic.
- $1.0M in IT increases to enhance service to customers, create efficiencies, and improve functionality to be more agile and resilient in the face of industry disruption. Further details can be found in Attachment 1-3-4 (B) - Digital Strategy.
- $3.0M in increased costs resulted from annual inflationary impacts on planned items. These amounts were calculated based on the OEB-Approved OM&A envelope and inflation parameters.

2023 Actuals vs. 2022 Actuals

2023 actuals were $12.3M higher than 2022 actuals, primarily as a result of:

- $8.4M in storm restoration costs. Hydro Ottawa continued to face elevated costs associated with weather events, such as the April 2023 ice storm and several lightning storms during the summer of 2023. Refer to Table 22 in Schedule 2-5-3 - Performance Measurement for Continuous Improvement for a summary of storm activity.
- $5.9M in increased costs related to the 84-day labour strike in the summer of 2023.
- $(5.5)M cost reduction was largely due to the reversal of non-recurring costs from the previous year.
- $3.5M in increased costs resulted from annual inflationary impacts on planned items. These amounts were calculated based on the OEB-Approved OM&A envelope and inflation parameters.

2024 Bridge Year vs. 2023 Actuals

Costs in the 2024 Bridge Year are expected to be $2.5M higher than 2023 actuals, primarily as a result of:

- $4.3M in increased compensation costs tied to additional Certified & Skilled Trades and Designated & Technical Professional resources being hired to enable Hydro Ottawa to execute both capital and OM&A programs, increase capacity, and maintain efficient and safe operations. Further details can be found in Attachment 4-1-3(C) - Workforce Growth.
- $(6.5)M cost reduction reflects the one-time costs from the storms and labour strike in previous year not recurring.
- $4.7M in increased costs resulted from annual inflationary impacts on planned items. These amounts were calculated based on the OEB-Approved OM&A envelope and inflation parameters.

2025 Bridge Year vs. 2024 Bridge Year

Costs in the 2025 Bridge Year are expected to be $3.6M higher than the 2024 Bridge Year, within the annual inflationary increases calculated based on the OEB inflation parameters:

- $3.7M in increased costs resulted from annual inflationary impacts on planned items. These amounts were calculated based on the OEB-Approved OM&A envelope and inflation parameters.
- $(0.1)M minor reductions.

2026 Test Year vs. 2025 Bridge Years

Costs in the 2026 Test Year are expected to be $21.1M higher than the 2025 Bridge Year, primarily due to:

- $6.1M of increased technology program costs related to cloud computing and cyber security. Technology-related projects are described in detail in Schedule 2-5-9 - General Plant Investments as well as in Attachment 4-1-1(A) - Transition to Cloud Computing. The most notable projects with cost impacts in 2026 are:
  - Enterprise Asset Management (EAM) System (2026 estimated cost: $3.0M) including the temporary positions required for the implementation
  - Customer Engagement Platform (2026 estimated cost: $0.9M)
  - Customer Relationship Management System (2026 estimated cost: $0.7M)
  - Metering Renewal AMI 2.0 System (2026 estimated cost: $0.7M)
  - Other minor technology program costs totaled of $0.8M
- $5.5M in increased compensation costs net of allocation recovery for incremental positions to support the required growth in both the capital and operations and maintenance programs as outlined in Attachment 4-1-3(C) - Workforce Growth.
- $4.6M in increased distribution maintenance including the integration and maintenance of non-wire solutions, drone inspections, and maintenance enhancement as outlined in below in Section 3.1 - Testing, Inspection, and Maintenance.

- $3.6M in increased costs resulted from annual inflationary impacts on planned items. These amounts were calculated based on the OEB-Approved OM&A envelope and the estimated inflation parameters.
- $1.3M increase in other costs beyond the items listed.

3. OM&A PROGRAM COST & VARIANCE ANALYSIS

Pursuant to Section 2.4.3 of the Filing Requirements, the following section provides a variance analysis for the 2021-2026 period of Hydro Ottawa's OM&A costs by major program. Table 3 provides Historical, Bridge, and Test Year (2026) expenditures by JA Category. These categories are consistent with those found in OEB Appendix 2-JA. Table 4 provides Historical, Bridge, and Test Year expenditures by the program categories and the CAGR of the 2026 Test Year OM&A expenditures over the 2021 Historical amount. The OM&A program costs shown in Table 4 are net of any allocations to the capital programs.[7]

In Hydro Ottawa's EB-2019-0261 proceeding, a comprehensive settlement was reached which included $90.6M for the 2021 Test Year for Hydro Ottawa's OM&A expenditures. This amount was agreed to as a total OM&A figure and was not established at the OM&A program level. As a result, the OM&A program level variances in this section do not include a comparison of 2021 actuals against 2021 OEB approved. A comparison for Hydro Ottawa's total OM&A is provided between 2021 Actuals and 2021 OEB approved in Section 2 above.

[7] Excel Attachment 2-6-2(A) - OEB Appendix 2-D - Overhead Expenses details both the OM&A costs by program before capitalization, as well as the OM&A that has been capitalized. Hydro Ottawa's capitalization policy is filed at Schedule 2-4-4 - Capitalization Policy.

Table 3 – Summary of OM&A Costs by JA Category 2021-2026 ($'000s)

JA Category	Historical Years			Bridge Years		Test Year
	2021	2022	2023	2024	2025	2026
Operations	$ 22.3	$ 26.0	$ 26.7	$ 33.9	$ 33.8	$ 44.9
Maintenance	$ 9.5	$ 17.8	$ 21.3	$ 14.7	$ 15.1	$ 18.9
SubTotal	**$ 31.8**	**$ 43.8**	**$ 48.1**	**$ 48.6**	**$ 48.9**	**$ 63.8**
Billing and Collecting	$ 9.7	$ 10.8	$ 10.9	$ 12.4	$ 12.9	$ 13.6
Community Relations	$ 6.4	$ 6.8	$ 7.4	$ 8.5	$ 8.5	$ 10.0
Administrative and General	$ 36.9	$ 39.1	$ 46.4	$ 45.8	$ 48.6	$ 52.6
SubTotal	**$ 52.9**	**$ 56.8**	**$ 64.7**	**$ 66.7**	**$ 70.1**	**$ 76.2**
TOTAL	**$ 84.7**	**$ 100.5**	**$ 112.8**	**$ 115.3**	**$ 118.9**	**$ 140.0**

A discussion of System Operation and Maintenance costs, and how they are impacted by the Capital Expenditure Plan, are discussed in Section 6 of Schedule 2-5-5 - Capital Expenditure Plan. That section should be read in conjunction with this schedule and Excel Attachment 4-1-2(A) - OEB Appendix 2-JA - Summary of Recoverable OM&A Expenses, to obtain an understanding of the comprehensive relationships between the capital, operating, maintenance, and administrative costs of the 2026-2030 rate period. In addition, testing, inspection and maintenance programs are also discussed in Section 8.3 of Schedule 2-5-4 Asset Management Process.

1 **Table 4 – Summary of OM&A Program Costs 2021-2026 ($'000s)**

Programs	Historical Years			Bridge Years		Test Year	CAGR
	2021	2022	2023	2024	2025	2026	
Testing, Inspection & Maintenance	$ 1,470	$ 1,433	$ 1,555	$ 2,221	$ 2,820	$ 8,894	43.3%
Vegetation Management	$ 3,811	$ 6,720	$ 6,257	$ 6,430	$ 5,822	$ 6,149	10.0%
Underground Locates	$ 3,273	$ 3,538	$ 3,389	$ 4,666	$ 5,285	$ 6,027	13.0%
Stations Maintenance	$ 2,670	$ 2,710	$ 2,888	$ 3,454	$ 4,167	$ 5,033	13.5%
Distribution Overhead & Underground Maintenance	$ 2,110	$ 2,591	$ 8,085	$ 3,070	$ 3,016	$ 2,714	5.2%
Metering	$ 1,594	$ 1,910	$ 1,487	$ 1,876	$ 1,890	$ 1,970	4.3%
System Operations & 24/7	$ 4,612	$ 9,323	$ 8,029	$ 5,976	$ 6,640	$ 6,423	6.8%
Engineering & Design	$ 6,729	$ 7,226	$ 7,826	$ 9,306	$ 8,930	$ 15,224	17.7%
Distribution Support	$ 1,179	$ 3,032	$ 4,433	$ 6,954	$ 5,342	$ 5,443	35.8%
Minor Maintenance	$ 1,297	$ 1,317	$ 1,250	$ 846	$ 990	$ 1,669	5.2%
Collections	$ 1,687	$ 2,856	$ 2,929	$ 3,099	$ 3,304	$ 3,462	15.5%
Customer Billing	$ 8,148	$ 8,033	$ 7,952	$ 9,269	$ 9,530	$ 10,053	4.3%
Customer & Community Relations	$ 6,856	$ 7,428	$ 7,838	$ 9,156	$ 9,213	$ 10,653	9.2%
Information Management & Technology	$ 9,661	$ 11,674	$ 11,908	$ 13,702	$ 15,105	$ 16,780	11.7%
Safety, Environment & Business Continuity	$ 2,595	$ 2,943	$ 2,613	$ 3,566	$ 3,967	$ 4,353	10.9%
Human Resources	$ 3,305	$ 3,821	$ 4,896	$ 4,365	$ 4,428	$ 4,762	7.6%
Supply Chain	$ 1,365	$ 1,110	$ 489	$ 807	$ 833	$ 989	(6.2)%
Facilities	$ 8,417	$ 9,311	$ 13,250	$ 10,362	$ 10,509	$ 10,969	5.4%
Finance	$ 2,819	$ 2,641	$ 2,723	$ 2,297	$ 2,381	$ 2,400	(3.2)%
Regulatory Affairs	$ 3,022	$ 3,390	$ 3,473	$ 3,876	$ 4,205	$ 4,842	9.9%
Corporate Costs	$ 8,116	$ 7,528	$ 9,509	$ 10,022	$ 10,544	$ 11,204	6.7%
TOTAL	**$ 84,737**	**$ 100,536**	**$ 112,778**	**$ 115,320**	**$ 118,922**	**$ 140,010**	**10.6%**

2

3.1. TESTING, INSPECTION, AND MAINTENANCE

The Testing, Inspection, and Maintenance program is focused on maintaining the reliability, safety, and performance of Hydro Ottawa's distribution system through systematic evaluations and preventative maintenance. Key activities include Cable Chamber Inspections to assess structural integrity and identify risks, and Pole Inspections using non-destructive testing to prioritize replacements. The program also encompasses Insulator Washing to prevent contamination-related failures, Thermographic Scanning for early detection of equipment issues, and Switch Maintenance to ensure functionality of critical overhead and underground distribution switchgear.

Maintenance extends to Vaults and Transformers, including cleaning, painting, graffiti abatement, and thermographic inspections. Cable Testing evaluates underground cables for potential failure, while Supervisory Control and Data Acquisition (SCADA) Maintenance ensures optimal system monitoring. Inspections of customer-owned vaults flag safety issues for corrective action. These efforts collectively minimize risks, maintain or extend asset life, and uphold system reliability.

Through 2026-2030, Hydro Ottawa is enhancing its Testing, Inspection and Maintenance program by shifting towards a more proactive and technologically advanced approach, as outlined in Table 5 below. A primary improvement involves increasing the frequency of inspections for aging infrastructure, specifically for select cable chambers and distribution poles exceeding their lifespan, reducing the inspection cycle from ten to five years. Similarly, inspection cycles for degraded underground vaults and cables will also increase. The introduction of drone-based inspections for overhead assets marks a significant technological upgrade, enabling more detailed visual and thermographic assessments of pole-top conditions and hardware.

Enhanced data capture during inspections, particularly for underground equipment like vaults, switchgear, and transformers, will improve condition assessments. The maintenance program will also expand to include functionality verification of Fault Circuit Indicators (FCI) and new programs for Battery Energy Storage Systems (BESS) and monitoring services of third-party non-wire solutions. Furthermore, Hydro Ottawa is exploring automation and artificial intelligence to refine

condition assessments and improve overall maintenance efficiency. Increased formal cable testing and more frequent testing of degraded cable sections will allow for improved cable replacement and refurbishment planning. This comprehensive strategy aims to ensure Hydro Ottawa is able to maintain reliability, safety, and efficiency across Hydro Ottawa's infrastructure.

3.1.1. 2026-2030 Business Priorities

The priority for the Testing, Inspection, and Maintenance program remains the ongoing evaluation and monitoring of distribution system assets such as poles, cables, switches, and underground chambers. These activities are essential to ensuring system reliability, safety, and cost-effectiveness while proactively identifying potential issues before they result in failures or outages.

The implementation of Copperleaf Predictive Analytics (PA) and enhancements to Asset Health Indexing have advanced asset condition assessment used to inform capital requirement planning, please refer to Section 4.4 of Schedule 2-5-4 - Asset Management Process. To further refine this assessment, increased data capture on underlying asset components is crucial. This data, gathered through Testing, Inspection, and Maintenance programs, will enable more accurate condition assessments. These are essential for prioritizing targeted asset intervention strategies as the overall asset population continues to degrade, thereby optimizing asset life and capital allocation.

Table 5 below provides a description of the activities completed by the Testing, Inspection, and Maintenance program - the base program column describes the normal activity and the 2026-2030 Program Enhancements column highlights the planned changes to the base programs.

Table 5 – Asset/Activity Descriptions for Distribution Testing, Inspection & Maintenance

Asset/Systems	Testing Inspection & Maintenance Activity/Description (Base Program)	2026-2030 Program Enhancements
Cable Chambers	**Cable Chamber Inspection (also referred to as Manhole Inspection)** Condition inspection of Hydro Ottawa and customer-owned cable chambers integral to Hydro Ottawa's system.This includes inspecting the collar, lid, roof, and walls. Cable chamber components are identified for corrective action (immediate if posing an immediate risk to the public, workers, or system reliability; planned for a later date if posing a reduced risk). This program is on a 10 year cycle.	Increase the cycle frequency from 10 years to 5 years for selected cable chambers which had reached or exceeded Typical Useful Life. Explore the introduction of new technology to capture additional condition data, such as advanced imaging.
Distribution Poles	**Pole Inspection** Inspection and testing of all Hydro Ottawa distribution poles on a 10-year cycle. Visual inspection and non-destructive resistograph drill tests are used to assess pole condition and estimate remaining strength. This data is used to prioritize pole replacement programs.	Increase the cycle frequency from 10 years to 5 years for selected poles which had reached or exceeded Typical Useful Life Introduction of a drone-based inspection program to collect additional details on pole top condition and pole mounted hardware. (Please refer to Overhead Lines and Assets (Overall), below)
Overhead Insulators	**Overhead Insulator Washing** Planned washing of Hydro Ottawa's overhead insulators in areas subjected to salt spray and heavy contamination to prevent insulation breakdown and pole fires.	N/A
Overhead Lines and Assets (Overall)	**Overhead Visual and Thermographic Inspection** Visual inspection and thermographic scanning of all overhead assets on a 3-year cycle to detect abnormal temperature conditions in equipment and connections (from the ground level).	Introduction of a drone-based inspection program (based on the results from a pilot in 2025) to perform visual inspection and thermographic scanning on all overhead assets, continued on a 3-year cycle.
Overhead Switches	**Overhead Switch Maintenance** Planned detailed inspection and corrective maintenance of Hydro Ottawa's critical overhead distribution switchgear (switches and controls).	Introduction of a drone-based inspection program to capture visual inspection and infrared scan information on all overhead switches (refer to Overhead Lines and Assets, above).

Asset/Systems	Testing Inspection & Maintenance Activity/Description (Base Program)	2026-2030 Program Enhancements
	Overhead Switches Visual and Thermographic Inspection Visual inspection and thermographic scanning of all overhead switches on a 3-year cycle to detect abnormal temperature conditions in equipment and connections (from the ground level).	
Overhead Transformers	**Overhead Transformers Visual and Thermographic Inspection** Visual inspection and thermographic scanning of all overhead transformers on a 3-year cycle to detect abnormal temperature conditions in equipment and connections (from the ground level).	Introduction of a drone-based inspection program to capture visual inspection and infrared scan information on all overhead transformers (refer to Overhead Lines and Assets (Overall), above).
Underground Equipment	**Hydro-Owned Vault Maintenance** Planned maintenance of Hydro Ottawa-owned easement/shared vaults within customer facilities including visual and thermographic inspection and minor cleaning.	Increased data capture for visual and thermographic inspections. Increased inspection cycles for vaults in degraded condition.
Underground Transformers	**Graffiti Abatement** Work to comply with the City of Ottawa's Graffiti By–Law.	N/A
	Padmount Transformer Painting Planned painting of Hydro Ottawa's padmount transformers to address deteriorated paint finishes.	N/A
SCADA Devices	**SCADA Maintenance** Planned maintenance of Hydro Ottawa SCADA devices, including visual inspection, communication checks, cleaning, torquing, battery replacement and function testing.	Introduction of expanded program for FCIs based on new capital program, refer to Section 3 in Schedule 2-5-8 - System Service Investments.
Underground Lines & Feeders	**Cable Testing** Planned testing of Hydro Ottawa's in–service polymeric distribution cables using non-destructive testing technologies. This testing determines the probability of cable failure due to water tree migration, Partial Discharge (PD) and neutral corrosion (pilot	Increased program for formal cable testing to perform Very Low Frequency Tan-Delta, PD and Time Domain Reflectometry test procedures on polymeric distribution cables to prioritize relevant renewal/refurbishment activities.

Asset/Systems	Testing Inspection & Maintenance Activity/Description (Base Program)	2026-2030 Program Enhancements
	implemented in 2024). Results prioritize cable replacement and refurbishment programs.	Increase cycle for retesting of segments in degraded condition.
Customer Equipment	**Customer-Owned Vault Inspections** Inspection of customer-owned vaults to identify deficiencies affecting operations or safety. Issues are reported to equipment owners for corrective action.	Increased frequency of inspection for select vaults in degraded condition.
Underground Switchgear	**Switchgear CO2 Wash – Padmounted Gear** Dry–ice washing of Hydro Ottawa's air insulated underground distribution switchgear, including cleaning its internal mechanism.	N/A
Underground Switchgear & Transformers Inspection	**Underground Switchgear Thermographic and Visual Inspection** Visual and thermographic inspection of Hydro Ottawa's gas-insulated and air-insulated distribution padmount switchgear.	Focus on increased data capture on underlying components for enhanced condition assessment, based on the visual and thermographic inspection of gas-insulated and air-insulated distribution padmount switchgear.
	Underground Transformer Thermographic and Visual Inspection Visual and thermographic inspection of Hydro Ottawa's underground transformers.	Focus on increased data capture on underlying components for enhanced condition assessment, based on the visual and thermographic inspection of underground transformers.
Battery Energy Storage Systems (BESS)	No program	New program consisting of visual inspection, performance testing and ensuring proper connections/compliance of BESS, alongside their monitoring and management.
Third Party Non Wire Alternative Solutions	No program	New program consisting of services related to monitoring of third party non-wire alternative solutions.
Overall Distribution	No program	Proposed funding to introduce improvements to maintenance programs/practices based on changing/evolving needs. Exploring opportunities include automating/improving the capture of inspection information, enhanced condition assessment based on artificial intelligence, etc.

1

The Testing, Inspection and Maintenance program seeks to address the following challenges facing Hydro Ottawa's system:

- **Deteriorating Infrastructure**: Approximately 25% of overhead and underground assets (excludes stations and metering) have reached or exceeded their typical useful life, as outlined in Section 7.1 of Schedule 2-5-4 - Asset Management Process. Based on the proposed replacement rates as outlined in Sections 3 and 4 of Schedule 2-5-7 - System Renewal Investments, Hydro Ottawa will not make gains on the overall aging asset population. Therefore, increased data capture, inspection frequency, and maintenance activities are crucial to appropriately prioritize intervention to maintain service reliability as the asset population ages.
- **Equipment Failure Trend**: Historical reliability data indicates a slight increase in equipment failures since 2021, particularly in overhead assets, as outlined in Section 4.5.6.1 of Schedule 2-5-3 - Performance Measurement for Continuous Improvement, emphasizing the need for more sophisticated inspection techniques and preventative maintenance programs. For example, Hydro Ottawa has experienced a relatively high number of outages each year due to overhead switches, underground transformers and cables, which do not correlate to the condition information and resulting health indices. Refer to Sections 3.3.4 and 4.3.4 in Schedule 2-5-7 - System Renewal Investments.
- **Evolving Environmental Conditions**: Increasingly severe weather events, such as ice storms and extreme temperatures, place additional stress on Hydro Ottawa's distribution infrastructure, highlighting the importance of proactive condition assessments and targeted interventions. Overhead assets do not always completely fail when subjected to adverse weather conditions, but this exposure can cause certain components (e.g. pole top, OH switches, OH conductor etc.) to degrade faster than expected, leading to power outages if not proactively managed. Refer to Section 3.3.3 in Schedule 2-5-7 - System Renewal Investments. This emphasizes the need for advanced inspection information capture, through techniques such as drones to gain detailed condition information on all underlying overhead components.

Over the 2026-2030 rate period, the Testing, Inspection, and Maintenance program will leverage the improvements made to data collection and advanced analysis techniques, as outlined in Section 4.4.2 of Schedule 2-5-4 Asset Management Process, coupled with the established data-driven Asset Health Indexing framework, as described in Section 4.4.3 of Schedule 2-5-4 Asset Management Process, to focus on the following intervention strategies:

- **Comprehensive Inspection Programs**: Perform periodic comprehensive inspection and maintenance of distribution equipment, emphasizing safety and operational readiness, incorporating detailed thermographic inspections and corrective actions as needed. For underground cables, advanced techniques such as Very Low Frequency Tan-Delta, Partial Discharge, and Time Domain Reflectometry will be employed to identify vulnerabilities, reduce the risk of unexpected failures, and optimize capital investments (based on the pilot in 2024).
- **Data Collection Enhancements**: Hydro Ottawa will work through implementing further enhancements to its inspection processes, including capturing more detailed visual inspection and infrared scan information of underlying components within a distribution asset. Through the drone inspection program, overhead inspections will capture comprehensive information on pole-mounted transformers, switches, and hardware, while expanded vault inspections will include visual and infrared assessments of vault equipment alongside existing civil inspections. These enhancements allow for more accurate condition assessments, critical for effective risk-based investment planning and proactive asset maintenance.
- **Innovation through Technology**: Hydro Ottawa will pilot drone inspections in 2025 to gather more accurate visual and infrared scan information on overhead distribution assets, as compared to ground-based inspections. Results from this initiative will inform the basis of the program commencing in 2026. The use of drones will enable targeted maintenance, improve asset health assessments and intervene on overhead assets in a deteriorated condition. Additional funding is proposed to enhance maintenance programs and practices by introducing improvements that address changing asset requirements and management.

This includes improvements/opportunities to use artificial intelligence to enhance condition assessment and automating or improving the capture of inspection information.

- **Managing Modern Asset Systems/Solutions:** Hydro Ottawa will implement comprehensive management strategies for emerging grid technologies, including BESS and monitoring services for third-party Non-Wires Solutions (NWSs). These additions will increase operational and maintenance costs due to specialized upkeep, software and cyber security needs, safety compliance, and continuous performance monitoring, often requiring third-party expertise. Integrating BESS and NWSs into grid operations adds complexity, necessitating specialized training and service contracts to monitor and control these technologies, further contributing to rising expenses. For additional details refer to Section 9 of Schedule 2-5-4 - Asset Management Process.
- **Implementing Asset Intervention/Refurbishment Strategies:** In prioritizing customer affordability, Hydro Ottawa reduced the system renewal investment level initially recommended by Copperleaf PA, to balance long term-cost impacts with the failure risk associated with assets in degraded condition, please refer to Sections 3.6 and 4.6 of Schedule 2-5-7 - System Renewal Investments. As a result, to manage long-term asset performance, Hydro Ottawa will explore asset refurbishment/intervention strategies to prolong the typical useful life of distribution assets. Utilizing enhanced inspection data down to the asset component level, Hydro Ottawa will implement proactive maintenance strategies for the targeted replacement of degrading components, such as bushings, insulators, elbows, splices, and barriers. This approach aims to mitigate the risk of outages and failures by addressing issues before they manifest. Other innovative methods and solutions will be explored to address issues such as woodpecker holes, pole top deterioration, transformer/gas insulated switchgear leaks etc.

The increased investments in the testing, inspection and maintenance program will allow Hydro Ottawa to gather more accurate asset health data (based on innovation through technology - e.g. drone inspection program), extend the typical useful life of assets not immediately slated for replacement, and mitigate the reliability risks associated with operating deteriorating assets. The

strategy is designed to balance optimal resource allocation between asset replacement investments and the preservation of a reliable and resilient electricity infrastructure.

Hydro Ottawa is enhancing the distribution testing, inspection, and maintenance program to obtain comprehensive asset condition data. This data-driven approach enables the strategic transition from a time-based maintenance program to a condition-based maintenance program, optimizing asset lifecycle management. The EAM solution will leverage this enhanced inspection data to enable asset condition assessments, preventative and predictive maintenance, management of compliance and safety, along with data-driven decision making. This will provide a comprehensive picture of the asset population, allowing for the identification of trends that can lead to improvements or changes to Hydro Ottawa's testing, inspection and maintenance programs. Further, enhanced inspection data is needed to advance the grid modernization roadmap, including the Advanced Distribution Management System. The resulting robust network model and enhanced field data capture will enable advanced analytics, anomaly detection, and health assessments.

By maintaining a strong focus on improving the testing, maintenance, and inspection program, Hydro Ottawa will continue to deliver reliable and uninterrupted service to customers while managing costs and mitigating risks associated with operating deteriorating infrastructure throughout the 2026-2030 rate period.

3.1.2. Variance Analysis

Table 6 - Testing, Inspection & Maintenance Variances 2021-2026 ($000s)

	Historical Years			Bridge Years		Test Year	CAGR
	2021	2022	2023	2024	2025	2026	
Expenditures	$ 1,470	$ 1,433	$ 1,555	$ 2,221	$ 2,820	$ 8,894	43.3%
Variance ($)		$ (37)	$ 122	$ 666	$ 600	$ 6,073	
Variance (%)		(2.5%)	8.5%	42.9%	27.0%	215.3%	

2026 vs. 2025

Costs are expected to increase by $6.1M, driven by the following key initiatives and enhancements:

- **Non-Wires Programming & System Integration**: A $2.8M annual program will ensure the effective integration of Hydro Ottawa and monitoring of third-party owned non-wires alternatives into the distribution system by leveraging internal and external resources to monitor, control, dispatch, and predict demand. Software as a service may be deployed to meet these objectives. For additional details refer to Section 9 of Schedule 2-5-4 Asset Management Process and Schedule 9-2-1 - New Deferral and Variance Accounts.
- **Maintenance Enhancements and Innovation**: An additional $1.8M annually will be allocated to leverage new evolving trends/technologies for asset management and anomaly detection. This includes improvements to maintenance programs and related condition assessments.
- **Drone Inspections:** Hydro Ottawa will invest $0.5M annually to operate a drone inspection program based on the pilot program conducted in 2025. This initiative aims to detect issues not visible to the human eye, such as the condition of pole-mounted hardware, enabling severity-based maintenance to improve system reliability and prevent failures
- **Other programs:** A $1M increase attributable to increased frequency and enhanced data collection across numerous programs to inform asset condition assessments

For more information on the associated headcount growth, refer to Section 3 of Attachment 4-1-3(C) - Workforce Growth.

3.2. VEGETATION MANAGEMENT

Hydro Ottawa's Vegetation Management program is part of a preventative maintenance approach with the overall goals of maintaining safety clearances and minimizing outages caused by tree contact. The program involves the annual trimming of more than 40,000 trees located near overhead power lines, both in the downtown core and in suburban areas. The City of Ottawa has a

significant tree canopy. Activities include planned trimming to maintain clearance standards and as-needed trimming to address specific hazards or requests from the City of Ottawa or customers. The planned trimming rotates through defined geographical areas of the service territory on a five-year cycle, whereas the as-needed trimming can be anywhere within Hydro Ottawa's territory. The program also includes Emergency Vegetation Management to respond to storms or imminent safety threats as well as the removal of trees infested with invasive species such as the Emerald Ash Borer. These efforts mitigate the risk of outages, enhance public and worker safety, and support environmental stewardship.

3.2.1. 2026-2030 Business Priorities

Key priorities for the vegetation management program include executing a comprehensive tree trimming program on a regular cycle to minimize the risk of outages caused by vegetation interference, addressing off-cycle vegetation hazards promptly to mitigate safety risks, and responding to customer and municipal requests for vegetation management in a timely manner. The team also prioritizes proactive measures to address ongoing challenges, such as the removal of trees affected by invasive species, and maintaining preparedness for emergency vegetation management during storm events. Enhancing operational efficiency through the adoption of advanced tools and data analytics, as well as maintaining alignment with environmental standards and municipal by-laws, are additional focus areas. These priorities collectively support Hydro Ottawa's goals of delivering safe and reliable service while fostering positive relationships with customers and stakeholders.

Hydro Ottawa plans to continue to leverage the use of Overstory, a software solution for optimizing vegetation management practices. The Overstory platform is able to establish vegetation data within Hydro Ottawa's service territory by combining artificial intelligence (AI) with remote sensing sources like satellite and aerial imagery. Overstory allows Hydro Ottawa to better manage vegetation fall-in risk (the risk of vegetation falling onto power lines), thereby improving reliability for customers, during and outside of extreme weather events.

Through the 2026-2030 rate period, Hydro Ottawa plans to use Overstory to:

- Enhance reliability and cost-effectiveness by leveraging the Overstory data to make informed and strategic decisions about vegetation maintenance scheduling.
- Use data-driven insights to determine when to advance or postpone overhead line spans within the regular trim cycle, ensuring optimal resource utilization.
- Use data-driven identification of hazardous trees, defined as trees posing a risk to overhead infrastructure, enabling Hydro Ottawa to plan and execute targeted removal for enhanced reliability.
- Evaluate compliance throughout the service territory based on the encroachment risk posed by individual vegetation, leveraging Overstory's data to identify high-risk areas and supplementing with targeted field inspections and responses to customer inquiries.

The implementation of the Overstory solution will facilitate precise risk assessment, enabling Hydro Ottawa to identify and prioritize hazardous trees on an ongoing basis. This is expected to produce a shift in tree trimming work, increasingly reducing spend on unplanned/emergency trimming as at-risk areas are addressed before any impact to the distribution system occurs, please refer to Overstory in Section 3.2.6 of Schedule 1-3-4 - Facilitating Innovation and Continuous Improvement, for an explanation of the future avoided costs. The long-term result is an improvement to reliability and resilience, with fewer outages related to damage caused by trees, both from individual contacts and large-scale impacts during extreme weather events.

3.2.2. Variance Analysis

Table 7 - Vegetation Management Variances 2021-2026 ($'000s)

	Historical Years			Bridge Years		Test Year	CAGR
	2021	2022	2023	2024	2025	2026	
Expenditures	$ 3,811	$ 6,720	$ 6,257	$ 6,430	$ 5,822	$ 6,149	10.0%
Variance ($)		$ 2,908	$ (463)	$ 173	$ (608)	$ 327	
Variance (%)		76.3%	(6.9%)	2.8%	(9.5%)	5.6%	

2022 vs. 2021

The $2.9M increase in vegetation management costs from 2021 to 2022 stemmed primarily from the 2022 Derecho storm. This event necessitated an immediate emergency response to clear debris and address downed trees. Beyond this initial impact, the storm's secondary effect of compromised tree health has required sustained elevated spending due to ongoing hazards posed by weakened trees. Subsequent severe weather events, including a winter storm in December 2022, an ice storm in April 2023, and further two storms in June and July 2023, have further stressed these vulnerable trees. Please refer to Section 4.4 of Schedule 2-5-3 - Performance Measurements for Continuous Improvement for further information.

Additionally, Ottawa's high tree coverage, combined with tree contact being a leading cause of power outages in Hydro Ottawa's service territory, necessitates a consistent, substantial and robust vegetation management program. This, coupled with the increased frequency of severe weather patterns and inflationary pressures on program costs, necessitates the proposed annual spending level.

3.3. UNDERGROUND LOCATES

The Underground Cable Locates program is part of an overall Public Safety program. Within this program, excavators - which can include utilities, home owners, and contractors - must submit a request to confirm that the location of any underground buried utility infrastructure is accurately

identified within the area in which they are excavating. The locate service is then executed by Hydro Ottawa's contractors.

In Ontario, the process of identifying and marking the precise location of underground electrical infrastructure is not merely a best practice, but a legal requirement crucial for safeguarding public safety, preventing costly damage, and ensuring the uninterrupted delivery of essential electrical services. Trained technicians use specialized equipment to detect and mark the position of buried cables, conduits, and other assets, in compliance with regulatory requirements such as the Ontario Underground Notification System Act and Ontario One Call. By accurately identifying the location of underground facilities, the program minimizes the risk of accidental strikes, reduces outages, and safeguards public and worker safety during excavation activities.

Over the last rate period, significant policy attention has been given to the locates file as the province focused on building homes faster including the establishment of Bill 93, *Getting Ontario Connected Act*, 2022.

3.3.1. 2026-2030 Business Priorities

Public safety is the driving force behind this program, therefore the key business priority is to provide efficient, timely, and compliant locate services that minimize excavation-related risks. The Underground Cable Locates program plays a critical role in Hydro Ottawa's commitment to public and worker safety, service reliability, and infrastructure protection. This program ensures that all excavation activities that have requested locates from Hydro Ottawa are conducted safely by accurately identifying and marking the location of buried infrastructure. Hydro Ottawa responds to locate requests from contractors, homeowners, and other stakeholders, using specialized equipment and trained technicians to detect and mark the position of cables, conduits, and other underground utilities. This work adheres to all relevant regulatory obligations, notably the Ontario Underground Infrastructure Notification System Act, 2012, which mandates the use of the Ontario One Call system. This adherence is critical for the prevention of accidental damage to underground utilities, the reduction of service outages, and the safeguarding of company infrastructure.

In 2022, the Ontario government enacted Bill 93, designed to accelerate construction projects through the more rapid provision of underground infrastructure locate services. The legislation mandates a five-day turnaround for locate requests and establishes penalties for non-compliance. Consequently, Hydro Ottawa has invested significantly in staffing and resources to meet these requirements. The implementation of Bill 93 has increased operational expenditures for Hydro Ottawa, due to the reliance on external service providers to ensure adherence to the legislated timelines.

Hydro Ottawa is leveraging a third party clearing house to reduce costs by improving the percentage of locate requests completed by office clear, which does not require an on-site visit. Please refer to Cable Locates Efficiency of Schedule 1-3-4 - Facilitating Innovation and Continuous Improvement for more details. These gains help to offset rising labour costs and increased locate requests. The incremental costs resulting from this legislation are tracked and recorded in the OEB Getting Ontario Connected Act (GOCA) variance account. For details, please refer to Section 3.9 of Schedule 9-1-3 - Group 2 Accounts.

3.3.2. Variance Analysis

Table 8 - Underground Locates Variances 2021-2026 ($'000s)

	Historical Years			Bridge Years		Test Year	CAGR
	2021	2022	2023	2024	2025	2026	
Expenditures	$ 3,273	$ 3,538	$ 3,389	$ 4,666	$ 5,285	$ 6,027	13.0%
Variance ($)		$ 265	$ (149)	$ 1,277	$ 619	$ 742	
Variance (%)		8.1%	(4.2%)	37.7%	13.3%	14.0%	

2024 vs. 2023

Costs for this program increased from 2023 to 2024 by $1.3M, due to a combination of increased volumes of cable locates related to increased construction activity resulting from Bill 93 as discussed above and pricing increases by external service providers. As shown in Table 9 below, the volume of requests expected by the passing of Bill 93 was initially countered in 2023 by the

increased costs of construction due to the Bank of Canada's high interest rate. As interest rates decline through 2024, it is anticipated that the pace of construction will increase and, with it, the volume of locate requests. The increased volumes persist through the bridge and test period and pricing is estimated to increase at 5% annually, based on current contracts.

Table 9 - External Cost per Locate 2021-2026

	Historical Years			Bridge Years		Test Years
	2021	2022	2023	2024	2025	2026
Number of Locates (segments)	65,288	54,846	45,824	60,256	61,410	61,410
Average Cost per locate ($)	$ 36.06	$ 50.92	$ 75.32	$ 77.16	$ 87.40	$ 86.16
Total External Locate Deliver Services Costs ($000s)	$ 2,631	$ 3,015	$ 3,622	$ 4,782	$ 5,443	$ 5,399
Less: Inspections ($000s)	$ (277)	$ (222)	$ (171)	$ (133)	$ (76)	$ (108)
Less: amounts in DVA accounts due to Bill 93			$ (738)	$ (1,467)	$ (1,645)	
Net Costs ($000s)	$ 2,354	$ 2,793	$ 2,714	$ 3,182	$ 3,722	$ 5,291

3.4. STATIONS MAINTENANCE

The Stations Maintenance program is focused on ensuring the safety, reliability, and performance of station assets through a combination of preventative, predictive, and reactive maintenance activities. Key components include transformer maintenance, encompassing routine inspections, electrical testing, oil quality analysis, and both planned and unplanned maintenance of transformers and tap changers. The program also includes switchgear and breaker maintenance, with annual visual and thermographic inspections, periodic preventative maintenance, and corrective work as needed. Relay maintenance involves function testing, calibration, and protection setting updates, while DC System maintenance focuses on the upkeep of station batteries and chargers. Other elements include maintenance of station structures, thermographic scans, and regular station inspections to identify and address deficiencies proactively. Together, these activities ensure the operational integrity of critical station infrastructure.

3.4.1. 2026-2030 Business Priorities

Over the 2026-2030 rate period, the Stations Maintenance program will focus on ensuring the safety, reliability, and sustainability of station assets through strategic and proactive maintenance practices. Recognizing the critical role of these assets in meeting energy demands, the program will advance the use of predictive condition based maintenance to enhance efficiency and mitigate unexpected failures. By integrating digital tools, including real-time monitoring and advanced diagnostics, Hydro Ottawa aims to optimize asset performance while managing risks effectively. Furthermore, the Stations Maintenance program will leverage the improvements made to data collection and advanced analysis techniques, as outlined in Section 4.4.2 of Schedule 2-5-4 - Asset Management Process, coupled with the established data-driven Asset Health Indexing framework, as described in Section 4.4.3 of Schedule 2-5-4 Asset Management Process, to optimize station maintenance.

The program emphasizes balancing long-term asset health with customer affordability. While asset management planning tools PA indicate that higher capital investments would address growing renewal needs, Hydro Ottawa has prioritized a reduced level of capital spending, complemented by increased maintenance activities, to extend asset life and sustain performance. Condition-based monitoring and life-cycle management strategies will play a pivotal role in achieving these outcomes, ensuring that maintenance planning is informed by robust data and analytics.

Table 10 below provides a description of the testing, inspection and maintenance activities completed by the Stations Maintenance program. The base program column describes the normal activity and the 2026-2030 Program Enhancements column highlights the planned changes to the base programs.

1 **Table 10 – Asset/Activity Descriptions for Station Maintenance**

Asset	Testing Inspection & Maintenance Activity/Description (Base Program)	2026-2030 Program Enhancements
Station Inspections (Overall)	Inspection of all station assets (including buildings and facilities) to identify issues or deficiencies. Each station is inspected at least once every three months.	Maintenance activities to support the end-of-life voltage conversion of 4kV stations. Specifically, decommissioning support for 4kV equipment, and assessment of equipment condition to assess suitability for use as a spare.
Station Transformers	Inspection and maintenance on all station class transformers: • Detailed visual inspection (annually) • Oil testing (annually) • Insulation resistance testing (every 3-5 years) • DC winding resistance testing (every 3-5 years) • Turns ratio testing (every 3-5 years) • Exciting current testing (every 3-5 years) • Insulation power factor testing (every 3-5 years) • Thermographic surveys (annually) • Routine maintenance (every 3-5 years) Tap changer inspection and maintenance (frequency varies by type): • Tap changers with contacts in vacuum: 6 to 8 years • Tap changers with contacts in oil (no filter): 1 to 2 years • Tap changers with contacts in oil (with filter): 2 to 4 years	Introduction of a new targeted insulator washing program for outdoor station transformers in high-traffic areas to reduce contamination and lower the risk of flashover incidents. Addressing operational and calibration issues with existing online Dissolved Gas Analysis (DGA) monitors by topping up calibration gasses in the units and performing unit recalibration to improve the reliability and online diagnostic monitoring accuracy for station transformers. Introducing advanced diagnostic testing, including dielectric frequency response (DFR) testing and online/acoustic PD measurements on station transformers to determine the actual moisture content in the solid insulation and further localize electrical/thermal faults within the transformers' main tank. Maintenance activities to support the end-of-life voltage conversion of 4kV station transformers. Specifically, decommissioning support for 4kV equipment, and assessment of equipment condition to assess suitability for use as a spare.

Asset	Testing Inspection & Maintenance Activity/Description (Base Program)	2026-2030 Program Enhancements
Station Switchgear	Station switchgear maintenance is performed to assess the condition of an operating switchgear lineup (inclusive of individual station breakers). Hydro Ottawa performs the following maintenance on all station switchgear (including independent breakers): • Detailed visual inspection • Contact resistance testing • Insulation resistance testing • Timing testing • Functional testing • Routine maintenance Testing, inspection and maintenance on a given switchgear cell is completed every 10 years while breakers are maintained on a 5-year cycle (including the relays).	Maintenance activities to support the end-of-life voltage conversion of 4kV station switchgear. Specifically, decommissioning support for 4kV equipment, and assessment of equipment condition to assess suitability for use as a spare.
Station Relays	Station relay maintenance is performed in conjunction with station switchgear maintenance through which settings are changed in relays, tested or points mapped out. Hydro Ottawa performs the following maintenance on all station relays: • Visual and mechanical inspection • Electrical testing • Functional operation testing • Control verification • Testing and Restoration Relay maintenance is completed on a 5-year cycle (with the breakers).	Maintenance activities to support the end-of-life voltage conversion of 4kV station relays. Specifically, decommissioning support for 4kV equipment, and assessment of equipment condition to assess suitability for use as a spare.

Asset	Testing Inspection & Maintenance Activity/Description (Base Program)	2026-2030 Program Enhancements
Station Batteries	Station battery maintenance is performed to assess the condition of an operating station battery cell/bank. Hydro Ottawa performs the following maintenance on all station batteries: • General visual and mechanical inspections • Electrical testing (float voltages, resistance measurements, load test/capacity discharge, initial charge) • Charger testing All station battery maintenance is completed on an annual basis, except for load tests (following one week in service either yearly, every 6 months or every 5 years, based on the battery type and capacity).	Maintenance activities to support the end-of-life voltage conversion of 4kV station batteries. Specifically, decommissioning support for 4kV equipment, and assessment of equipment condition to assess suitability for use as a spare.

Key updates to the Stations Maintenance program include:

- **Station Decommissioning Support**: Maintenance activities will facilitate the 4kV voltage conversion and subsequent decommissioning process, ensuring minimal disruption and effective resource allocation.
- **Transformer Washing**: Targeted insulator washing for outdoor station transformers will address contamination issues, particularly in high-traffic areas, reducing the risk of flashover incidents.
- **Online Dissolved Gas Analysis (DGA) Monitors Maintenance**: Operational and calibration issues with existing online DGA monitors will be addressed to improve reliability and diagnostic accuracy for station transformers.
- **Advanced Diagnostic Testing of Station Transformers:** Perform advanced diagnostic testing on station transformers inclusive of dielectric frequency response (DFR) testing and online/acoustic PD measurements, to establish the actual moisture content in the

solid insulation and further localize electrical/thermal faults within the transformers' main tank.

Without intervention, approximately 65% of Hydro Ottawa's station asset population will meet or exceed its typical useful life by 2030, with approximately 18% in a degraded (very poor, poor) condition as outlined in Section 2.3.2 of Schedule 2-5-7 - System Renewal Investments. Hydro Ottawa's 2026-2030 station asset renewal strategy involves optimizing the level of investment to mitigate short term failure risk based on supply chain and resource considerations, as outlined in Section 2.6.3 of Schedule 2-5-7 - System Renewal Investments. This approach acknowledges that increased maintenance requirements are an inevitable consequence of lower capital spending. Enhanced maintenance programs are designed to mitigate the risks associated with deteriorating infrastructure, leveraging predictive tools and data-driven strategies to focus resources where they are most needed. By proactively addressing asset degradation through maintenance, Hydro Ottawa aims to extend the typical useful life of its station assets and deliver reliable service to its customers by deferring capital replacement.

Hydro Ottawa collects good station equipment condition data through its existing inspection program. Unlike distribution assets, station assets can largely be repaired or refurbished when they fail. Therefore, Hydro Ottawa has allocated additional funds for reactive maintenance from 2026-2030 to address such unanticipated situations. Through the maintenance activities to support the EOL voltage conversion of 4kV station equipment, Hydro Ottawa will perform a detailed assessment to assess suitability for use as a spare, to manage the performance of 4kV assets at other stations in a degraded condition.

The 2026-2030 Stations Maintenance program represents a deliberate shift towards condition-driven station asset management in conjunction with Hydro Ottawa's planned implementation of an EAM system. The program balances the need for system renewal capital investment with the imperative to manage costs, ensuring that safety, reliability, and sustainability remain at the forefront of Hydro Ottawa's operational priorities.

3.4.2. Variance Analysis

Table 11 - Stations Maintenance Variances 2021-2026 ($'000s)

	Historical Years			Bridge Years		Test Year	CAGR
	2021	2022	2023	2024	2025	2026	
Expenditures	$ 2,670	$ 2,710	$ 2,888	$ 3,454	$ 4,167	$ 5,033	13.5%
Variance ($)		$ 40	$ 178	$ 566	$ 713	$ 865	
Variance (%)		1.5%	6.6%	19.6%	20.6%	20.8%	

There are no reportable variances over the historic, bridge, or test period.

3.5. DISTRIBUTION OVERHEAD AND UNDERGROUND MAINTENANCE

The Distribution Overhead and Underground Maintenance program is focused on ensuring safe, reliable, and efficient operation of Hydro Ottawa's distribution system. This program includes inspections, cleanings, and reactive maintenance/repairs to address both wear and tear and the population of deteriorating assets.

The Distribution Overhead and Underground Maintenance Program is designed to minimize service disruptions, enhance public and worker safety, and extend the lifespan of critical electrical infrastructure through the following comprehensive maintenance activities:

Overhead Maintenance:

- Refurbishment and repair of line switches and reclosers.
- Refusing in line cut-outs.
- Removal of temporary switching devices.
- Cleaning of insulators and bushings to ensure optimal performance.

Underground Maintenance:

- Repair and maintenance of underground cable conductors, splices, and connections.
- Repair or relocation of junction boxes and potheads.
- Application and repair of cable fireproofing and repair of supports.
- Safe removal of asbestos fireproofing and installation of arc-proof tapes.
- Fault detection and repair within underground cable systems.
- Maintenance of underground and vault switches.
- Replenishment of SF6 gas in gas-insulated switchgear.
- Maintenance and repair of vault and underground transformers, including oil renewal.
- Repair of transformer foundation bases.
- Maintenance of proper drainage and insulation within underground vaults.

3.5.1. 2026-2030 Business Priorities

The 2026-2030 business priorities for the Distribution Overhead and Underground Maintenance program will center on sustaining and enhancing the reliability, safety, and resilience of Hydro Ottawa's distribution network. The program will continue to build on Hydro Ottawa's 2021-2025 reactive maintenance work around managing overhead and underground distribution assets by making necessary repairs. Additionally, the program will strengthen resilience to environmental impacts by incorporating climate adaptation measures, such as reinforcing poles and underground systems against severe weather conditions. These initiatives aim to ensure consistent service delivery, safeguard public and worker safety, and extend the lifespan of critical assets. The reactive maintenance activities under this program can be highly impacted by severe weather events, as outlined in the variance analysis in Section 3.5.2.

In an effort to further Hydro Ottawa's efficient and cost-effective use of resources, it will expand the use of its Salesforce Field Services platform to the reliability operations team. This mobile workforce management system allows crews to prioritize tasks and optimize scheduling in a

centralized environment, reducing downtime, as explained in Salesforce Field Service for Reliability Operations in Schedule 1-3-4 - Facilitating Innovation and Continuous Improvement.

3.5.2. Variance Analysis

Table 12 - Distribution Overhead & Underground Maintenance Variances 2021-2026 ($'000s)

	Historical Years			Bridge Years		Test Year	CAGR
	2021	2022	2023	2024	2025	2026	
Expenditures	$ 2,110	$ 2,591	$ 8,085	$ 3,070	$ 3,016	$ 2,714	5.2%
Variance ($)		$ 481	$ 5,494	$ (5,015)	$ (54)	$ (301)	
Variance (%)		22.8%	212.1%	(62.0%)	(1.8%)	(10.0%)	

2023 vs. 2022

Costs for this program increased from 2022 to 2023 by $5.5M as a result of reactive maintenance to respond to unexpected severe weather events including tornadoes, hail, and a record number of lightning strikes as described in Table 4 in Section 2 of Schedule 2-5-1 - Distribution System Plan Overview. Several of these extreme weather events (the tornadoes, in particular) occurred during the 84-day labour strike, so contract resources were employed to restore power safely and efficiently for customers.

2024 vs. 2023

Costs for this program decreased from 2023 to 2024 by $5.0M following the completion of the weather events and labour strike in 2023, returning the program to expected cost levels.

3.6. METERING

The Metering program includes activities related to the acquisition, installation, maintenance, and monitoring the testing of meters. The Meter Data Services team is also part of this program and is responsible for reading and validating all data from every meter point to ensure accurate

billing and settlement for electricity that is purchased and sold by Hydro Ottawa. All costs associated with operation and maintenance of Hydro Ottawa's meter fleet are captured by the Metering program. Activities include, but are not limited to, testing and inspections, cross readings and investigations, and field retrieval. Compensation is the main cost driver in the program.

3.6.1. 2026-2030 Business Priorities

The 2026-2030 business priorities for the Metering program will focus on ensuring accurate, reliable, and efficient metering operations while modernizing infrastructure through investments in AMI 2.0, refer to Section 5 in Schedule 2-5-7 - System Renewal Investments for further details. Key priorities include maintaining high standards for meter accuracy and reliability through rigorous testing, inspections, and timely maintenance activities. Enhancing meter data validation processes will remain a focus to support billing and settlement.

A significant initiative during this period will be the deployment of AMI 2.0, which will involve upgrading existing meters and integrating advanced data analytics capabilities. This investment will enable real-time data collection, improved outage detection, and enhanced energy management tools for customers, contributing to greater operational efficiency and customer engagement. Field operations will also see enhancements in efficiency and responsiveness, supported by streamlined workflows and technology upgrades. These priorities ensure that the Metering program continues to support Hydro Ottawa’s operational needs, regulatory requirements, and customer satisfaction, while paving the way for a smarter, more connected energy future.

3.6.2. Variance Analysis

Table 13 - Metering Variances 2021-2026 ($'000s)

	Historical Years			Bridge Years		Test Year	CAGR
	2021	2022	2023	2024	2025	2026	
Expenditures	$ 1,594	$ 1,910	$ 1,487	$ 1,876	$ 1,890	$ 1,970	4.3%
Variance ($)		$ 316	$ (423)	$ 390	$ 14	$ 80	
Variance (%)		19.8%	(22.2%)	26.2%	0.7%	4.3%	

There are no reportable variances for this program over the historic, bridge, or test period.

3.7. SYSTEM OPERATIONS & 24/7 MAINTENANCE

The System Operations & 24/7 Maintenance program focuses on the real-time management, monitoring, and control of the electrical distribution system to ensure safe, reliable, and efficient operation of the distribution system. This program includes activities such as system monitoring through SCADA systems, outage response and restoration, load forecasting, and coordination of switching operations. It ensures the continuous and reliable delivery of electricity by operating 24/7, serving as the primary response to trouble calls, and coordinating with first responders such as Ottawa Police & Fire. It also involves maintaining and updating system control equipment, training personnel in operational protocols, and ensuring compliance with regulatory and safety standards. The primary objective of the program is to optimize system performance, minimize downtime, and support effective decision-making during normal operations and emergencies.

3.7.1. 2026-2030 Business Priorities

The business priorities for the System Operations & 24/7 Maintenance Program program are centered around ensuring the safe, reliable, and efficient management of the electrical distribution system. Priorities for this group over the rate term include enhancing real-time monitoring and control through advanced SCADA systems, streamlining outage response and

restoration efforts to minimize downtime and improve customer satisfaction, and accurately forecasting system loads to support effective planning and operations. Ensuring safe and efficient switching operations, strengthening resilience against emergencies, and maintaining robust operational protocols are also critical areas of focus.

This program prioritizes ongoing technology upgrades, process optimization, and workforce training to ensure operators are equipped to handle both routine and emergency scenarios effectively. Regulatory compliance and timely reporting remain fundamental, as does supporting customer-centric initiatives, such as integrating Distributed Energy Resources (DERs) and improving service reliability metrics. These priorities collectively aim to optimize system performance, uphold safety standards, and align with the utility's overarching goals of operational excellence and superior customer service.

3.7.2. Variance Analysis

Table 14 - System Operations & 24/7 Maintenance Variances 2021-2026 ($'000s)

	Historical Years			Bridge Years		Test Year	CAGR
	2021	2022	2023	2024	2025	2026	
Expenditures	$ 4,612	$ 9,323	$ 8,029	$ 5,976	$ 6,640	$ 6,423	6.8%
Variance ($)		$ 4,711	$ (1,294)	$ (2,053)	$ 665	$ (218)	
Variance (%)		102.2%	(13.9%)	(25.6%)	11.1%	(3.3%)	

2022 vs. 2021

Costs from 2021 to 2022 increased by $4.7M, primarily as a result of the reactive maintenance activities of $4.6M driven by the Derecho storm. Further details on the impacts of the Derecho storm are provided in Attachment 2-1-1(A) - Derecho May 2022 After Storm Report.

2023 vs. 2022

Costs from 2022 to 2023 decreased by $1.3M as a result of $2.4M less spent on reactive maintenance for in-year storm damage, with an offset of $1.1M increased costs associated with the 2023 strike.

2024 vs. 2023

Costs from 2023 to 2024 decreased by $2.1M as costs and activities return to expected program levels.

3.8. ENGINEERING & DESIGN

The Engineering & Design Program focuses on the strategic planning, design, and operational optimization of Hydro Ottawa's electrical distribution system. This program encompasses the following groups:

- **Distribution Design:** Creates detailed plans for new infrastructure and system upgrades, ensuring alignment with operational needs and regulatory requirements.
- **Assets:** Ensures long-term reliability by forecasting infrastructure needs and prioritizing investments while supporting real-time system management and coordination. This group is also responsible for maintaining and updating all records and Hydro Ottawa's Geographic Information System (GIS).
- **Standards & Quality Assurance:** Develops and maintains Policies, Procedures, and Standards to guide engineering practices, ensure safety, and promote consistency across projects. This group is also responsible for quality assurance of project delivery.
- **Distribution System Integration:** Responsible for strategic planning of grid modernization activities and liaising between the control room and the field to ensure successful deployment of the grid modernization strategy.
- **Program Management:** Responsible for project management of Major Projects and Work Scheduling as well as the scheduling and forecasting all internal and external trade staff.

- **Program Oversight:** Leads project reporting by leveraging data-driven analysis to help teams drive productivity.
- **Grid Technology**: Supports OT systems including the SCADA system, GIS, and Smart Grid solutions, as well as communication infrastructure such as Optical Transport Network (OTN) Fiber Network used to enhance grid reliability and introduce innovative services.

The program's costs are predominantly driven by salaries and benefits associated with the groups described above, followed by software costs to maintain the OT systems.

3.8.1. 2026-2030 Business Priorities

The Engineering & Design program performs many of the basic functions that are essential to the utility's ownership and operation of its distribution system. In many ways, Hydro Ottawa's ability to achieve its eight strategic objectives, as highlighted in Section 2.2 of Schedule 1-2-3 - Business Plan, is contingent upon the Engineering & Design program fulfilling its broad set of accountabilities.

The primary objective of the Engineering & Design program for the 2026-2030 rate period is the successful execution of all capital and maintenance programs, delivered on time and within budget. This reflects a commitment to operational excellence, ensuring that projects meet quality and reliability standards while being completed efficiently and cost-effectively. In support of this objective, the program will focus on optimizing workforce scheduling and enhancing contractor management. By improving the allocation of internal resources and ensuring that external contractors deliver high-quality work at competitive costs, the program aims to achieve greater efficiency and effectiveness in project delivery.

To optimize maintenance efficiency, the Engineering & Design program will implement an EAM technical landscape in the 2026-2030 rate period, which is discussed in further detail in Attachment 4-1-1(A) - Transition to Cloud Computing. This EAM will provide Hydro Ottawa with a single repository of asset lifecycle information by which maintenance work can be prioritized

on the basis of actual asset condition. The time and avoided future costs achieved by the EAM will enable Hydro Ottawa to redirect its resources into different value-added tasks rather than continuing with the current manual processes.

3.8.2. Variance Analysis

Table 15: Engineering & Design Variances 2021-2026 ($000s)

	Historical Years			Bridge Years		Test Year	CAGR
	2021	2022	2023	2024	2025	2026	
Expenditures	$ 6,729	$ 7,226	$ 7,826	$ 9,306	$ 8,930	$ 15,224	17.7%
Variance ($)		$ 497	$ 600	$ 1,480	$ (376)	$ 6,294	
Variance (%)		7.4%	8.3%	18.9%	(4.0%)	70.5%	

2024 vs. 2023

Costs are projected to increase by $1.5M from 2023 to 2024, driven by the addition of 17 positions needed to support higher volumes of project-related work. The additional costs of these positions are pro-rated in 2024 to reflect the timing of the positions to be filled. The increased headcount is attributed to the growing number of load requests and planned investments in grid modernization and electrification activities, as outlined in the DSP and in Attachment 4-1-3(C) - Workforce Growth.

2026 vs. 2025

Costs from 2025 to 2026 are projected to increase by $6.3M as a result of:

- $3.0M in costs associated with the EAM platform, described in Attachment 4-1-1(A) - Transition to Cloud Computing, Section 3.0 EAM.
- $2.2M of increased compensation costs, including economic increases for the existing employees and the 22 incremental positions to support Hydro Ottawa's plans for system capacity expansion, deteriorating infrastructure renewal, and enabling the energy

transition as described in the DSP and in Attachment 4-1-3(C) - Workforce Growth. This includes addressing increased project volumes, developing expertise in emerging technologies, and ensuring grid resilience through proactive planning and storm-hardening efforts. The costs are shown net of the capital allocation offset.

- $1.1M cost increases are primarily the inflationary impacts from the existing programs and grid modernization costs of both fibre maintenance and consulting.

3.9. DISTRIBUTION SUPPORT

The Distribution Support program captures the work that underpins the operations of the distribution teams. Key activities include oversight of Capital and Maintenance projects, intake of requests for Services to Third Parties, partnering with Algonquin College to offer Skilled Trades training that can lead to apprenticeships at Hydro Ottawa, and liaising with major contractors.

Costs are driven by salaries and benefits, net of allocations to Capital, Maintenance, and Services to Third Parties work; non-capital tools; safety gear; and office expenses.

3.9.1. 2026-2030 Business Priorities

The business priorities for the Distribution Support program for the 2026-2030 rate period focus on providing the essential operational backbone to ensure the safety, reliability, and compliance of the distribution system, as well as contributing to the future of Hydro Ottawa through its work with Algonquin College, training new workers in the Skilled Trades that are vital to the operation of a reliable distribution system.

Additionally, the group prioritizes safety and compliance by ensuring all distribution team members have the appropriate safety clothing, equipment, knowledge and training needed to keep themselves and the public safe while performing their duties.

Continuous improvement in processes, leveraging technology to enhance accuracy and efficiency, and aligning with regulatory and industry standards are also central goals for this

program. The introduction of the Salesforce CRM platform to the Service Desk team has improved both efficiency and customer experience with its ability to centralize case management, automate workflows, and improve communication. Details on the ways that Hydro Ottawa has leveraged the Salesforce CRM are explained in Schedule 1-3-4 - Facilitating Innovation and Continuous Improvement.

3.9.2. Variance Analysis

Table 16 - Distribution Support Variances 2021-2026 ($'000s)

	Historical Years			Bridge Years		Test Year	CAGR
	2021	2022	2023	2024	2025	2026	
Expenditures	$ 1,179	$ 3,032	$ 4,433	$ 6,954	$ 5,342	$ 5,443	35.8%
Variance ($)		$ 1,853	$ 1,401	$ 2,521	$ (1,612)	$ 100	
Variance (%)		157.1%	46.2%	56.9%	(23.2%)	1.9%	

The costs in this program represent the Distribution Operations resources including Fleet, net of allocation to Capital, Maintenance, and Services to Third Parties, refer to Schedule 6-3-1 - Other Revenue Summary.

2022 vs. 2021

Costs in this program increased from 2021 to 2022 by $1.9M, primarily due to a $2.1M decrease in labour and overhead allocated to Capital. Certain planned capital activities were deferred in 2022 to allow redirection of resources to the maintenance work required after the Derecho storm. This variance is included in Appendix 2-D.

2023 vs. 2022

Costs in this program increased from 2022 to 2023 by $1.4M, primarily explained by $2.5M further decrease in labour and overhead allocated to Capital, which is attributed to the redirection of resources required for maintenance work in the aftermath of the April and summer

storms in 2023. The variance is partially offset by decreased compensation during the labour strike.

2024 vs. 2023

Costs in this program increased from 2023 to 2024 by $2.5M as a result of increased labour and fleet costs, net of allocation. Compensation costs were higher in 2024 both because the strike of 2023 was over and because 22 incremental positions were added in the second half of 2024,[8] as a result some of the related compensation costs remain in this program for 2024 (vs. allocated to other operational programs) while the new employees undergo training.

2025 vs. 2024

Costs in this program decreased from 2024 to 2025 by $1.6M as a result of the employees hired in 2024 completing their training and beginning to allocate their time to the Capital, Maintenance, and Services to Third Parties programs, which reduced the compensation costs that remain attributed to the Distribution Support program.

3.10. MINOR MAINTENANCE

The Minor Maintenance program focuses on routine and low-cost activities that are integral to maintaining the operational integrity and safety of tools and equipment. This program includes tasks such as cleaning and inspecting equipment, and addressing minor damage or wear before it escalates. Minor maintenance often occurs during regular inspections or as part of scheduled preventative maintenance and is essential for ensuring tools and equipment operates efficiently. By addressing small issues promptly, this program helps to prevent larger, costlier repairs and reduces hazards due to failed tools and equipment.

[8] More information can be found in Attachment 4-1-3(C) - Workforce Growth

3.10.1. 2026-2030 Business Priorities

The 2026-2030 business priorities for the Minor Maintenance program are centered on maintaining the safety and operational efficiency of trades personnel tools and equipment. The program will focus on timely identification and resolution of minor issues during inspections and preventative maintenance to prevent equipment failures and ensure safe, efficient field operations.

3.10.2. Variance Analysis

Table 17 - Minor Maintenance Variances 2021-2026 ($'000s)

	Historical Years			Bridge Years		Test Year	CAGR
	2021	2022	2023	2024	2025	2026	
Expenditures	$ 1,297	$ 1,317	$ 1,250	$ 846	$ 990	$ 1,669	5.2%
Variance ($)		$ 21	$ (67)	$ (404)	$ 144	$ 679	
Variance (%)		1.6%	(5.1%)	(32.3%)	17.1%	68.5%	

There are no reportable variances for this program over the historic, bridge, or test period.

3.11. COLLECTIONS

The Collections program captures costs associated with Hydro Ottawa's efforts to manage customer arrears, recover outstanding balances, and address bad debt. This program includes collection activities, such as follow-up communications with customers who have overdue payments, implementing payment arrangements, and working with third-party agencies to recover delinquent accounts. Additionally, it encompasses managing disconnection and reconnection activities for customers with overdue accounts, while working to minimize service disruptions and provide support options. The program also covers costs related to bad debt expense, which accounts for amounts that are deemed uncollectible after all efforts to recover payment have been exhausted. By managing collections and mitigating bad debt, this program helps Hydro Ottawa to maintain financial health and minimize revenue losses.

3.11.1. 2026-2030 Business Priorities

The 2026-2030 business priorities for the Collections program will focus on enhancing customer engagement and implementing strategies to reduce bad debt while maintaining operational efficiency. Key initiatives will include leveraging data analytics to improve the identification of at-risk accounts and tailor proactive outreach strategies. Please refer to Schedule 1-3-4 - Facilitating Innovation and Continuous Improvement for information on the impact of initiatives such as increased use of Remote Disconnection Technology and Disconnection Notification Automation.

Continued support will be provided to customers facing financial challenges through flexible payment options and payment arrangement programs to help reduce delinquent accounts and increased awareness of financial assistance programs such as Low-Income Energy Assistance Program (LEAP). The program will also emphasize strengthening partnerships with third-party agencies to increase recovery rates for overdue balances.

3.11.2. Variance Analysis

Table 18 - Collections Variances 2021-2026 ($'000s)

	Historical Years			Bridge Years		Test Year	CAGR
	2021	2022	2023	2024	2025	2026	
Expenditures	$ 1,687	$ 2,856	$ 2,929	$ 3,099	$ 3,304	$ 3,462	15.5%
Variance ($)		$ 1,169	$ 74	$ 170	$ 205	$ 158	
Variance (%)		69.3%	2.6%	5.8%	6.6%	4.8%	

2022 vs. 2021

Costs increased in this program from 2021 to 2022 by $1.2M, primarily as a result of increased bad debt expenses and writeoffs. This increase was primarily due to the conclusion of government assistance programs related to the COVID-19 pandemic and the impact of

increased inflationary pressures. The lingering effects of these disruptions, combined with increased interest rates and ongoing inflation continue to contribute to elevated costs.

3.12. CUSTOMER BILLING

The Customer Billing program is dedicated to accurately and efficiently managing the billing cycle for electricity customers, from meter data collection to payment processing. This program includes Billing Activities, which ensure timely and precise generation of customer invoices based on usage data. Meter-to-Cash Processes encompass the end-to-end workflow of collecting meter readings, validating data, calculating charges, issuing bills, and processing customer payments. Additionally, Meter Data Activities focus on gathering, managing, and analyzing data from advanced metering infrastructure (AMI) to support billing accuracy, energy usage insights, and customer service enhancements. Together, these activities create a seamless experience for customers while maintaining revenue integrity for the utility.

3.12.1. 2026-2030 Business Priorities

During the 2026-2030 rate period, the Customer Billing program will focus on enhancing the customer experience by leveraging technology and streamlining processes. Key priorities include streamlining billing exception processes, proactively addressing billing anomalies with advanced analytics, and enhancing customer communication about charges, payment options, and support programs. Additionally, this program will continue to benefit from the adoption of paperless billing, contributing to Hydro Ottawa's sustainability goals while offering customers a convenient and eco-friendly option. Please refer to Schedule 1-3-4 - Facilitating Innovation and Continuous Improvement for an explanation of the impact of initiatives such as Net Metering automation and Online Billing.

The program will work closely with other areas of the organization to introduce new billing capabilities that support the evolving energy landscape. These initiatives include tailored billing options for customers with DERs and electric vehicles, and the rollout of future pricing programs.

3.12.2. Variance Analysis

Table 19 - Customer Billing Variances 2021-2026 ($'000s)

	Historical Years			Bridge Years		Test Year	CAGR
	2021	2022	2023	2024	2025	2026	
Expenditures	$ 8,148	$ 8,033	$ 7,952	$ 9,269	$ 9,530	$ 10,053	4.3%
Variance ($)		$ (115)	$ (81)	$ 1,317	$ 261	$ 523	
Variance (%)		(1.4%)	(1.0%)	16.6%	2.8%	5.5%	

2024 vs. 2023

Costs from 2023 to 2024 increased by $1.3M as a result of:

- $0.3M in increased compensation. This increase reflects adjustments for economic increases applied to existing employees salaries.
- $0.6M in increased IT costs, mainly Meter-to-Cash for existing subscriptions.
- $0.4M allocation of Finance related costs to support billing of customer accounts.

3.13. CUSTOMER AND COMMUNITY RELATIONS

The Customer and Community Relations program captures costs associated with managing the customer experience; fostering relationships with Key Accounts, government officials, and other community stakeholders; and providing customer contact and communications services. Activities within this program include handling customer inquiries, maintaining relationships through engagement activities, participating in industry events and advocacy efforts, supporting demand-side management, Customer Contact Centre services that support customer interactions, technology costs for maintaining customer service platforms, and marketing and communications efforts to keep customers informed.

The program also includes the administration of provincially-mandated programs such as the LEAP and the Ontario Electricity Support Program (OESP), which provide financial support to

eligible customers. Together, these activities ensure effective customer engagement, support vulnerable populations, and contribute to the utility's commitment to customer satisfaction and community relations.

3.13.1. 2026-2030 Business Priorities

The Customer and Community Relations program plays an important role in ensuring that Hydro Ottawa builds strong and meaningful connections with the customers and communities it serves. This program focuses on fostering a customer-centric culture that emphasizes care, accessibility, and seamless interactions.

During the 2026-2030 rate period, the Customer and Community Relations program is focused on meeting evolving customer expectations and adapting to the changing energy landscape. The program will prioritize customer and community stakeholder engagement and touchpoint improvements, personalization and self-service, energy enablement, and productivity and operational effectiveness. These priorities aim to enhance customer experience, align programs and policies with customer needs, support the energy transition, and ensure operational efficiency and affordability. Please refer to Schedule 1-3-4 - Facilitating Innovation and Continuous Improvement for the impact of the Move-In Move-Out Automation initiative.

3.13.2. Variance Analysis

Table 20 - Customer & Community Relations Variances 2021-2026 ($'000s)

	Historical Years			Bridge Years		Test Year	CAGR
	2021	2022	2023	2024	2025	2026	
Expenditures	$ 6,856	$ 7,428	$ 7,838	$ 9,156	$ 9,213	$ 10,653	9.2%
Variance ($)		$ 572	$ 410	$ 1,319	$ 57	$ 1,440	
Variance (%)		8.3%	5.5%	16.8%	0.6%	15.6%	

2024 vs. 2023

Costs from 2023 to 2024 increased by $1.3M due to:

- $1.1M increased compensation costs in 2024 relative to 2023 as a result of the labour strike. The majority of the positions in this expense category were unionized, which led to a greater variance year over year.
- An additional $0.2M increase is related to the increase in external customer contact center costs resulting from increased contract rates and volumes of calls.

2026 vs. 2025

Costs from 2025 to 2026 are projected to increase by $1.4M predominantly as a result of:

- Increased cloud computing implementation costs and subscription costs associated with the Customer Relationship Management and MyAccount enhancements described in Attachment 4-1-1(A) - Transition to Cloud Computing and Schedule 2-5-9 - General Plant Investments, respectively.
- An additional IT position has been added in 2026 to focus on developing and supporting customer-centric solutions, including online self-service portals, mobile applications, personalized communication channels, and AI-driven enhancements to customer service and engagement. Leveraging AI for efficiency and productivity gains in the customer experience area requires specialized skills in AI development and implementation.[9]

3.14. INFORMATION MANAGEMENT AND TECHNOLOGY

The Information Management and Technology program encompasses activities and costs related to IT and operational technology (OT) services within Hydro Ottawa. This program includes compensation, benefits, and externally-sourced operating expenses required to deliver

[9] More information can be found in Attachment 4-1-3(C) - Workforce Growth

services such as IT infrastructure management, helpdesk support, application development and maintenance, data and information management, cyber security, and IT project planning.

This program is responsible for aligning IT and OT strategies with Hydro Ottawa's business objectives and delivering technological solutions that improve operational efficiency and enable strategic growth. This includes the lifecycle management of IT and information assets while ensuring compliance with privacy and data governance regulations.

Key components of the Information Management and Technology program include:

Planning & Programs: Oversees technology initiatives, aligns corporate strategies, and ensures effective governance for IT investments.
Infrastructure Management: Maintains IT infrastructure and provides essential services such as network support, email systems, and IT helpdesk operations.
Enterprise Applications: Manages core business systems like accounting, service desk, and field crew dispatch applications.
Cyber Security: Protects information systems and data from cyber threats through advanced tools, training, and partnerships.

The Information Management and Technology program's comprehensive approach ensures that Hydro Ottawa remains equipped to meet current operational demands and future challenges, while contributing to improved service delivery and customer satisfaction.

3.14.1. 2026-2030 Business Priorities

Over the 2026-2030 rate period, the Information Management and Technology program will enable Hydro Ottawa to navigate the rapid evolution of operational and informational technology systems. With increasing digitalization, automation, and customer expectations, this program aims to ensure Hydro Ottawa can stay ahead of technological advancements while safeguarding the grid and customer data.

Cyber security has been and will continue to be a top priority for this program over the rate term. The growing connectivity of grid assets, smart meters, and operational systems expands the attack surface, exposing critical infrastructure to cyber threats such as ransomware, phishing, and state-sponsored attacks. Recent trends, including the rise of AI-driven cyber threats and increasingly sophisticated hacking techniques, further heighten these risks. To safeguard grid reliability and customer data, and maintain regulatory compliance, Hydro Ottawa is increasing funding for IT security initiatives such as advanced threat detection, network segmentation, and real-time monitoring. Strengthening cyber security not only protects against potential service disruptions and financial losses, but also ensures compliance with evolving regulatory requirements and industry best practices.

In addition to cyber security, over the rate term this program will continue to focus on:

- **Enhancing Customer Experience**: Hydro Ottawa is prioritizing a seamless and empowering customer experience by investing in digital tools and AI-driven solutions. This includes enhancing online and mobile platforms, deploying advanced chatbots, and upgrading the contact center to provide 24/7, efficient, and cost-effective service, ultimately delivering on its commitment to best in class Customer Service.

- **Enhancing Employee Experience:** Empowering the workforce through digital transformation including providing secure, anytime-anywhere access to information and tools via mobile and web applications, and leveraging touch-screen devices. The company will integrate Generative AI to boost productivity and enhance existing tools. Further investments in HR and safety platforms, utilizing AI and data, will focus on talent acquisition, skills development, and ensuring a safer workplace.
- **Productivity & Operational Effectiveness:** Driving operational efficiency through a focus on financial, supply chain, asset, and fleet management solutions. This includes streamlining workflows, enabling real-time data access, and optimizing resource and inventory management. Investments in data lakes and analytics will leverage vast data

volumes for predictive insights. Generative AI will be explored for process automation and data analysis. System consolidation and integration, along with enhanced ServiceNow capabilities, will further reduce data silos and improve workflow automation, service delivery, and IT management.

- **Grid Automation & Modernization:** Supporting grid operations and modernization efforts with integrated solutions to assist grid planning and design processes, and empower predictive maintenance, optimized resource allocation, and informed decision-making for a modern and sustainable grid through data-driven decision making. Grid Modernization also aims to empower customers, providing real-time data access for informed energy management.
- **Cyber Security & Business Continuity:** Recognizing the escalating threats from both severe weather and cyberattacks, Hydro Ottawa is prioritizing robust cyber security and Business Continuity plans. This includes investing in proactive threat detection and response systems, strengthening network security, and ensuring data protection to mitigate cyber risks. Simultaneously, the company is enhancing resilience to disruptive events through infrastructure hardening, redundant systems, and detailed disaster recovery protocols. These combined efforts aim to safeguard critical infrastructure, maintain uninterrupted service, and protect customer data in the face of increasingly complex challenges.

3.14.2. Variance Analysis

Table 21 - Information Management & Technology Variances 2021-2026 ($'000s)

	Historical Years			Bridge Years		Test Year	CAGR
	2021	2022	2023	2024	2025	2026	
Expenditures	$ 9,661	$ 11,674	$ 11,908	$ 13,702	$ 15,105	$ 16,780	11.7%
Variance ($)		$ 2,013	$ 234	$ 1,794	$ 1,403	$ 1,675	
Variance (%)		20.8%	2.0%	15.1%	10.2%	11.1%	

2022 vs. 2021

Costs from 2021 to 2022 increased by $2.0M primarily as a result of increased subscription costs from an increased transition to cloud based programs, including the implementation of Esker, which has increased efficiency by reducing manual processes in accounts payable, and Google Workspace, which has improved productivity by allowing easier collaboration and data-sharing between Hydro Ottawa divisions.

2024 vs. 2023

Costs from 2023 to 2024 are projected to increase by $1.8M as a result of continued increases in technology costs such as cloud computing, as well as an increase in consulting costs to enhance system integrations and support databases. In addition, 2023 includes lower unionized salaries relative to 2024 due the 2023 strike. In 2024, staffing levels increased by two positions in response to an increased workload in cyber security and IT program management to support cloud infrastructure.[10]

2025 vs. 2024

Costs from 2024 to 2025 are projected to increase by $1.4M as a result of:

- $0.7M in increased compensation. This increase reflects adjustments for economic increases applied to existing employees salaries, as well as the cost associated with two existing positions that were redeployed within the organization and transitioned to IT to directly support the EAM project, for details please refer to Attachment 4-1-1(A) - Transition to Cloud Computing. This reallocation of resources demonstrates Hydro Ottawa's commitment to the project's success without creating net new positions.
- $0.5M in additional costs for consulting, IT maintenance contracts, and subscriptions to support annual application upgrades and enhancements.

[10] More information can be found in Attachment 4-1-3(C) - Workforce Growth.

- $0.2M is allocated for property rental costs for a new backup data center. This investment is a critical recommendation following the Derecho storm after action report, and will help safeguard reliability during severe weather events by establishing a geographically separate facility.

2026 vs. 2025

Costs from 2025 to 2026 are projected to increase by $1.7M, primarily as a result of:

- $1M in increased compensation costs for annual inflationary compensation increases as well as five incremental positions[11] required for:
  - **Cloud Computing:** Support the migration to cloud computing, enhancing scalability and security in a rapidly digitizing environment.
  - **Cyber Security:** Strengthen Hydro Ottawa's cyber program and mitigate risks associated with an increasingly integrated IT/OT system landscape.
  - **Data & Systems Integration and Program Management:** Support the growing complexity and volume of technology initiatives. Design and implementation of innovative technology solutions.
- $0.3M due to the implementation of AI-driven solutions.
- $0.4M remaining increase is due to a mix of inflationary increases to existing costs and increases to software subscription fees as the use of cloud-based software expands.

3.15. SAFETY, ENVIRONMENT & BUSINESS CONTINUITY

The Safety, Environment, and Business Continuity program is critical to maintaining Hydro Ottawa's commitment to a safe, sustainable, and resilient operation. This program includes costs associated with Distribution Environmental Programs, and external environmental remediation services. For more information, refer to Attachment 4-1-3(E) - Health, Safety and Environmental Compliance, Sustainability and Business Continuity Management.

[11] More information can be found in Attachment 4-1-3(C) - Workforce Growth.

This program includes the following focus areas:

Safety: Administers a comprehensive, internationally-certified management system designed to ensure a safe and healthy workplace. This includes implementing robust policies, procedures, and standards; delivering orientation and safe work practice training programs; conducting inspections and audits; providing job site coaching; and managing contractor safety performance. These efforts ensure compliance with all statutory health and safety requirements while fostering a culture of safety across the organization.

Environment: Focuses on improving Hydro Ottawa's environmental performance and reducing the ecological impact of its operations. Key activities include compliance reporting, inspections and audits, and environmental remediation from equipment damage, as well as sustainability initiatives aimed at lowering the utility's carbon footprint, adopting green procurement practices, and cultivating workforce sustainability awareness that supports Hydro Ottawa Holding Inc.'s goal of net zero operations by 2030.

Business Continuity: Establishes and maintains a framework to ensure organizational resilience, emergency preparedness, and the ability to manage operational disruptions effectively. This includes identifying potential risks, assessing their impact on operations, and implementing recovery plans through the utility's Crisis Management Plan and related initiatives.

3.15.1. 2026-2030 Business Priorities

The 2026-2030 business priorities for the Safety, Environment, and Business Continuity program emphasize advancing Hydro Ottawa's commitment to safe, sustainable, and resilient operations. A key focus will be enhancing the safety management system to adapt to evolving industry standards, with an emphasis on continuous improvement through targeted training, proactive audits, and contractor safety management. On the environmental front, the program will prioritize initiatives to further reduce the utility's carbon footprint, expand green procurement practices, and align with regulatory and sustainability goals, while maintaining compliance with environmental laws through diligent reporting and inspections. These initiatives support Hydro Ottawa Holding Inc., Hydro Ottawa's parent company, in its commitment to becoming the first

municipally-owned utility in Canada to achieve net-zero operations by 2030. Strengthening business continuity will remain critical, with efforts centered on refining the Crisis Management Plan to address emerging risks, enhance emergency preparedness, and improve recovery capabilities. These priorities aim to support a resilient organization that fosters a strong safety culture, minimizes environmental impact, and ensures operational reliability in the face of disruptions.

3.15.2. Variance Analysis

Table 22 - Safety, Environment & Business Continuity Variances 2021-2026 ($'000s)

	Historical Years			Bridge Years		Test Year	CAGR
	2021	2022	2023	2024	2025	2026	
Expenditures	$ 2,595	$ 2,943	$ 2,613	$ 3,566	$ 3,967	$ 4,353	10.9%
Variance ($)		$ 347	$ (330)	$ 952	$ 401	$ 386	
Variance (%)		13.4%	(11.2%)	36.4%	11.2%	9.7%	

There are no reportable variances for this program over the historic, bridge, or test period.

3.16. HUMAN RESOURCES

The Human Resources program is essential to supporting Hydro Ottawa's strategic priorities by fostering a skilled, engaged, and high-performing workforce. This program includes costs associated with delivering HR support, talent attraction, onboarding and development, labour relations, payroll administration, and other key HR functions. This program includes a wide range of areas, including recruitment, compensation, employee and labour relations, wellness, organizational development, and change management.

Through the implementation of policies, frameworks, and programs, the Human Resources program ensures Hydro Ottawa has the right talent, skills, and organizational capacity to meet its objectives. It supports employees in adapting to industry changes while maintaining a safe,

healthy, and inclusive work environment. The division's efforts have earned Hydro Ottawa recognition as a top employer and leader in innovation, youth employment and development, and sustainability, demonstrating a commitment to creating a workplace that reflects its values and drives organizational excellence.

By partnering with business units and leveraging advanced HR technologies, the Human Resources program continuously enhances productivity, employee experience, and organizational resilience to meet the evolving demands of the utility industry.

3.16.1. 2026-2030 Business Priorities

The priorities for the Human Resources program over the 2026-2030 rate period include:

Workforce Planning: Lead workforce planning efforts to sustain the trades workforce, replace mid-level experienced front-line supervisors, and address changing skillset requirements driven by technological innovations in the electricity sector.

Compensation Strategy: Ensure compensation practices attract and retain a highly skilled workforce, promote a performance-driven culture, and control total compensation costs, while aligning with the utility's strategic objectives, competencies, and organizational values.

Organizational Effectiveness and Workforce Alignment: Focus on engaging, developing, aligning, and preparing the workforce to ensure organizational capacity and continuity through appropriate talent management and fostering a safe, healthy work environment.

Funding for the Human Resources program is proposed at the level required to keep pace with the projected level of organizational growth. At a reduced level of funding, Hydro Ottawa risks operational inefficiencies that could impact its ability to execute its 2026-2030 plans. As headcount expands, recruitment, onboarding, and employee support and development all increase in complexity and scale. Without adequate HR capacity, delays in filling critical roles and gaps in employee and labour relations support could arise. This not only affects workforce readiness but also introduces productivity risks, particularly as the company navigates a period

of transition with a younger, less tenured workforce. Investing in HR ensures that Hydro Ottawa can effectively manage workforce growth, sustain employee engagement, and maintain a high standard of operational excellence.

3.16.2. Variance Analysis

Table 23 - Human Resources Variances 2021-2026 ($'000s)

	Historical Years			Bridge Years		Test Year	CAGR
	2021	2022	2023	2024	2025	2026	
Expenditures	$ 3,305	$ 3,821	$ 4,896	$ 4,365	$ 4,428	$ 4,762	7.6%
Variance ($)		$ 515	$ 1,075	$ (530)	$ 62	$ 334	
Variance (%)		15.6%	28.1%	(10.8%)	1.4%	7.5%	

2023 vs. 2022

Costs in this program increased from 2022 to 2023 by $1.1M predominantly as a result of additional costs related to the 2023 labour strike.

3.17. SUPPLY CHAIN

The Supply Chain program is integral to ensuring the efficient and effective operation of Hydro Ottawa's procurement and warehouse functions. This program is responsible for administering procurement policies, procuring all products and services required by the utility, and managing inventory and equipment essential for constructing and maintaining Hydro Ottawa's distribution assets. The program also partners with key vendors to respond to power outage events, ensuring the availability of necessary inventory and services.

Aligned with corporate policies, the program emphasizes adherence to fair, open, efficient, transparent, and accountable competitive processes. By fostering strong relationships with reputable and ethical vendors, it ensures that the utility secures favorable prices and maximizes

value for both the organization and its customers. Refer to Attachment 4-2-2(A) - Procurement Policy for additional details.

The program's scope encompasses all costs associated with the delivery of procurement and warehouse functions, supporting Hydro Ottawa's commitment to operational excellence and the long-term sustainability of its distribution infrastructure.

3.17.1. 2026-2030 Business Priorities

The 2026-2030 business priorities for the Supply Chain program will focus on enhancing procurement efficiency, optimizing inventory management and supporting the long-term sustainability of Hydro Ottawa's distribution infrastructure. Key initiatives will include leveraging digital tools and data analytics to improve demand forecasting and inventory optimization, ensuring the timely availability of materials while minimizing carrying costs. The program will also emphasize strengthening vendor relationships by fostering partnerships with ethical, high-performing suppliers, enabling the utility to secure competitive pricing and reliable delivery of goods and services.

Adherence to fair, transparent, and accountable procurement practices will remain a cornerstone, with efforts directed toward streamlining processes to reduce lead times and enhance operational efficiency. Additionally, the program will prioritize sustainability by incorporating green procurement practices, aligning with corporate environmental goals and supporting the transition to more sustainable materials and services. These priorities ensure that the Supply Chain program continues to support Hydro Ottawa's operational needs while delivering value to both the organization and its customers.

3.17.2. Variance Analysis

Table 24 - Supply Chain Variances 2021-2026 ($'000s)

	Historical Years			Bridge Years		Test Year	CAGR
	2021	2022	2023	2024	2025	2026	
Expenditures	$ 1,365	$ 1,110	$ 489	$ 807	$ 833	$ 989	(6.2%)
Variance ($)		$ (254)	$ (621)	$ 318	$ 27	$ 155	
Variance (%)		(18.6%)	(56.0%)	65.1%	3.3%	18.6%	

There are no reportable variances for this program over the historic, bridge, or test period.

3.18. FACILITIES

The Facilities program oversees the acquisition, operations and maintenance of Hydro Ottawa's facility assets. These assets include four operations centers, an administrative office, fleet garage, training facility and over 70 Hydro Ottawa owned distribution stations. The Facilities program costs consist of maintenance and operating costs for Hydro Ottawa's administrative and operations buildings and substations. Such costs include summer and winter civil maintenance, cleaning, waste management, building electrical, mechanical, safety, security, general repair, utilities and property taxes. Approximately one third of total program costs are property taxes.

3.18.1. 2026-2030 Business Priorities

Over the upcoming 2026-2030 rate period, the Facilities program's priorities will focus on ensuring the effective management and optimization of Hydro Ottawa's physical assets to support operational excellence and financial stewardship. Key priorities include maintaining safe, efficient and sustainable facilities that meet the evolving needs of the utility and its workforce while delivering value for money through cost-effective maintenance, upgrades and investments.

The program will also prioritize energy efficiency initiatives within Hydro Ottawa's facilities to align with broader environmental and sustainability goals. Supporting other divisions in achieving corporate objectives will remain a central focus, particularly through providing flexible, well-maintained workspaces that enable productivity and collaboration. Additionally, the Facilities Division will play a critical role in ensuring compliance with regulatory requirements, promoting operational reliability and contributing to the successful execution of the initiatives and outcomes outlined in this Application.

3.18.2. Variance Analysis

Table 25 - Facilities Variances 2021-2026 ($'000s)

	Historical Years			Bridge Years		Test Year	CAGR
	2021	2022	2023	2024	2025	2026	
Expenditures	$ 8,417	$ 9,311	$ 13,250	$ 10,362	$ 10,509	$ 10,969	5.4%
Variance ($)		$ 895	$ 3,939	$ (2,888)	$ 146	$ 460	
Variance (%)		10.6%	42.3%	(21.8%)	1.4%	4.4%	

2023 vs. 2022

Costs from 2022 to 2023 increased by $3.9M as a result of increased costs related to the labour strike including security costs.

2024 vs. 2023

Costs from 2023 to 2024 decreased by $2.9M primarily as a result of security costs that were no longer incurred after completion of the 2023 strike partially offset by rising insurance and consulting expenses to support environmental initiatives.

3.19. FINANCE

The Finance program is a cornerstone of Hydro Ottawa's operational stability, responsible for managing a wide range of financial activities critical to the organization's success. This program

oversees cash flow management, banking and liquidity, taxation, financial compliance, and insurance. It is also responsible for all billing operations outside of the electricity billing described in the Customer Billing program.

The Finance Program ensures the accuracy and timeliness of all internal and external financial reporting, as well as the efficient operation of accounting processes, accounts payable, cash receipts, accounts receivable, and capital asset administration. Lastly, it plays a pivotal role in supporting Hydro Ottawa's budgeting, forecasting, and business planning cycles.

The program's costs are predominantly driven by salaries and benefits associated with key functions such as accounts receivable and payable, capital asset accounting, banking, audit, budgeting, and financial reporting. Though compensation remains the primary cost driver, headcount within the program has remained relatively flat over the past four years, reflecting a commitment to efficiency and prudent resource management.

3.19.1. 2026-2030 Business Priorities

The priorities for the Finance program over the 2026-2030 rate period include:

Financial Strength: Ensure strong financial operations, practices, information, systems, and reporting to support informed decision-making and financial performance.

Value for Money: Manage assets and procurement with a focus on achieving value for money and sound stewardship.

Support for Corporate Priorities: Assist other divisions in executing strategic initiatives, such as DSP investments, business expansion, potential consolidations, shared services, strategic collaborations, and monetization of assets and expertise.

Execution and Monitoring: Effectively execute, monitor, and report on the progress of the Application and associated initiatives to ensure alignment with corporate goals.

3.19.2. Variance Analysis

Table 26 - Finance Variances 2021-2026 ($'000s)

	Historical Years			Bridge Years		Test Year	CAGR
	2021	2022	2023	2024	2025	2026	
Expenditures	$ 2,819	$ 2,641	$ 2,723	$ 2,297	$ 2,381	$ 2,400	(3.2%)
Variance ($)		$ (178)	$ 82	$ (426)	$ 84	$ 19	
Variance (%)		(6.3%)	3.1%	(15.6%)	3.6%	0.8%	

There are no reportable variances for this program over the historic, bridge, or test period.

3.20. REGULATORY AFFAIRS

The Regulatory Affairs program ensures that the utility is able to fulfill its obligations under the various rules, regulations and codes of the OEB, IESO and Ministry of Energy (MOE). The program has two distinct areas to manage, Rates & Revenue, and Regulatory Policy, Compliance & Reporting. Core functions of this program include overseeing the implementation of OEB-Approved distribution rates and charges and ongoing review and analysis, preparation of distribution rate applications, load forecasting, cost allocation, rate design, deferral and variance accounts, regulatory compliance review and support, regulatory reporting, policy research and analysis, and public policy engagement, advocacy and implementation. In addition, Regulatory Affairs supports other areas of the organization on items such as economic evaluations, customer billing, customer communication, and customer enquiries.

Included in Regulatory Affairs are compensation and benefits costs related to overseeing these core functions. OEB fees represent approximately 50% of ongoing program costs and have seen a CAGR of 9.8% from 2021 to 2026, outpacing other ongoing expenditures.

3.20.1. 2026-2030 Business Priorities

The 2026-2030 business priorities for the Regulatory Affairs program focus on ensuring compliance with evolving regulatory requirements while maintaining operational excellence and cost-effectiveness. Effectively executing, monitoring, and reporting against the progress of this Application will likewise serve as a critical area of focus as it has over the past two custom applications. Continued enhancement of regulatory and compliance reporting processes as the changes to the regulatory landscape has evolved and seen unprecedented change will ensure timely and accurate submissions to the OEB, IESO, and MOE. Additionally, the program will prioritize proactive engagement in public policy discussions and policy research to contribute to regulatory developments that balance customer affordability and grid reliability.

3.20.2. Variance Analysis

Table 27 - Regulatory Affairs Variances 2021-2026 ($'000s)

	Historical Years			Bridge Years		Test Year	CAGR
	2021	2022	2023	2024	2025	2026	
On-Going Expenditures	$ 2,551	$ 2,928	$ 3,011	$ 3,414	$ 3,743	$ 3,762	8.1%
Amortization of One-Time Rate Application Costs	$ 471	$ 462	$ 462	$ 462	$ 462	$ 1,080	18.1%
Total Expenditures	$ 3,022	$ 3,390	$ 3,473	$ 3,876	$ 4,205	$ 4,842	9.9%
Variance ($)		$ 368	$ 83	$ 403	$ 329	$ 637	
Variance (%)		12.2%	2.5%	11.6%	8.5%	15.1%	

There are no reportable variances for this program over the historic, bridge, or test period. For one time Rate Application costs please see Schedule 4-2-3 - Regulatory One-Time Costs and for On-Going Regulatory Costs please see Schedule 4-2-4 - Regulatory Costs.

3.21. CORPORATE COSTS

The Corporate Costs program encompasses key activities and expenses fundamental to the governance, strategic planning, and operational oversight of Hydro Ottawa. This program includes costs for insurance, future employee benefits, legal services, and corporate services from Hydro Ottawa Holding Inc. Hydro Ottawa Holding Inc. provides shared corporate services to Hydro Ottawa in the form of strategic direction and oversight in several critical business areas tasked with ensuring effective governance, legal compliance, and strategic alignment. For more details on shared services please see Schedule 4-2-1 - Shared Services and Corporate Cost Allocation. Strategic direction and oversight examples include:

- **President and CEO**: Provides strategic leadership, aligning operations with the corporate strategy set by the Board of Directors. Responsibilities include driving profitability, sustainability, and growth; ensuring corporate policies and practices reflect Hydro Ottawa's mission and values; and serving as the utility's public face and spokesperson.
- **Internal Audit and Risk Management:** Evaluates and improves the effectiveness of corporate risk management, internal controls, and governance processes, and enables the effective identification and timely management of factors likely to impede the achievement of corporate objectives. Direct reporting on these matters to the Board of Directors is a key responsibility.
- **Corporate Planning and Governance**: Develops and implements an integrated framework for strategic and business planning. This group ensures robust performance monitoring and reporting, facilitates the execution of governance processes, and supports compliance with corporate statutes and policies.
- **Legal Services**: Providing legal advice, ensuring compliance with laws and regulations, supporting litigation and transactional matters, and managing responses to access and privacy requests.

3.21.1. 2026-2030 Business Priorities

The Corporate Costs program is dedicated to enabling Hydro Ottawa to achieve its eight strategic objectives, as shown in Figure 1 of Schedule 1-2-3 - Business Plan. This program plays a pivotal role in supporting the organization's overall operational and strategic success by providing the necessary resources, oversight, and coordination across all business areas.

President and CEO: Provide leadership and direction to ensure the successful execution of corporate objectives throughout the rate term.

Corporate Planning and Governance: Administer the integrated strategic and business planning framework, aligning divisional plans with corporate performance goals and ensuring comprehensive monitoring and reporting.

Legal Services: Focus on delivering timely legal analysis and advice on business transactions, risk mitigation, and the evolution of the utility's operating model in response to industry changes. Transition from an internal service provider to a business partner to assist with legal challenges arising from the evolving utility business model.

3.21.2. Variance Analysis

Table 28 - Corporate Costs Variances 2021-2026 ($'000s)

	Historical Years			Bridge Years		Test Year	CAGR
	2021	2022	2023	2024	2025	2026	
Expenditures	$ 8,116	$ 7,528	$ 9,509	$ 10,022	$ 10,544	$ 11,204	6.7%
Variance ($)		$ (588)	$ 1,981	$ 513	$ 523	$ 660	
Variance (%)		(7.2%)	26.3%	5.4%	5.2%	6.3%	

2023 vs. 2022

Costs from 2022 to 2023 increased by $2.0M as a result of:

- $1.5M increased activity in corporate functions in 2023 as a result of the strike and storm-related activities.
- $0.5M increase in Future Employee Benefits due to the actuarial loss arising from a decrease in the discount rate.

Attachment 4-1-2(A) - OEB Appendix 2-JA - Summary of Recoverable OM&A Expenses

(Refer to the attachment in Excel format)

Attachment 4-1-2(B) - OEB Appendix 2-JC - OM&A Programs Table

(Refer to the attachment in Excel format)

Attachment 4-1-2(C) - OEB Appendix 2-L - Recoverable OM&A Cost per Customer and per Full Time Equivalent

(Refer to the attachment in Excel format)

OEB Appendix 2-JB - Recoverable OM&A Cost Driver Table

(Refer to the attachment in Excel format)

WORKFORCE STAFFING AND COMPENSATION

1. INTRODUCTION

This Schedule, in tandem with Attachments 4-1-3(A) through (F), provides detailed information on Hydro Ottawa's workforce staffing and compensation strategies and approach to ensuring operational capacity and capability to meet business growth needs and ensure safe and efficient work. This includes:

- Maintain and enhance the reliability of the electricity distribution system;
- Execute its comprehensive asset management plan and planned infrastructure renewal;
- Address increased workload demands, evolving skill requirements, and emerging business priorities;
- Respond to increasing legislative and regulatory requirements;
- Address customer growth and nurture an evolving customer relationship;
- Continue to manage the effects of the demographic shifts in the workforce; and
- Leverage technological advancements in an ever-changing business landscape.

Schedule 4-1-3 - Workforce Staffing and Compensation includes the following Attachments:

- Attachment 4-1-3(A) - Employee Compensation Strategy
- Attachment 4-1-3(B) - Workforce Planning Strategy
- Attachment 4-1-3(C) - Workforce Growth
- Attachment 4-1-3(D) - OEB Appendix 2-K - Employee Costs
- Attachment 4-1-3(E) - Health, Safety and Environmental Compliance, Sustainability and Business Continuity
- Attachment 4-1-3(F) - Actuarial Report

2. WORKFORCE PLANNING STRATEGY

Over the course of two successive five-year rate plans, Hydro Ottawa has sought to keep its permanent positions relatively static. This has been achieved through various means, including rigorous workforce planning, boosting productivity and efficiency (especially through technology and automation), redistributing vacancies from support functions to positions in the skilled trades, increasing the use of temporary positions, and leveraging contracted services. This context is essential to understanding the prospective outlook for Hydro Ottawa for the remainder of its current five-year rate plan and looking ahead to the 2026-2030 term. In short, there is a critical need for growth of the workforce and the addition of new and enhanced skill sets.

Hydro Ottawa's historically lean approach to headcount is no longer sustainable, and not increasing investment in its workforce would result in risks to its ability to deliver necessary services to customers, creating unsustainable workloads for staff and the potential for health and safety concerns. These issues contributed to a near-strike in 2021 and an 84-day labour strike in 2023, where one of the key concerns was workload and its impact on safety. As such, Hydro Ottawa has developed a workforce plan that includes adding 177 new positions between 2024 and 2030. This represents an approximate 29% increase in Hydro Ottawa's headcount from the 2021 OEB approved headcount. Attachment 4-1-3(B) - Workforce Planning Strategy outlines the context of Hydro Ottawa's business environment, both internal and external, that necessitates the need to increase its workforce, and lays out the company's approach to delivering on its Workforce Strategy.

Hydro Ottawa has experienced a significant shift in its workforce demographics from the previous rate period, resulting in a younger workforce with fewer years of service. With over one-third of the existing workforce having five years or less of service, it is critical that Hydro Ottawa proactively forecast talent demand and anticipate supply gaps early - particularly for positions that require a longer lead time to reach full competency, such as those filled through apprenticeship and internship programs. It also means an increased need to focus on hiring

mid-career professionals, people leaders, trades, and technical employees to help fill the knowledge and experience gap.

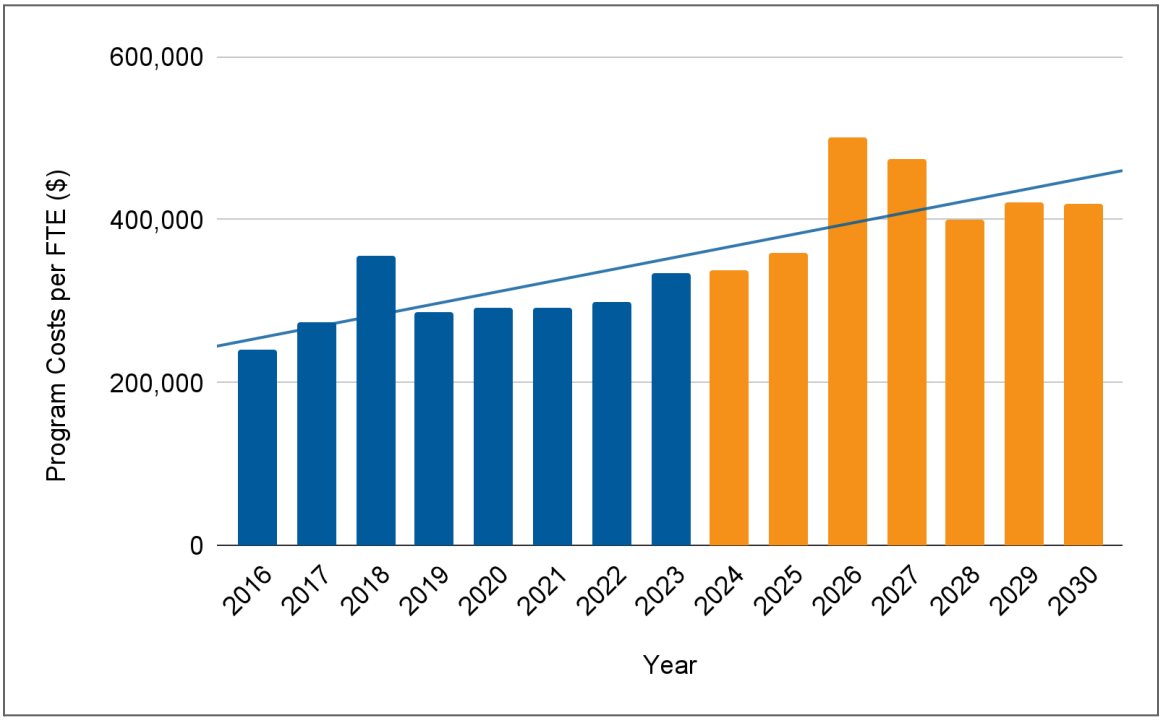
At the same time that Hydro Ottawa's workforce is trending younger, with fewer years of experience, there is a need for historic levels of investment in the distribution system to address deteriorating infrastructure, the energy transition, grid modernization, and climate change resilience.

Recovering from increasingly common extreme weather events takes a substantial toll on not only the electrical infrastructure, but also on employees as they work long hours to restore service in Hydro Ottawa's territory. In recent years, Hydro Ottawa's service territory has experienced tornados, ice storms, frequent lightning storms, floods, and the 2022 Derecho - the most damaging storm in Hydro Ottawa's history.

Demand for electricity is also increasing with electrification and the energy transition. Municipal electrification projects, as well as growing residential and commercial demand, are increasing the need for investment in the distribution system accordingly. This is causing work volumes to increase, as well as increasing the complexity of the local distribution network as complex services are added to the network, and as Distributed Energy Resources become more frequent among customers.

As shown in Figure 1, Hydro Ottawa has, over time, been increasing its program spend per FTE, demonstrating that more work is being completed per FTE and this trend is expected to continue into the future. This chart includes the new headcount that is described in Schedule 4-1-3(B) - Workforce Planning Strategy.

Figure 1 - Program Costs Per FTE, 2016-2030



Given the current and future challenges facing Hydro Ottawa, the company has developed a workforce plan that invests in an expanded workforce to increase its capacity to deliver on its programs safely and efficiently, and that strategically adds new skill sets in emerging areas.

3. WORKFORCE GROWTH

Attachment 4-1-3(C) - Workforce Growth provides a detailed overview and justification for the new headcount proposed in Hydro Ottawa's staffing plan. New positions are discussed by work program as defined in Excel Attachment 4-1-2(B) - OEB Appendix 2-JC OM&A Programs Table. The proposed addition of 177 new positions represents a strategic investment in Hydro Ottawa's workforce designed to address increased workload demands, evolving skill requirements, and emerging business priorities. As depicted in Table 1 below, the majority of new positions are in Distribution Operations, Engineering & Design and Metering, which reflects Hydro Ottawa's growing operational need.

Table 1 - New Positions by Appendix 2-JC OM&A Programs

	Bridge Years		Test Years					Total
	2024	2025	2026	2027	2028	2029	2030	
Metering	3		3	2				8
Engineering & Design	17		22	13	4		2	58
Distribution Operations[1]	22		43	21				86
Customer Billing			1					1
Customer & Community Relations			1					1
Information Management & Technology	2		5					7
Safety, Environment & Business Continuity	2		4		1			7
Human Resources	1		2					3
Finance	1			1	1	1		4
Regulatory Affairs	2							2
TOTAL	**50**		**81**	**37**	**6**	**1**	**2**	**177**

The following are high-level summaries of the headcount needs by Appendix 2-JC - OM&A Program. Attachment 4-1-3(C) - Workforce Growth provides more detailed explanations for the headcount needs summarized below.

3.1. DISTRIBUTION OPERATIONS, ENGINEERING & DESIGN, AND METERING

- Given their collective responsibility for the execution of operations-based programs, workforce planning for these three programs was undertaken as a unified effort.
- 42 new positions were added in 2024, primarily due to four discrete drivers, each demanding a particular set of skills and competencies:
  - **Customer Connection and Capacity Program Growth:** Hydro Ottawa experienced an unprecedented volume of customer-driven growth projects in the 2021-2025 period,

[1] Distribution Operations is an umbrella term for the following Appendix 2-JC programs: System Ops & 24/7, Vegetation Management, Underground Locates, Distribution Support, Distribution Overhead & Underground Maintenance, Stations Maintenance, Minor Maintenance, and Testing, Inspection & Maintenance.

including unforeseen large commercial jobs, as well as a surge in residential connection volumes. In addition to the growth in projects driven by residential and commercial customers, Hydro Ottawa also experienced significant unbudgeted growth in the Capacity Upgrades.

- **Distributed Energy Resources (DER) and Capacity Connection Request Complexity:** The complexity and volume of large load and DER connection requests increased substantially in the historical period, causing significant strain on Hydro Ottawa's engineering resources. In addition to the large load inquiry and connection increase, Hydro Ottawa also experienced on-going growth in both volume and complexity of DER connection requests beginning in 2021.
- **Grid Modernization:** Hydro Ottawa fully commenced the implementation of its Advanced Distribution Management System in 2023. During the detailed planning phase, Hydro Ottawa revealed significant gaps in the initial budget and a lack of internal dedicated resources to support the implementation.
- **Enhanced Leadership and Oversight:** Larger, more complex projects and a younger, less tenured workforce presented the need to expand its leadership team to support intake volumes, as well as enhanced project governance and strategic oversight.

- 110 new positions are planned to be added between 2026-2030, driven by growth in a range of programs and functions, including:
  - **Growth and Electrification:** Expanding grid capacity to serve a growing community and ensure a reliable, resilient electricity system capable of meeting increasing demand driven by new customer connections and distributed energy resources.
  - **Renewing Deteriorating Infrastructure:** Mitigating reliability risk by strategically upgrading or replacing deteriorating and critical infrastructure, prioritizing assets with the greatest impact on system reliability and safety based on condition assessments.
  - **Grid Modernization:** Modernizing the grid through strategic technology adoption and infrastructure upgrades to enable the energy transition, facilitate customer participation, and optimize DER integration, thereby enhancing grid capabilities and efficiency.

- **Enhancing Grid Resilience:** Enhancing grid resilience by proactively upgrading infrastructure and implementing measures to protect against increasingly frequent and intense severe weather events and cyber threats.
- **Testing, Inspection, and Maintenance Programs:** Maintaining the reliability, safety, and performance of the distribution system through systematic evaluations and preventative maintenance of overhead and underground assets.
- **Stations Maintenance:** Increasing monitoring and maintenance activities, including advanced diagnostic testing for station assets that are rapidly deteriorating.
- **Battery Energy Storage Systems:** The integration of Battery Energy Storage Systems (BESS) into the grid, requiring new operating and maintenance programs related to specialized upkeep, software and cyber security needs, safety compliance, data analysis, operational complexity, and expanded network maintenance.
- **System Operations:** Increasing capital and maintenance programs will concurrently drive increased activity within the control room.
- **Engineering:** The confluence of grid modernization, increased DER integration, and an aging and deteriorating asset base is placing new and growing demands on the Engineers that support the development of new programs and the oversight of the implementation and integration of new technologies.
- **Contractor Management and Oversight:** Expanding capital and maintenance programs necessitate a significant increase in contracted resources, which drives the need for additional capacity to support inspection, quality assurance, contract administration, and cost administration of the increased volume of contracted resources.
- **Project Execution Planning:** Increasing volume of capital projects and maintenance activities will drive a significant increase in work estimation, job planning, and resource scheduling.
- **Leadership:** The anticipated substantial increase in trades, technical, and engineering staff necessitates a proportional expansion of Hydro Ottawa's leadership team to ensure effective oversight and support of the growing team.

- Internal labour as a percentage of Gross Program Costs is forecasted to reduce between 2026-2030 (23.4%) when compared to 2021-2025 (27.4%), indicating that proposed operational headcount growth is prudent and appropriately calibrated to the anticipated growth in programs.

3.2. INFORMATION MANAGEMENT & TECHNOLOGY, CUSTOMER BILLING, AND COMMUNITY RELATIONS

- Information Management & Technology, Customer Billing, and Customer & Community Relations are discussed together since the two new positions in Customer Billing and Customer & Community Relations are technical roles that support the ongoing development of technology platforms associated with those programs.
- Since 2024, and over the next five years of the rate period, significant investments are expected to support the grid modernization plan such as Control Systems, AMI 2.0, and Enterprise Asset Management. The incremental increase of nine positions, two in 2024 and seven in the upcoming rate period, is focused on supporting the expansion of these programs. Specifically, the new positions will enable Hydro Ottawa to:
  - **Bolster Cyber Security Posture:** Strengthen cyber security defenses to protect critical infrastructure and sensitive data from evolving threats.
  - **Enhance Customer Experience:** Develop and support digital platforms that improve customer satisfaction and engagement.
  - **Evolve Employee Experience:** Implement technologies that enhance employee productivity and collaboration.
  - **Improve Productivity and Automation:** Develop and deploy AI and automation solutions to streamline processes and improve efficiency.

3.3. SAFETY, ENVIRONMENT & BUSINESS CONTINUITY

- This program encompasses a wide range of activities, including occupational health and safety, public safety, safety training, environmental stewardship, and business continuity

management. As Hydro Ottawa grows and faces new challenges, increased staffing is essential to ensure the continued effectiveness of this vital program.

- An additional seven positions in this program, two in 2024 and five in the upcoming rate period, will enable Hydro Ottawa to:
  - **Design, Enhance and Deliver Essential Safety Training:** Ensure comprehensive and effective safety training programs are developed/procured and delivered to employees to meet the growing needs of a changing workforce, including a younger and less tenured demographic.
  - **Strengthen Business Continuity:** Improve organizational resilience and emergency preparedness through enhanced planning, exercises, and response capabilities. The two new positions in 2024 fall within this program area. Hydro Ottawa could not wait until 2026 to bring in new capacity in business continuity management given the increasing prevalence of extreme weather events, and potential cyber security disruptions, particularly as the age and tenure of the workforce is trending downward.
  - **Advance Sustainability Initiatives:** Implement programs and practices to reduce Hydro Ottawa's carbon footprint and achieve its net-zero targets.
  - **Improve Environmental Performance:** Minimize the environmental impact of Hydro Ottawa's operations through proactive environmental stewardship.

3.4. HUMAN RESOURCES

- As Hydro Ottawa continues to grow and evolve, the demands placed on the Human Resources (HR) program have increased significantly. The primary factors driving the need for additional HR staff are recruitment and onboarding, employee and leadership support and development, as well as the evolution of HR technology.
- Three additional HR staff members, one in 2024 and two in the upcoming rate period, will enable Hydro Ottawa to:
  - **Effectively Manage Workforce Growth:** Ensure timely recruitment and onboarding to fill critical roles and support the organization's expansion.

- **Enhance Employee and Leader Support:** Provide timely and effective support to employees and people leaders across all HR functions.
- Support the ongoing deployment and enhancements of **Human Resources Technology** platforms to ensure HR services are delivered to employees efficiently and that access to the information employees need is available anytime, anywhere, on any device.
- **Strengthen Employee and Labour Relations:** Proactively address employee and labour relations matters to maintain a positive, collaborative, and productive work environment.
- **Support Strategic Priorities:** Contribute to Hydro Ottawa's strategic priorities by ensuring the organization has the workforce, skill development, and organizational capacity to achieve its objectives.

3.5. FINANCE

- Between 2016 and 2023, three positions were reallocated from Finance to support growth in other areas of the organization, demonstrating a history of internal efficiency and resource optimization. However, the increased workload, complexity, and evolving requirements now necessitate an increase in Finance staff to ensure the group can effectively support the organization's strategic goals and operational needs.
- The addition of one position in 2024 and one position in each of 2027, 2028, and 2029 is crucial to ensure the Finance program can effectively support the organization's strategic goals and operational needs. This increase will enable the group to:
  - Maintain accurate and timely financial reporting
  - Ensure compliance with accounting standards and evolving regulatory requirements
  - Provide effective support to operational teams
  - Strengthen internal controls and risk management
  - Adapt to the rapidly evolving complexities of the business environment
- This measured increase in staffing is essential for the Finance function to continue fulfilling its critical role in the organization's financial governance and operational success.

3.6. REGULATORY AFFAIRS

- The demands placed on Regulatory Affairs have increased significantly. Rate applications, policy consultations, and commitments stemming from proposals, settlements, and mandated outcomes have grown in complexity and volume. Historically, the Group has managed these increased demands by relying on existing staff and hiring temporary support. This approach has proven unsustainable.
- The addition of two new positions in 2024 provides continuous support and focus on outcomes, commitments, and planning of rate setting applications. It will also enable a more proactive and strategic approach to regulatory compliance, ensuring that Hydro Ottawa is well-positioned to navigate the evolving regulatory landscape.

4. COMPENSATION AND HEADCOUNT

Hydro Ottawa's compensation philosophy and associated compensation components are premised on attracting and retaining a skilled workforce and on supporting a performance-driven work culture. This is achieved by appropriately and fairly rewarding performance in the achievement of the objectives identified in the utility's Strategic Direction, and in accordance with position competencies and the utility's values, while at the same time responsibly managing total compensation costs in an increasingly competitive talent market. More details on Hydro Ottawa's approach to total compensation – including salaries, incentive-based pay for senior employees only, insured benefit plans, pension plan, premiums, and allowances – are outlined in Attachment 4-1-3(A) - Employee Compensation Strategy, as well as in Attachment 4-1-3(F) - Actuarial Report regarding the utility's limited future benefit costs (2023).

As provided in Attachment 1-3-3(F) - Compensation Benchmarking Study, Hydro Ottawa engaged Mercer Canada to conduct a benchmarking study of the utility's total compensation, including salaries, target total cash compensation (which includes salary and target incentive where applicable), and benefit and pension contributions against both general industry and utility market comparators, where available.

Jobs that are core to the operational business were all found to be very well aligned with the utility market comparators as well as with the general industry market comparators, with the exception of the System Designer, which was higher than general industry market comparators. Some jobs, generally unionized support roles, were found to be higher than the general industry market comparators, but in most cases were still aligned to the utility market comparators.

The study also found that Hydro Ottawa's employer paid benefits, which include insurance and wellness benefits and pension contributions, are generally aligned with what is typically seen in the market – and more specifically, in the Ontario Public Sector.

Hydro Ottawa's total number of permanent FTEs has remained relatively static over the course of two successive five-year rate plans. In 2023, the non-management permanent FTEs were lower as a result of an 84-day strike by the International Brotherhood of Electrical Workers (IBEW). In 2024 and 2025, permanent FTEs are forecasted to increase in the non-management group, primarily in certified and skilled trades and designated and technical professionals, while management permanent FTEs are forecasted to be below the 2023 actual in 2024 and 2025, returning to that same level in 2026. This is consistent with Hydro Ottawa's Workforce Planning Strategy, which is appended to this Application as Attachment 4-1-3(B) - Workforce Planning Strategy.

Hydro Ottawa has leveraged a temporary workforce over the course of two successive five-year rate plans, which provides the utility with more flexibility to address seasonal and other workloads and can be more easily adjusted upwards or downwards as required. Hydro Ottawa's 2024 and 2025 Bridge Years and 2026 Test Year continues this approach, leveraging a temporary workforce and allowing the utility to better manage compensation costs.

Excel Attachment 4-1-3(D) - OEB Appendix 2-K - Employee Costs summarizes Hydro Ottawa's 2021-2023 Historical, 2024-2025 Bridge Years, and 2026 Test Year FTEs and compensation costs, and indicates the following:

- In 2023, there was a decrease in the non-management FTEs as a result of an 84-day strike by the IBEW. In the 2024 and 2025 Bridge Years, and into the 2026 Test Year period, the non-management FTEs are forecasted to increase while the management FTEs are forecasted to stay relatively flat. This increase in FTEs is aligned with Attachment 4-1-3(B) - Workforce Planning Strategy, which outlines the need for growth in certain segments of its workforce in response to planned distribution system investments and modernization of the electrical grid to ensure reliability and climate resilience as customers increasingly electrify their homes and businesses and their way of life; and
- Total compensation costs are expected to increase from approximately $72.0M in 2021 to $104.4M in 2026.
- Hydro Ottawa applies a vacancy assumption to its FTE and compensation cost forecasts. Vacancy assumptions result in forecasted cost reductions of $7.3M in 2024, $7.9M in 2025, and $9.0M in 2026.

5. MAINTAINING A SAFE WORK ENVIRONMENT

As outlined in Attachment 4-1-5(E) - Health, Safety and Environmental Compliance, Sustainability and Business Continuity Management, Hydro Ottawa is responsible for delivering electricity in a manner that protects the health and safety of employees, contractors, customers, and the broader community, while also being a good steward of the shared environment.

5.1. EMPLOYEE SAFETY

To ensure employee and contractor safety, Hydro Ottawa deploys an internal responsibility system and Occupational Health, Safety, and Environmental (OHSE) Accountability program. These are entrenched in the organization as both a general philosophy of shared accountability and as a direct reflection of the specific roles and responsibilities required by legislation and regulations. OHSE programs are kept current through an audited OHSE management system that is registered to the ISO 14001 Environmental Management Systems Standard and the ISO 45001 Occupational Health and Safety Management Systems Standard.

A key component of safety is training. Training is not only a legislative requirement under the *Occupational Health and Safety Act* and other key statutes and codes that govern Hydro Ottawa, but also contributes to higher employee competence and efficiency, and is critical to delivering safer operations.

With a greater proportion of younger workers who do not yet possess the hands-on exposure to the scope and varied aspects of the electrical system in trades where these are key aspects in a worker's skill development, these workers do not yet have experience to identify how the hazards and risks may manifest in all scenarios. To mitigate these risks over the 2026-2030 rate period, Hydro Ottawa must have an enhanced focus on key safety planning activities such as tailboard conferences, safety inspections, jobsite coaching, pre-construction meetings, and independent reviews of work practices that are essential in mitigating safety risks.

The importance of safety in Hydro Ottawa's operations extends beyond its own employees to include contractors who perform work on the utility's behalf. Continued use of contractors is required to meet Hydro Ottawa's construction, maintenance, and other needs on an ongoing basis. Safe, efficient, and high-quality performance from contractors is essential to the delivery of electricity to the utility's customers. To effectively manage projects involving contractors, Hydro Ottawa utilizes a project management methodology and a Contractor OHSE Management Program, which align project planning and implementation activities as they relate to contractors and sub-contractors.

5.2. EMPLOYEE HEALTH AND WELLNESS

Along with the emphasis on safety, Hydro Ottawa recognizes that, to have a productive workforce, employees need to be healthy and well. This results in an engaged and resilient workforce, a safe and healthy workplace, and a culture where everyone can thrive. Hydro Ottawa has strategies in place to help prevent illness and injury, and reduce the associated lost time, in five areas of focus: Physical Health, Financial Fitness, Healthy Workspaces, Mental Wellbeing, and Disability Management and Work Reintegration.

5.3. PUBLIC SAFETY

Hydro Ottawa takes the health and safety of the public as seriously as it does the health and safety of its employees. Public safety is considered in all phases of Hydro Ottawa's operations, from facility and equipment design through construction to operations and maintenance. All job planning activities take into account public safety, so that the public is not adversely affected by construction and maintenance activities conducted on Hydro Ottawa property, on customer property, and along the many municipal roadways where infrastructure is located.

To ensure regulatory compliance, Hydro Ottawa participates in multiple Electrical Safety Authority (ESA) due diligence inspections per year, as well as an annual ESA compliance audit. The results of the utility's ESA compliance audits from 2019 to 2023 consistently demonstrated that Hydro Ottawa remains compliant in the five key compliance sections examined.

The other major component of public safety is education. Hydro Ottawa provides highly visible signage warning of hazards on all of its distribution substations and ground level transformers. The utility also works to foster a culture of safety and energy conservation in the community through a number of education and safety awareness campaigns.

5.4. ENVIRONMENT

Hydro Ottawa is subject to federal, provincial, and municipal environmental legislation and regulations and undertakes a range of strategies and activities to ensure compliance with these requirements. Hydro Ottawa's operations are subject to a variety of environmental reporting at scheduled and ad-hoc intervals throughout the year to ensure compliance.

Throughout any year, Hydro Ottawa may experience a number of unexpected releases of substances into the environment, with the majority of these releases coming from oil-filled transformers that fail due to age or damage. The utility has a 24-hour response system, with employees qualified to promptly report releases and to organize immediate response through an on-call spill remediation contractor. Field employees receive periodic training in spill reporting

and containment. All of Hydro Ottawa's large vehicles carry spill response kits containing protective equipment for employees, and absorbent materials and mats to prevent spill entry into sensitive areas.

Hydro Ottawa is actively working to eliminate Polychlorinated Biphenyls (PCBs) from its electrical distribution system. Federal regulations introduced in 2008 established end-of-use dates for all PCBs from 2009-2025, depending upon the location and concentration of PCBs. Hydro Ottawa has fulfilled all requirements to date to ensure compliance with the 2025 end-of-use deadlines.

On January 1, 2021, Ontario's new *On-Site and Excess Soil Management Regulation,* O. Reg 406/19, came into effect under the province's *Environmental Protection Act,* and is being implemented in phases over five years. Hydro Ottawa has commenced the implementation of an excess soil management process, which has added cost and complexity to the company's asset management and project management activities.

Since 2010, Hydro Ottawa's has had a commitment to environmental sustainability, and has received recognition of its efforts in this area, including the Sustainable Electricity Company designation, new facilities constructed and maintained to LEED Gold standards, as well as being recognized as one of Canada's Greenest Employers every year from 2011-2016, and 2018-2024.

5.5. BUSINESS CONTINUITY MANAGEMENT

The purpose of the Hydro Ottawa Business Continuity Management (BCM) program is to ensure resilience by proactively identifying potential threats, mitigating their impacts, and establishing effective response and recovery strategies. The BCM Program aims to safeguard employees, protect assets, maintain critical business functions, and uphold reputation in the face of unforeseen disruptions. Over the past ten years, Hydro Ottawa's BCM program has evolved from one focused primarily on preparing for and responding to electricity outages, to

one that takes an all hazards approach and encompasses overarching crisis management, life safety, incident management, and business continuity plans.

The BCM Program provides oversight, coordination, and management of business continuity activities, including business impact assessments; Life Safety, Crisis Management, Divisional Business Continuity and/or Incident Management Plans; the after-action reporting process; and the associated Exercise Framework. The Program plays a crucial role in fostering a culture of preparedness within the company, enabling it to thrive in an ever evolving threat landscape.

In addition to the BCM Program and the exercising of plans, Hydro Ottawa derives experience from responding to real life events. From 2018-2024, Hydro Ottawa has had to respond and adapt to disruptive events of a variety, severity, frequency and duration never before experienced by the utility in succession.

EMPLOYEE COMPENSATION STRATEGY

1. INTRODUCTION

Hydro Ottawa's compensation philosophy and associated compensation components are designed to attract and retain a skilled workforce while fostering a performance-driven work culture. This is achieved by appropriately and fairly rewarding performance aligned with the objectives outlined in the utility's Strategic Direction, position competencies, and the company's values, while responsibly managing total compensation costs in an increasingly competitive talent market.

2. TOTAL COMPENSATION

Hydro Ottawa's approach to total compensation aligns with its compensation philosophy and includes the following key components which strengthen the value proposition: salaries, incentive-based pay for mid- and senior-level positions only, insured benefit plans, pension plan, and statutory benefits.

2.1. COMPENSATION BENCHMARKING STUDY

As provided in Attachment 1-3-3(F) - Compensation Benchmarking Study, Hydro Ottawa engaged Mercer Canada to conduct a benchmarking study of the utility's total compensation, including salaries, target total cash compensation (which includes salary and target incentive where applicable), and benefit and pension contributions against both general industry and utility market comparators, where available. Competitiveness of salaries and target total cash compensation was defined as being within +/- 10% of P50 of each market comparator.[1]

The study reviewed 20 jobs, including those core to the business, as well as technical, professional, and para-professional roles that support the business. The jobs included in the study are representative of both groups of positions/employees (management and non-management), which are further defined in Section 3 below. Five management jobs and 15

[1] "P50" refers to the market median job rate.

non-management jobs at different levels of each group were reviewed. The market comparison study evaluated all jobs against base salary and target total cash compensation.

The following seven jobs that are core to the operational business (e.g. Director, Distribution Operations; Manager, Distribution Operations; Supervisor, Distribution Operations; Professional Engineer; and the unionized trades jobs of Power Line Technician; System Operator; and Vehicle and Utility Equipment Technician) were found to be well aligned with the utility market comparators. In the case of the Director, Distribution Operations and Professional Engineer jobs, they were also well aligned with the general industry market comparators. One core operational job, the System Designer job, which is a multi-skill job that consists of both technical and project management functions, was found to be above both market comparators although just slightly above the utility market comparators, while the Vehicle and Utility Equipment Technical was found to be slightly above the general industry market comparator for base salary, but aligned with target total cash compensation, while remaining aligned with utility market comparators.

The market comparison study for unionized support jobs can best be described in two categories. The first category of unionized support jobs (e.g. Warehouse Attendant; IT Service Desk Technician; GIS/CAD Technician; and Customer Contact Agent) were found to be above the general industry market comparators in varying degrees and only slightly above the utility market comparators where available, with the GIS/CAD Technician aligned on base salary and slightly above when comparing target total cash compensation. The second category of unionized support jobs (e.g. Billing Service Associate; Collection Agent; and IT Systems Support) were found to be well aligned to the utility market comparators, but slightly higher than the general industry market comparators, with the IT Systems Support job also well aligned with the general industry market comparators.

Key professional and supervisory jobs (e.g. Network Administrator; Management Accountant; Communications Officer; and Supervisor, Billing) were also found to be consistent, with both the

general industry and utility market comparators. The Supervisor Billing is aligned with general industry, but below the utility market comparators, while the Management Accountant aligned with the general industry on base salary, but below when compared with target total cash. In addition, the Management Accountant was also lower on base salary within the utility market. The Senior Procurement Agent job was found to be above the general industry market comparators with no available utility comparators.

With respect to employer paid benefits, which includes insurance and wellness benefits and pension contributions, the study found that these offerings at Hydro Ottawa are aligned with what is typically seen in the market for non-executive employees. Specifically, when compared to the Ontario Public Sector, where such benefits account for 20-25% of base salary, Hydro Ottawa's benefits were found to be within 19-24% of base salary depending on the level of positions. Overall, Hydro Ottawa's benefits have accounted for between 20-22% of total compensation.

Table 1 below summarizes Hydro Ottawa's historical and forecasted employer paid benefits as a percentage of total compensation from 2021-2026.

Table 1 – Employer Paid Benefits as a Percentage of Total Compensation (2021 to 2026)

Historical Years			Bridge Years		Test Year
2021	2022	2023	2024	2025	2026
20%	20%	20%	22%	22%	22%

2.2. MERIT INCREASES

The salary structure for management and non-union employees consists of seven salary scales representing positions of similar scope and responsibility. A formalized point factor system is used to evaluate positions and determine the salary scale in which they are placed. This ensures internal equity. Salary scales are reviewed annually to ensure external competitiveness.

Employees are paid an annual salary within the salary scale based on education and experience. Annual increases to salaries, within the salary scales, are merit-based and determined by performance and contributions in the previous year. A robust performance management process is in place for this purpose. An overall performance rating is established and a merit increase associated with the rating is provided. Performance and contributions are directly tied to Hydro Ottawa's corporate performance scorecard ensuring alignment with and advancement of the utility's Strategic Direction.

In determining the appropriate merit increase associated with each performance rating, Hydro Ottawa reviews the national, provincial, and local salary projections of major compensation consulting firms, including those projections for the utility and broader public sectors, as well as consumer price indices. Merit increases are aligned with these projections.

2.3. INCENTIVE-BASED PAY

Only those employees occupying senior management positions and members of the executive team are eligible for an annual incentive-based pay as a component of their total cash compensation, which is expressed as a percentage of annual salary. These employees contribute directly to the success of the utility's Strategic Direction. On average, 40 employees are eligible for incentive-based pay in any given year.

Incentive-based pay is derived from the achievement of corporate, divisional, and individual priorities in the previous year. Corporate priorities are established each year and approved by the Board of Directors, with divisional priorities approved by the Division Chief and President and CEO. Non-financial priorities are designed to achieve continuous improvement in relation to Hydro Ottawa's Strategic Direction. They include a number of strategic objectives focused on customer service, operational and organizational efficiency and effectiveness, and service reliability.

Table 2 below provides the average annual incentive pay per eligible employee

Table 2 – Average Annual Incentive-Based Pay (2021 to 2023)[2]

	Historical Years			3-Year Average
	2021	2022	2023	2021-2023
Number of Employees	38	39	43	40
Average Amount	$ 18,818	$ 18,701	$ 18,388	$ 18,636

2.4. COLLECTIVE AGREEMENT

The International Brotherhood of Electrical Workers (IBEW), Local 636 represents Hydro Ottawa's unionized employees. This includes the company's trades, technical, clerical, and administrative employees.

The current collective agreement is in effect from April 1, 2023 to March 31, 2027. This collective agreement was reached after an 84-day strike by the IBEW where the key items in dispute were workload and its effect on safety, and wages and benefits. The collective agreement was ratified by 57% of the employees. Negotiated wage increases were 4.5% for 2023 (3.0% April 1 and 1.5% October 1 - not compounded) and 3.5% for 2024 (2.0% April 1 and 1.5% October 1 - not compounded). For 2025 and 2026, the wage increases are 3.25% on April 1 of each year. This represents an average increase in wages of 3.625% per year. The wage increases for the previous collective agreement from April 1, 2021 to March 31, 2023 were 2.3% on April 1 for each of 2021 and 2022. Overall, unionized wages increases for the period from April 1, 2021 to March 31, 2027 will be on average 3.18% per year. The Consumer Price Index from October 2021 to October 2024 has risen by an average annual rate of 3.99%[3] while unionized wages at Hydro Ottawa during the same period increased by an average of 3.43% per year.

Increases to certain premiums, allowances, and insured benefits also formed part of the April 1, 2023 to March 31, 2027 collective agreement, spread-out over the collective agreement's four-year term. For the April 1, 2021 to March 31, 2023 collective agreement nominal increases

[2] Incentive payments earned are paid in the following year, year of payment is being presented in Table 2.
[3] Inflation Calculator - Bank of Canada.

were negotiated for certain premiums, allowances and insured benefits, as was a decrease of the cap on the cost of living increase for those on Long-term disability (LTD); the cap was decreased to up to 3% per year from the previous up to 4% per year.

2.5. PENSION PLAN

Hydro Ottawa employees are part of the Ontario Municipal Employees Retirement System (OMERS), a multi-employer, contributory, defined-benefit pension plan established by the Province for employees of municipalities, local boards, and school boards in Ontario. Pension benefits are determined by a formula based on the highest consecutive five-year average of contributory earnings and years of service. Pension benefits are subject to Shared Risk Indexing, meaning any indexation to increases in the Consumer Price Index is conditional upon the OMERS Sponsors Corporation Board of Directors (OMERS SC Board) annual assessment of the overall financial health of the plan. Both participating employers and participating employees are required to make equal contributions to the plan based on the participating employees' contributory earnings.

Employers and employees that are members of the OMERS pension plan contribute a lesser percentage on earnings received up to the annual Yearly Maximum Pensionable Earnings (YMPE), and a higher percentage on earnings above the YMPE. The YMPE is equal to the Base Canada Pension Plan (CPP) earnings threshold, as the OMERS pension plan is designed to work together with the CPP to provide a stable retirement income.

The OMERS SC Board, who is responsible for decisions on benefit levels and contribution rates, has recently confirmed that there will be no changes to contribution rates for 2025 and 2026. The contribution rates have been static since the last increase in 2013. Effective January 1, 2027, the OMERS SC Board has approved changes to contribution rates consistent with external actuarial advice and its Contribution Rate Policy. Contribution rates up to the YMPE will decrease from the current 9.0% of contributory earnings to 8.6% and contribution rates above

the YMPE will increase from the current 14.6% of contributory earnings to 15.7%. Hydro Ottawa has forecasted these contribution rates through to 2030.

Table 3 below summarizes Hydro Ottawa's historical and forecasted contribution rates to OMERS from 2021-2026.

Table 3 – OMERS Contribution Rates (2021-2026)

	YMPE	Below YMPE	Above YMPE
2021 Historical	$ 61,600	9.0%	14.6%
2022 Historical	$ 64,900	9.0%	14.6%
2023 Historical	$ 66,600	9.0%	14.6%
2024 Bridge	$ 68,500	9.0%	14.6%
2025 Bridge	$ 70,555	9.0%	14.6%
2026 Test	$ 71,900	9.0%	14.6%

2.6. INSURED BENEFITS

Hydro Ottawa's insured benefit plans provide employees with income security and protection from catastrophic and life events. Insured benefits coverage is provided to active full-time employees in the following areas:

- Health, including vision care, prescription drugs, and paramedical services;
- Dental, including major dental and orthodontics services;
- Long-term disability (LTD) benefits;
- Short-term disability benefits;
- Life insurance; and
- Critical Illness insurance (management and non-union employees only).

Increases to certain insured benefits formed part of the April 1, 2021 to March 31, 2023 and April 1, 2023 to March 31, 2027 collective agreements, spread-out over the terms of those collective agreements. In the collective agreement from April 1, 2017 to March 31, 2021 there

were no changes made to the provisions of the insured benefit plans for the four-year term of that collective agreement.

Hydro Ottawa continues to benefit from its existing cost containment measures such as reasonable and customary limitations and generic drug substitution. A drug risk management program is also in place whereby new or existing drugs with new treatment indications are reviewed by the benefit plan insurer to ensure appropriateness. As noted earlier, as part of the April 1, 2021 to March 31, 2023 collective agreement a decrease to the cap on the cost of living increase for those on LTD was negotiated; the cap was decreased to up to 3% per year from the previous up to 4% per year.

In late 2022 and into 2023, Hydro Ottawa undertook a competitive marketing process of its insured benefit plans. This exercise resulted in a decrease in premiums of 11.2% or $656K annually. The 2024 estimated benefit costs are based on the final negotiated rates and estimated premiums following this exercise, and for April 2025 onwards, benefit costs are projected by applying reasonable assumptions to the prior year's estimated costs, subject to rate guarantees and renewal caps resulting from the competitive marketing exercise. The assumptions are based on Mercer's 2024 Anticipated Benefit Costs (published in fall 2023) and expected and anticipated salary increases where applicable.

2.7. POST-RETIREMENT BENEFITS

Hydro Ottawa has taken steps to contain its future benefit costs by limiting the type, scope, and applicability of post-retirement benefits. Hydro Ottawa's post-retirement benefits consist only of life insurance and a small retirement grant for eligible employees, the latter for unionized employees only and primarily linked to positive attendance at work. By maintaining these limited post-retirement benefits, Hydro Ottawa prevents substantial current and future expenses.

Hydro Ottawa completes a full actuarial valuation of the future value of the post-retirement benefits every three years, which is consistent with industry standards. In the interim years, an

extrapolation is completed to determine if there has been a material change from the previous year.

The most recent actuarial valuation was performed as at December 31, 2022, with an actuarial extrapolation performed as at December 31, 2023 by Eckler Consultants & Actuaries.[4] The valuation determined that the accrued post-retirement life insurance obligation is increasing, primarily due to a decrease in the discount rate used in 2023. The accrued retirement grant obligation increased in 2023 compared to 2022 and then is estimated to decrease in subsequent years mainly attributable to the decreasing average age and service of employees, as to be eligible for the retirement grant an employee must have 25 years or more of service.

2.8. REGULATORY TREATMENT OF PENSION AND OTHER POST-EMPLOYMENT BENEFITS

On September 14, 2017, the OEB issued its final report on the regulatory treatment of pension and other post-employment benefit (OPEB) costs establishing the use of accrual accounting as the default method on which to set rates for pension and other post-employment benefit amounts in cost-based applications.[5] Moreover, this report also provides for the establishment of a variance account to track the difference between the forecasted accrual amount in rates and actual cash payment(s) made, with an asymmetric carrying charge in favour of ratepayers applied to the differential.

Hydro Ottawa provides pension benefits for its employees through the OMERS Fund (Fund). Although the plan is a defined benefit plan, sufficient information is not available to Hydro Ottawa to account for it as such as it is not possible to attribute the fund assets and liabilities between the various employers who contribute to the Fund. As a result, Hydro Ottawa accounts for the plan as a defined contribution plan, and contributions payable as a result of employee service are expensed as incurred similar to short-term employee benefits.

[4] Please see Attachment 4-1-3(F): Actuarial Report.
[5] Ontario Energy Board, *Report of the Board: Regulatory Treatment of Pension and Other Post-Employment Benefits (OPEBs) Costs*, EB-2015-0040 (September 14, 2017).

Hydro Ottawa also provides other post-employment benefits such as life insurance and a small retirement grant. These provide benefits to certain employees when they are no longer providing active service. The aforementioned other post-employment benefits are recorded on an accrual basis. The accrued benefit obligation and current service costs are calculated using the projected benefit method prorated on service and based on assumptions that reflect Hydro Ottawa's best estimates. Hydro Ottawa tracks the difference between the forecasted accrual amount in rates and actual cash payments in a variance account as set out in the OEB Report. Please see Schedule 9-1-3 - Group 2 Accounts for balances related to the variance account.

Table 4 below outlines Hydro Ottawa's historical and forecasted Pension and OPEB amounts from 2021-2026.

Table 4 – 2021-2026 Pension and OPEB Amounts ($'000s)

Pension and OPEB[6]	Historical Years			Bridge Years		Test Year
	2021	2022	2023	2024	2025	2026
Pension cost	$ 5,478	$ 5,710	$ 5,340	$ 7,189	$ 7,813	$ 8,930
Future employee benefits cost	$ 747	$ 281	$ 878	$ 840	$ 857	$ 874
Cash paid (future employee benefits)	$ 815	$ 788	$ 843	N/A	N/A	N/A

3. HEADCOUNT

Hydro Ottawa has categorized employees/positions into two groups in calculating the total full-time equivalents (FTE). These groups are comprised of full-time permanent equivalents and temporary equivalents (which can be full-time or part-time), defined as follows:[7]

- Management – includes executives, directors, managers, supervisors, and senior professionals such as professional engineers.

[6] These definitions likewise apply to Tables 5 to 8 which follow.
[7] Summer students and co-op students are not included, as these short-term hires are viewed as developmental in nature.

- Non-Management – includes non-unionized professionals, such as engineers-in-training and executive assistants, and all employees who are represented by the IBEW.

The tables below summarize Hydro Ottawa's actual FTEs for 2021, 2022, 2023 along with the forecasted FTEs for 2024, 2025 and 2026. Hydro Ottawa's FTE count is determined using standard methodology. For the 2021-2023 actuals, FTE is a calculated value derived from the total regular hours paid each year divided by the regular hours of work scheduled each year by a single employee in that group. For the 2024 and 2025 Bridge Years and 2026 Test Year, FTE is calculated as all budgeted positions, adjusted for part-year budgeting for new positions where applicable, and estimated vacancies.

3.1. FULL-TIME PERMANENT AND TEMPORARY EQUIVALENTS

Table 5 provides the total number of actual and forecasted permanent and temporary FTEs, and illustrates Hydro Ottawa's need for growth in certain segments of its workforce as outlined in its Workforce Planning Strategy.

Table 5 – 2021-2026 Number of Employees (Full-Time Equivalents including Permanent, Temporary and Part-Time)[8]

	Historical Years			Bridge Years		Test Years
	2021	2022	2023	2024	2025	2026
Management	122	137	138	133	135	141
Non-Management	463	458	356	495	506	575
TOTAL	**585**	**595**	**494**	**628**	**641**	**716**

In 2023 there was a decrease in the non-management FTEs as a result of the strike by the IBEW.

[8] Hydro Ottawa has completed OEB Appendix 2-K - Employee Costs, which is included in this Application.

In the 2024 to 2026 period the non-management FTEs are forecasted to increase while the management FTEs are forecasted to stay relatively stable. This increase in FTEs is aligned with Hydro Ottawa's Workforce Planning Strategy which outlines the need for growth in certain segments of its workforce. The increase is primarily in certified and skilled trades and designated and technical professionals. Meanwhile management permanent FTEs are forecasted to be below the 2023 Actual in 2024 and 2025, returning to that same level in 2026. This is in response to planned distribution system investments and modernization of the electrical grid to ensure reliability and climate resilience as customers increasingly electrify their homes and businesses. This also remains consistent and aligned with the aforementioned Workforce Planning Strategy.

Table 6 summarizes the number of actual employees at year-end from 2021 to 2024. This headcount aligns with the reported full-time equivalents and reflects the 2023 increase over the reported FTE attributed to the end of the labour disruption and return to normal operations. The increase in headcount in 2024 is attributed to increased hiring of existing and new positions hired during the year.

Table 6 – 2021-2024 - Number of Employees at Year-End (Full-Time, Temporary and Part-Time)

	Historical Years			Test Year
	2021	**2022**	**2023**	**2024**
Number of Employees	584	589	582	652
TOTAL	**584**	**589**	**582**	**652**

3.2. FULL-TIME PERMANENT EQUIVALENTS

Table 7 below illustrates Hydro Ottawa's forecasted plan to grow its total number of permanent full-time positions/employees in accordance with its Workforce Planning Strategy detailed in Attachment 4-1-3(B) - Workforce Planning Strategy.

Table 7 – 2021-2026 - Number of Full-Time Permanent Equivalents

	Historical Years			Bridge Years		Test Year
	2021	2022	2023	2024	2025	2026
Management	121	135	137	127	129	138
Non-Management	439	432	331	471	482	550
TOTAL	**560**	**567**	**468**	**598**	**611**	**688**

Hydro Ottawa's total number of permanent FTEs has remained relatively static over the course of two successive five-year rate plans. This aligns with Hydro Ottawa's previous strategy of reduced headcount growth and use of contingent employees to supplement the workforce.

As previously discussed, the increase starting in 2024 supports the planned distribution system investments and modernization of the electrical grid as detailed on the Workforce Planning Strategy.

3.3. TEMPORARY EQUIVALENTS

Table 8 summarizes the number of actual and forecasted temporary equivalents from 2021 to 2026, which includes both temporary full-time and part-time employees.

Table 8 – 2021-2026 - Number of Temporary Equivalents (Full-Time or Part-Time)

	Historical Years			Bridge Years		Test Year
	2021	2022	2023	2024	2025	2026
Management	1	2	1	6	6	3
Non-Management	24	26	25	24	24	25
TOTAL	**25**	**28**	**26**	**30**	**30**	**28**

Historically, Hydro Ottawa has leveraged a temporary workforce which provides the utility with more flexibility to address seasonal and other workloads, and can be more easily adjusted upwards or downwards as required. In the negotiations for the April 1, 2021 to March 31, 2023 collective agreement, Hydro Ottawa and the IBEW agreed to increase the maximum length of

employment for temporary full-time employees, from the previous 18 months to the current 24 months. Hydro Ottawa's 2024, 2025 and 2026 forecast continues this approach to a temporary workforce, allowing the utility to better manage compensation costs.

4. TOTAL COMPENSATION

Table 9 below summarizes Hydro Ottawa's historical and forecasted total compensation including salary, wages, and benefits from 2021 to 2026.

Table 9 – 2021-2026 - Total Compensation (Salary, Wages, & Benefits) ($'000s)[9]

	Historical Years			Bridge Years		Test Year
	2021	2022	2023	2024	2025	2026
Management	$ 18,604	$ 21,015	$ 25,081	$ 21,178	$ 22,283	$ 24,110
Non-Management	$ 53,440	$ 55,526	$ 45,985	$ 63,652	$ 68,523	$ 80,323
TOTAL	**$ 72,044**	**$ 76,542**	**$ 71,066**	**$ 84,830**	**$ 90,806**	**$ 104,433**

4.1. 2021-2022 ACTUALS

The total compensation increase from 2021 to 2022 is largely due to step increases and annual negotiated salary increases for unionized employees, and annual merit increases for management and non-union employees. It is also attributable to an increase in overtime costs in 2022 in connection with restoration activities following the Derecho storm, the most devastating severe weather event in Hydro Ottawa's history, which caused significant damage to the electricity grid. Please see Attachment 2-1-1(A) - May 2022 Derecho After Storm Report for more information related to the Derecho storm.

4.2. 2023 ACTUAL

In 2023, non-management total compensation is lower due to the strike by the IBEW. Likewise, management total compensation is higher in 2023 due primarily to overtime worked during the

[9] Hydro Ottawa has completed OEB Appendix 2-K - Employee Costs, which is included in this Application.

period of the strike responding to outages resulting from an exceptionally active summer of lightning strikes, tornados, and heat waves.

4.3. 2024 AND 2025 BRIDGE YEARS, 2026 TEST YEAR

There is a corresponding increase in total compensation due to the increase in FTEs in accordance with Hydro Ottawa's Workforce Planning Strategy. The non-management group forecasted increase in total compensation is primarily related to the need for growth in certain segments of the utility's workforce as outlined in Attachment 4-1-3(B) - Workforce Planning Strategy.

Also contributing to the increase in total compensation are step increases and annual negotiated salary increases for unionized employees, annual merit increases for management and non-union employees, and a projected increase in benefit costs based on assumptions from Mercer's 2024 Anticipated Benefit Costs which was published in the fall of 2023.

5. VACANCY ALLOWANCE

Hydro Ottawa's position budgeting process ensures a thorough and accurate representation of the number of required full-time permanent positions and their associated compensation costs. To attain this level of accuracy, a vacancy assumption (allowance) is applied, effectively reducing both the number of FTE and the related compensation cost the company can reasonably expect to incur.

The vacancy assumption is determined using historical and current trending which includes attrition (retirement and resignations), internal/external environmental factors and forecasting. Expected vacancies are expressed as a percentage and then applied.

Table 10 below summarizes the number of required full-time permanent positions, vacancy assumption, reduced FTE due to vacancy assumption and anticipated contingent work force, culminating in the final number of FTEs as detailed in Appendix 2K for 2024 through 2026.

Table 10 – 2024-2026 - Reconciliation of Positions to FTEs in Appendix 2K[10]

	Bridge Years		Test Year
	2024	2025	2026
Number of Full-Time Permanent Positions	667	667	748
Vacancy Assumption	10%	8%	8%
Vacancy Assumption translated into FTEs	(69)	(56)	(60)
Number of FTEs Sub total	**598**	**611**	**688**
Temps and Part Time	30	30	28
Number of FTEs (Appendix 2K)	**628**	**641**	**716**

The actual vacancy in 2022 and 2023 peaked at 12% due to an increase in attrition, with anticipated retirements and unanticipated resignations. A hiring freeze that was instituted for the duration of the COVID-19 pandemic, with only key/critical positions being filled, contributed to higher vacancy during this time. The post pandemic environment has changed the way employees and potential employees view employment. Issues such as working from home, hybrid work arrangements and the mobility of the workforce exacerbated the issue resulting in a tight labour market for employers and has led to an increase in the attrition rate. In addition, the labour disruption in 2023 and the subsequent return to work of this segment of employees caused delays in filling vacant positions.

However, recent hiring efforts have been successful and the vacancy assumption is forecasted to continue to reduce as seen in Table 9. Full details regarding attrition, and retention/attraction programs instituted to address this can be found in Attachment 4-1-3(B) - Workforce Planning Strategy. As shown in Table 11 below, this vacancy allowance of 8% results in a reduction of compensation for the 2026 Test Year of nearly $9M. In addition, although the position growth

[10] Hydro Ottawa has completed OEB Appendix 2-K - Employee Costs, which is included in this Application; Note that the 2024 vacancy rate is elevated due to partial-year positions.

referred to above is 177 positions out to 2030 or 131 out to 2026, on an FTE basis after the vacancy allowance, this represents an equivalent of 100 FTE growth between the OEB approved level of 616 in 2021 to 716 in 2026 as shown in Schedule 2-K.

Table 11 – Vacancy Assumption Cost Reductions[11] ($'000s)

	Bridge Years		Test Year
	2024	2025	2026
Compensation	$ 92,140	$ 98,729	$ 113,420
Vacancy Assumption	$ (7,310)	$ (7,923)	$ (8,987)
Net Compensation (Appendix 2K)	**$ 84,830**	**$ 90,806**	**$ 104,433**

Hydro Ottawa responsibly manages total compensation costs. In an increasingly competitive talent market, the company's retention and attraction programs are designed to secure the critical and key talent required to ensure ongoing success.

To ensure the compensation budget accurately reflects anticipated expenditures, a vacancy assumption was incorporated. This adjustment acknowledges the inherent reality of position turnover and recruitment timelines, recognizing that a full complement of staff is rarely present throughout the entire fiscal year. By factoring in a realistic vacancy rate, the budget avoids overstating personnel costs and provides a more precise representation of expected payroll expenses.

[11] Hydro Ottawa has completed OEB Appendix 2-K - Employee Costs, which is included in this Application.

WORKFORCE PLANNING STRATEGY

1. INTRODUCTION

This attachment outlines the challenges facing Hydro Ottawa in relation to its workforce and Hydro Ottawa's approach and strategy to addressing the challenges. The attachment is organized into the following sections:

1. Introduction
2. Internal & External Challenges
3. Approach to Identifying Workforce Needs
4. Execution of the Workforce Plan

Utilities across Canada continue to face challenges in not only replacing and renewing their aging workforce but also competing in a tight labour market for a range of critical skill sets. Hydro Ottawa has been diligent in establishing strategic workforce planning as part of its annual corporate planning and budgeting processes, and as an ongoing business consideration to ensure it has a sustainable and prepared workforce in light of a rapidly transforming environment.

In recent years, the company has experienced a wave of retirements, with many being long service employees, people leaders, and skilled workers in trades or technical positions. While Hydro Ottawa has successfully planned for this shift, it has had the effect of lowering the average employee age (employees under the age of 40 represent nearly 50% of the workforce in 2023, compared to 32% of the workforce in 2012) and length of service in what is a safety-sensitive and high risk industry.[1] This has been coupled with significantly higher resignation rates in the years during and following the pandemic.

[1] Further details on the safety-sensitive nature of Hydro Ottawa's work can be found in Attachment 4-1-3(E) - Health, Safety and Environment Compliance, Sustainability and Business Continuity Management.

Over the course of two successive five-year rate plans, Hydro Ottawa has sought to keep its permanent positions relatively static. This has been achieved through various means, including rigorous workforce planning, boosting productivity and efficiency (especially through technology and automation),[2] redistributing vacancies from support functions to positions in the skilled trades, increasing the use of temporary positions, and leveraging contracted services. This context is essential to understanding the prospective outlook for Hydro Ottawa for the remainder of its current five-year rate plan and looking ahead to the 2026-2030 term. In short, there is a critical need for an increase in positions and new skill sets. Hydro Ottawa's historically lean approach to headcount is no longer sustainable, and not increasing investment in its workforce would result in risks to its ability to deliver necessary services to customers, creating unsustainable workloads for staff and the potential for health and safety concerns. These issues contributed to a near-strike in 2021 and an 84-day labour strike in 2023, where one of the key concerns was workload and its impact on safety.

The historic levels of capital investment required in the years ahead, along with the modernization of the electrical grid and the broader energy transition, results in a need to increase the workforce[3]. Workforce levels and skill sets need to align with the realities of an increasingly electrified, decarbonized and digitized future, in which customer expectations for reliable service and minimal outages will be magnified. As such, Hydro Ottawa has developed a staffing plan that includes adding 177 new positions between 2024 and 2030. This represents an approximate 29% increase in Hydro Ottawa's headcount from the 2021 OEB approved headcount. Attachment 4-1-3(C) - Workforce Growth provides a detailed breakdown and rationale for the proposed 177 new positions by program.

In addition to increased staffing levels, there is an ongoing need for upskilling of current employees and seeking new skill sets in order to adapt to an evolving business and

[2] An overview of Hydro Ottawa's efforts to boost productivity and efficiency can be found in Schedule 1-3-4 - Facilitating Innovation and Continuous Improvement.
[3] Further details on increasing capital investment requirements can be found in Schedule 2-5-5 - Capital Expenditure Plan.

technological landscape and ensure that work is performed safely and efficiently. Over the coming years, advanced technological and engineering capabilities will be required in order to more effectively and efficiently provide reliable service to customers.

As the electricity distributor to the nation's capital of 1 million people, and 364,000 residential and commercial customers, Hydro Ottawa needs to be able to respond quickly and effectively to power disruptions at all times, regardless of cause. Power outages can have far reaching impacts for the city of Ottawa which hosts numerous federal, provincial and municipal government offices and facilities, military establishments, foreign embassies, large educational institutions and museums, major hospitals, research facilities and long term care homes, an international airport, hotels and conference centres, an expanding light rail transit system and one of the country's largest technology hubs. Add to this the province's/ nation's move toward increased electrification, more people working from home, increasing physical and cyber security threats and changing weather patterns/extreme weather events.

These pressures are further compounded by an intensely competitive labour market, characterized by low unemployment, high number of vacancies, and challenges in recruiting and retaining employees in critical occupations. As described by Electricity Human Resources Canada's Labour Market Insights Report, nearly half of the sector's core occupations are projected to face labour shortages and the sector's ability to to attract talent from other sectors is declining.[4]

2. INTERNAL & EXTERNAL CHALLENGES

2.1. INTERNAL FACTORS IMPACTING THE WORKFORCE

2.1.1. Historical Headcount Stabilization

Over the course of two successive five-year rate plans, Hydro Ottawa has sought to keep its permanent positions relatively static. This has been achieved through various means, including

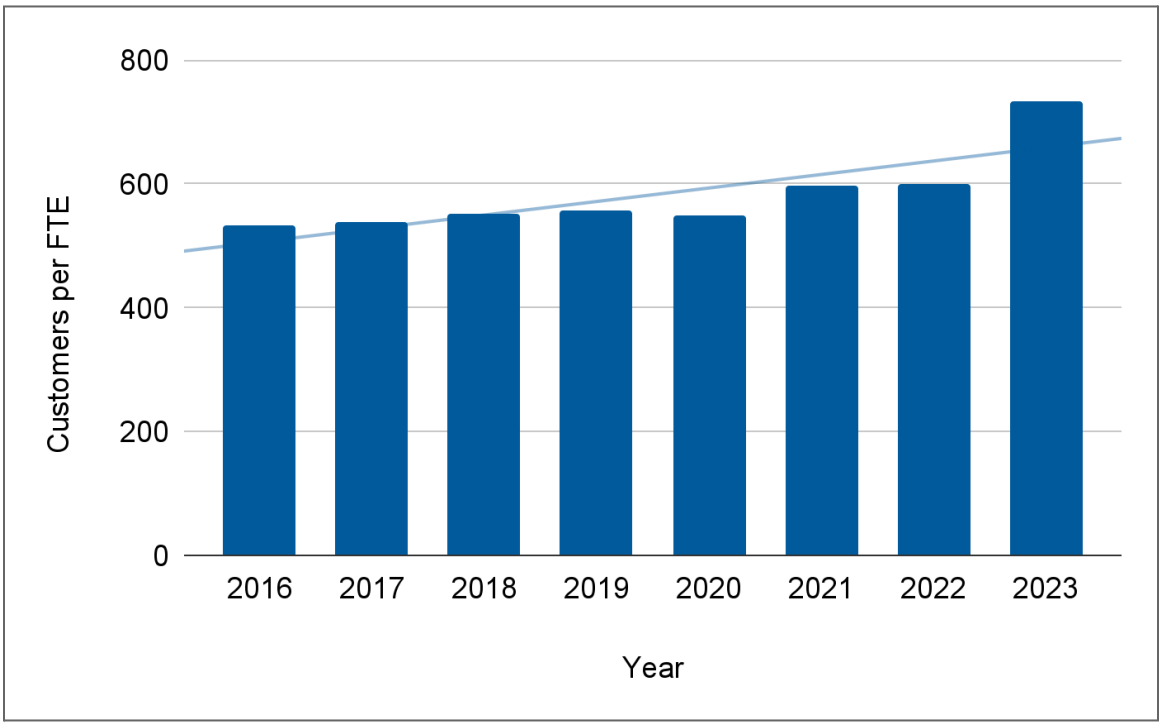
[4] Electricity Human Resources Canada, *Electricity in Demand: Labour Market Insights, 2023-2028*, Page 13.

boosting productivity through technology and automation,[5] redistributing vacancies from support functions to positions in the skilled trades, increasing the use of temporary positions, and leveraging contracted services more broadly.

As depicted in Figure 1 below, the number of customers that Hydro Ottawa is serving per full-time equivalent (FTE[6]) is continually increasing annually, requiring Hydro Ottawa to serve more and more customers without a corresponding increase in headcount. A similar trend appears when looking at the number of Circuit Kilometers per FTE. The length of Primary Lines in Hydro Ottawa's distribution network has grown by 13% between 2015 and 2023, again, without a corresponding increase in headcount.

[5] Productivity improvements are discussed in Schedule 1-3-4 - Facilitating Innovation and Continuous Improvement.
[6] The calculation and definition of FTEs is discussed in attachment 4-1-3(A) - Employee Compensation Strategy.

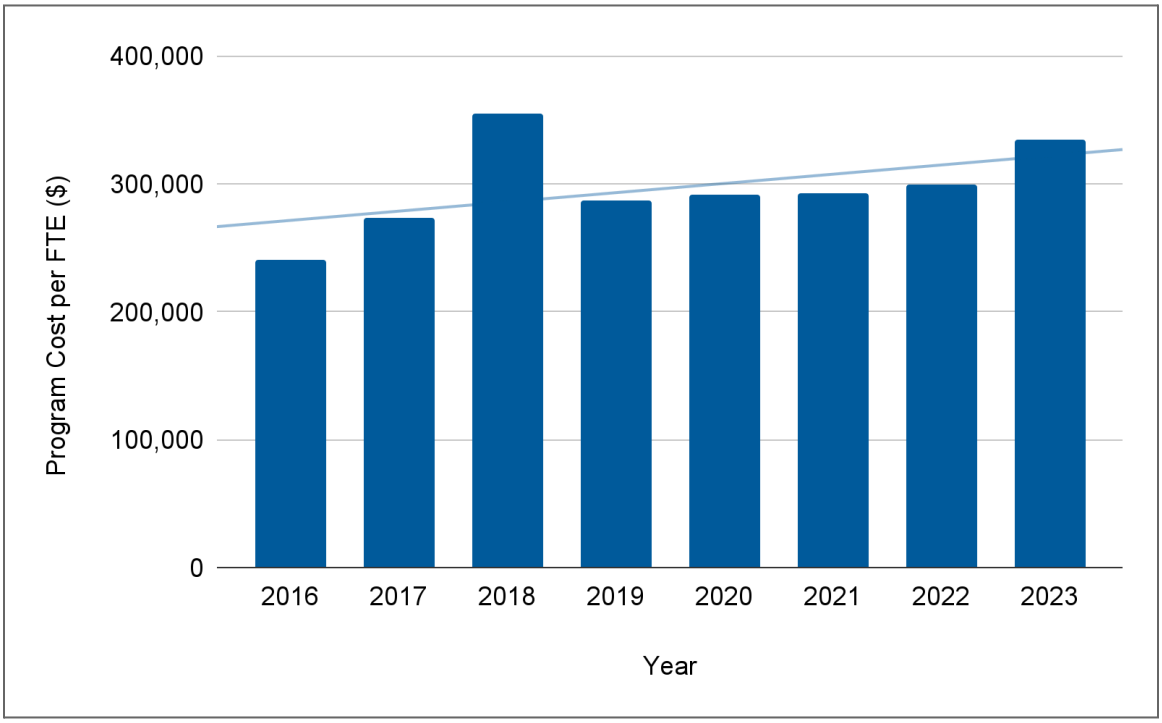
Figure 1 - Number of Customers Per FTE[7]



The same trend appears when comparing FTEs to dollars spent. Figure 2 displays Hydro Ottawa's historical growing overall program costs on a per FTE basis. The spend per FTE continues to trend upwards, indicative that Hydro Ottawa is delivering more per employee. Another telling metric is the number of FTEs per $1million capital expenditures, as shown in Figure 3 below. Hydro Ottawa is completing capital work with fewer employees for every $1million dollars spent. In other words, the amount of capital work being done per employee is increasing.

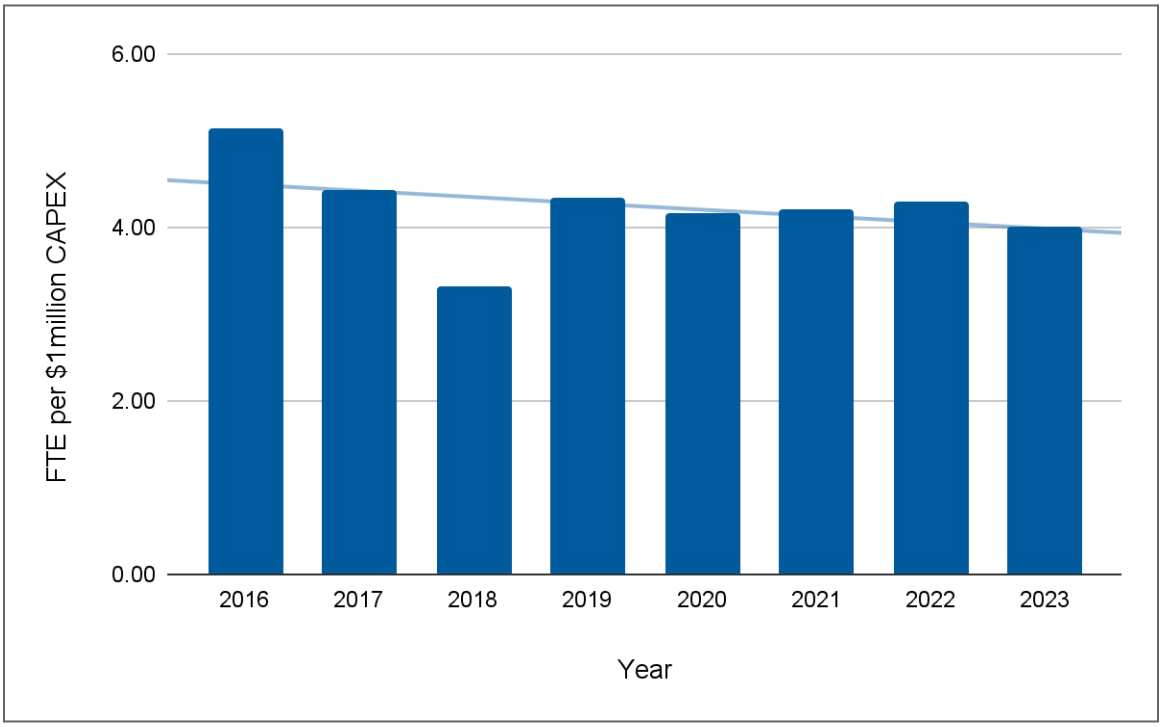
[7] The spike of number of customers per FTE in 2023 is largely driven by the 2023 labour strike, however even without this spike, the trend is that Hydro Ottawa has been serving a larger number of customers on a per employee basis.

Figure 2 - Program Costs Per FTE, 2016-2023[8]



[8] Program Costs in Figure 2 and Figure 4 are the sum of the Gross Capex Program, Maintenance Program, and Work for Others Program.

Figure 3 - FTE per $1million Capex, 2016-2023



While these trends are positive in terms of what Hydro Ottawa is delivering to its customers, it is reaching a point that is not sustainable and is straining Hydro Ottawa's workforce.

Given these changes already occurring, Hydro Ottawa could not delay increasing positions until the next rate period due to the significant increase in the capital plan, competing priorities, and projects requiring a greater number of resources.

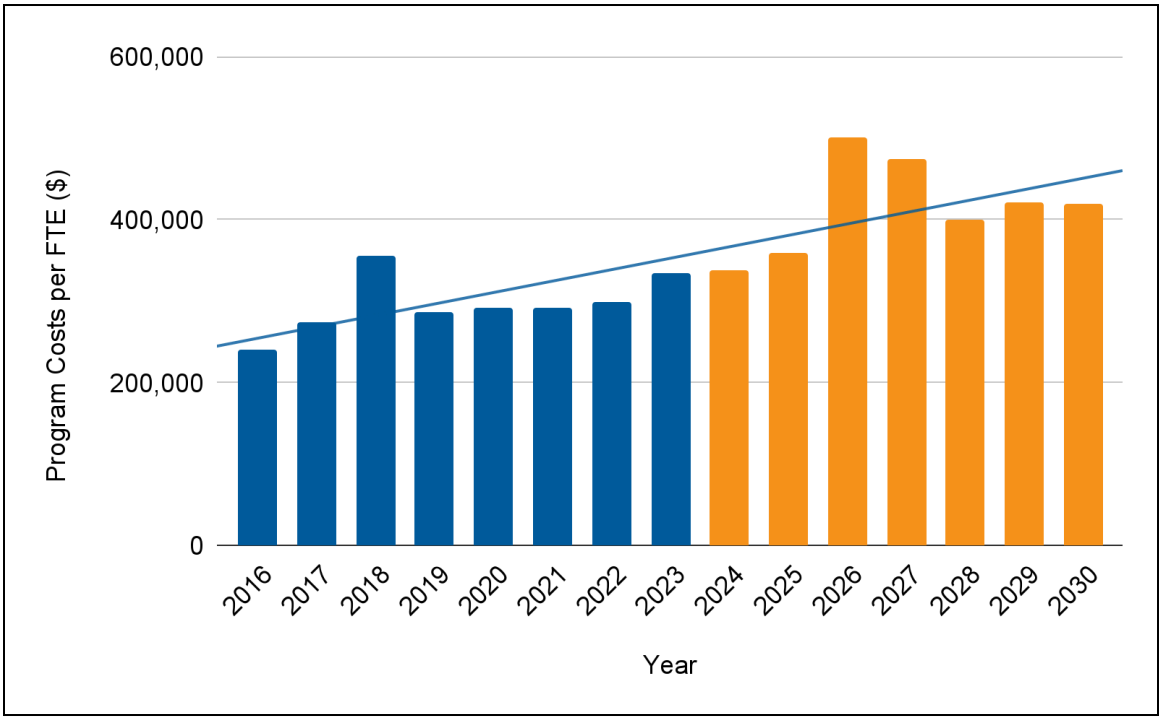
2.1.2. The Need To Grow

After two successive rate periods of managing increasing workforce needs through the restrictions of a headcount stabilization mandate, it is no longer possible nor prudent for Hydro Ottawa to sustain operations without additional resources. One of the key items in dispute during Hydro Ottawa's 84-day strike by the IBEW in 2023 was workload and its effect on safety.

As the utility moves forward with initiatives to expand and modernize the grid in response to the evolving external environment and the ongoing transformation of the energy system[9], it similarly needs to invest in an expanded workforce to increase its capacity to deliver on its programs safely and efficiently, and strategically add new skill sets in emerging areas such as grid modernization and cyber security.

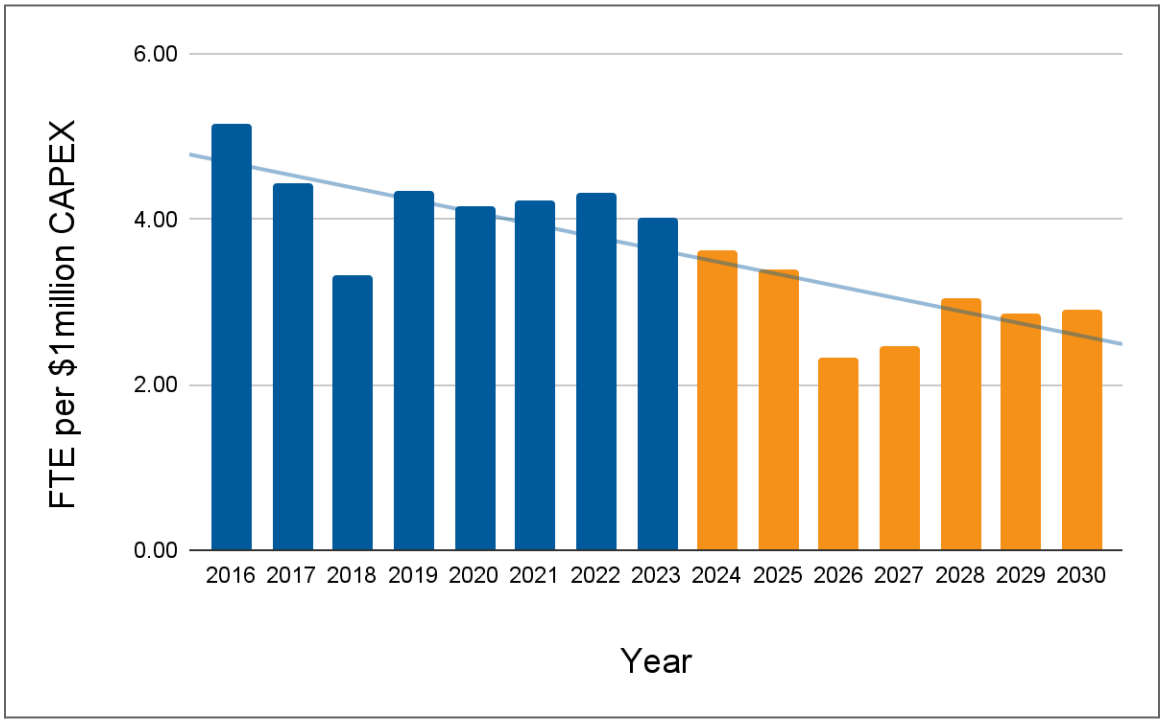
As one looks to the future, the trend of doing more work per employee only increases. Figure 4 and Figure 5 below show the same data as the figures above, but projected out to 2030. The charts include the new positions created in Hydro Ottawa's staffing plan, which is described in greater detail below.

Figure 4 - Program Costs Per FTE, 2016-2030[10]



[9] External challenges and trends are described in Section 2.2.
[10] Program Costs not normalized for inflation.

Figure 5 - FTE per $1million Capex, 2016-2030



Even with forecasted headcount growth, Hydro Ottawa will continue to deliver more on a per FTE basis. If Hydro Ottawa's headcount were not to increase, delivering on its programs out to 2030 would be unattainable, as discussed in more detail in Schedule 4-1-2 - Operations, Maintenance and Administration Program Costs .

2.1.3. Attrition And Movement

Over the past four years, Hydro Ottawa has had attrition rates and internal movement rates to a degree not previously experienced. Hydro Ottawa's attrition rate for resignations and retirements was 9.21% in 2023 and this was largely driven by resignations.

Table 1 below demonstrates the high rates of attrition (retirements and resignations) experienced by Hydro Ottawa.

Table 1 - Annual Attrition Rate 2019-2024

Year	2019	2020	2021	2022	2023	2024
Attrition Rate	6.86%	7.19%	5.73%	7.39%	9.21%	5.61%

Increasingly Hydro Ottawa is seeing employees depart the company early or midway through their careers. This trend has presented itself in areas that historically saw few resignations such as the electrical skilled trades, for both journeypersons and apprentices. The number of annual retirements increased during the pandemic but has since declined.

Internal movement, both laterally and through promotion, has also been trending upwards since the pandemic with the high rate of attrition having created more opportunities to expand and grow careers.

Table 2 - Internal Movements: 2019-2024

Year	2019	2020	2021	2022	2023	2024
Number of Internal Movements	15	17	26	37	47	62

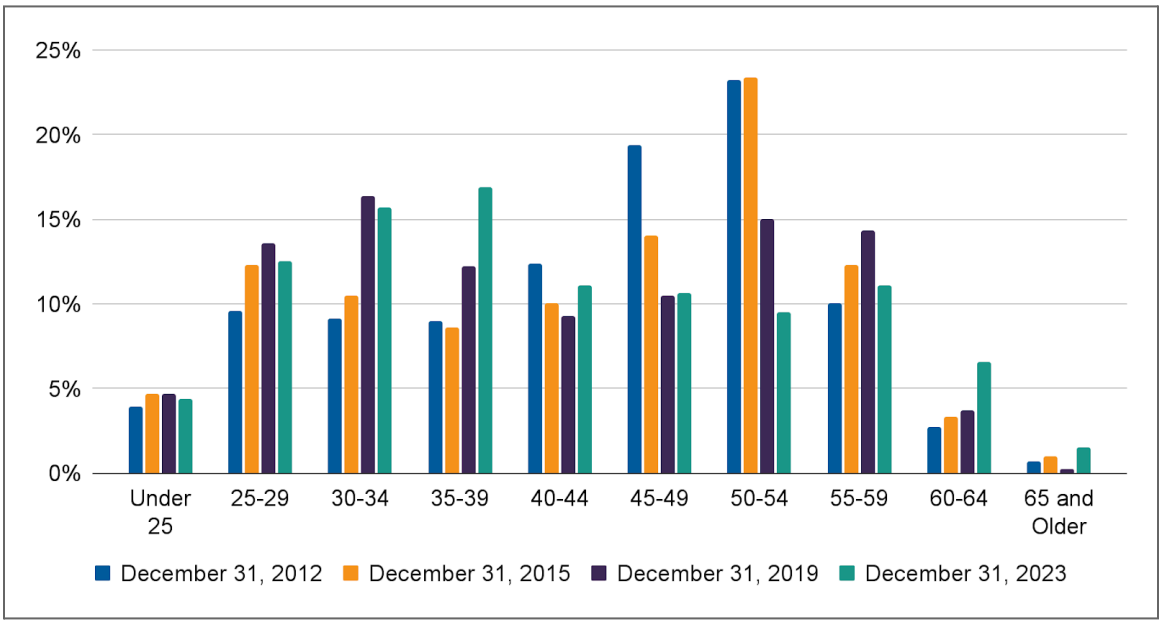
These trends are indicative of a more fluid and dynamic workforce and the labour market more broadly. And, in conjunction with the competitive landscape for talent discussed in Section 2.2.4, this has led to ongoing vacancies and a need for increased levels of recruitment, as showcased in Section 4.1.1 below.

2.1.4. Workforce Demographics

Hydro Ottawa has experienced a shift in its workforce demographics over the previous rate period, resulting in a younger workforce with fewer years of service.

The age distribution of Hydro Ottawa's workforce, as depicted in Figure 6, is slightly younger than it has been in recent years, attributable to continuing hiring of trades apprentices and engineering interns and other professional graduates at the same time as experiencing higher rates of retirement of long service employees. Employees under the age of 40 represent nearly 50% of the workforce in 2023, compared to 32% of the workforce in 2012.

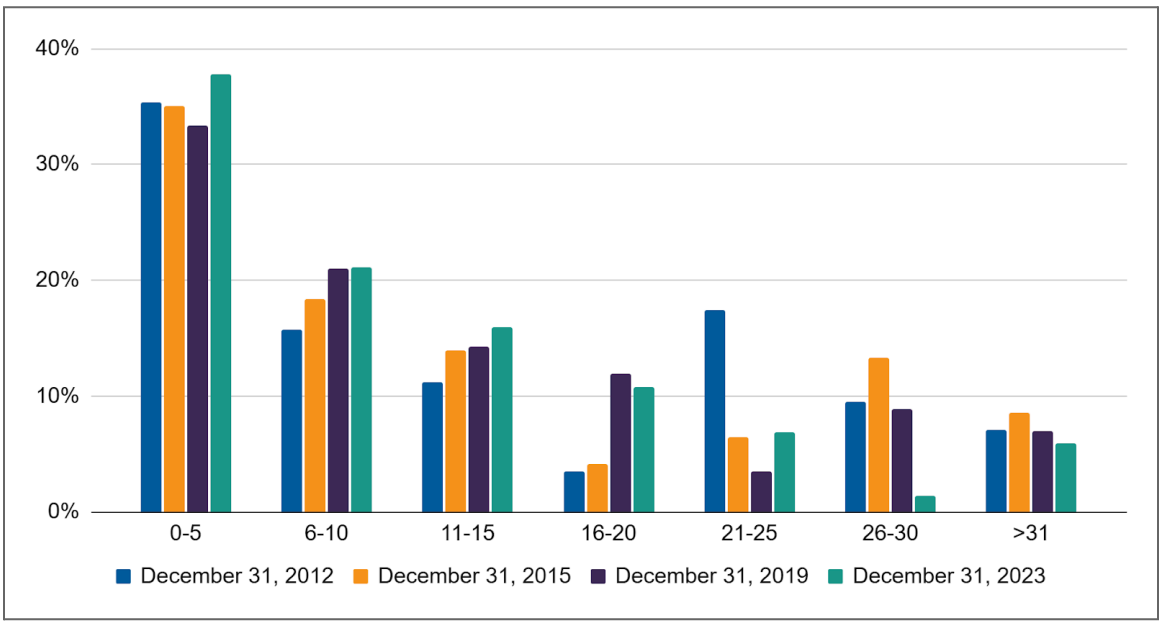
Figure 6 - Workforce Age Distribution



The average years of service has decreased by 19% from 13.4 years in 2015 to 10.8 years in 2023. As a result of this fundamental shift in demographics, 59% of Hydro Ottawa's workforce has 10 years of service or less. Having a younger and less experienced workforce exposes Hydro Ottawa to potential risks as historical knowledge transfer to new employees is strained

and there are relatively fewer experienced employees to oversee their work, as was the case in 2012 and 2015.

Figure 7 - Workforce Years of Service Distribution

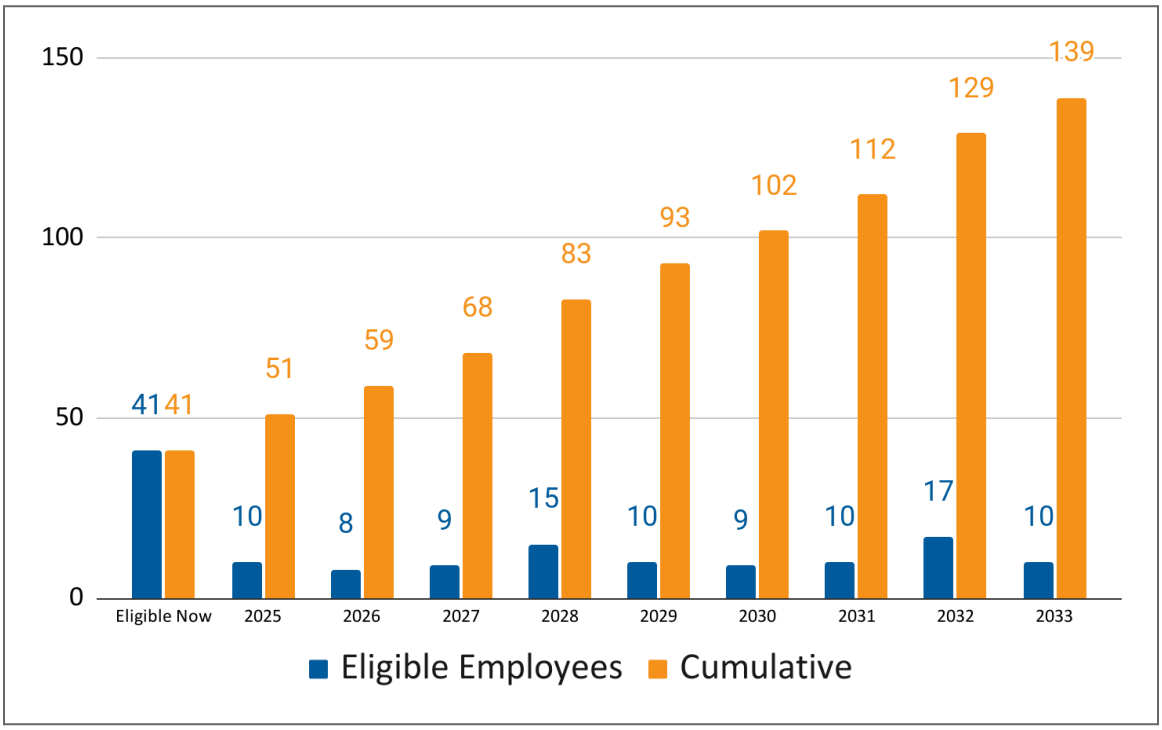


As depicted in Figure 8 below, the number of employees eligible to retire is projected to increase by 139 between 2024 and 2033. Notably, 41 employees, representing 28.8% of this total, will become eligible in 2024. Projected retirements over this period, while still high, are lower than what Hydro Ottawa has experienced over the previous ten years as the baby boomer retirement wave reaches its end. While the rate of retirement is predicted to be lower, Hydro Ottawa projects the potential loss of approximately 3,605 years of experience as a result of retirements.

With over one-third of the existing workforce having five years or less of service, it is critical that Hydro Ottawa proactively forecast talent demand and anticipate supply gaps early - particularly for positions that require a longer lead time to reach full competency, such as those filled through apprenticeship and internship programs. It also means an increased focus on hiring

mid-career professionals, people leaders, trades, and technical employees to help fill the knowledge and experience gap.

Figure 8 - Eligible Workforce Retirements Forecast to 2033[11]



2.2. EXTERNAL FACTORS IMPACTING THE WORKFORCE

The combination of planned distribution system investments related to reliability, climate resilience, energy transition and electrification, as well as the growth in customers, will have a significant impact on Hydro Ottawa's capital planning both now and into the future and this will drive the need for workforce growth in addition to new skills and knowledge. The combination of planned distribution system investments related to reliability, climate resilience, energy transition and electrification, as well as the growth in customers, will have a significant impact on Hydro

[11] Retirement forecasts are displayed out to 2033 as this is a 10 years view of retirement eligibility.

Ottawa's capital planning both now and into the future and this will drive the need for workforce growth in addition to new skills and knowledge.

2.2.1. Extreme Weather Events

The past several years have seen an increase in the frequency and intensity of major weather events impacting Hydro Ottawa's service territory.[12] These have included multiple tornadoes, ice storms, record levels of lightning storms, and the devastating 2022 Derecho. During the 2022 Derecho, Hydro Ottawa experienced the most damaging storm in its history, which resulted in over 1000 separate outages and 180,000 customers without power. Hydro Ottawa continues to deliver high service levels to customers and advance its capital plan despite the pressure caused by the increasing frequency of these major events.

Recovering from extreme weather events results in significant increases in employee overtime as storm damage is repaired and outages are restored. As these events become more prevalent and severe, the increased work volumes take a toll on the workforce and the resiliency with which employees bounce back. Historically, these large-scale events were infrequent, and so had far less of an impact on employee resilience. This has had the unfortunate impact of a change in career choices being made by some trades and technical employees including opting out of the electricity industry or not working beyond eligible retirement dates which had previously been the norm.

2.2.2. Electrification And The Energy Transition

In addition to the increasing frequency of major weather events, the impact of climate change on Hydro Ottawa is also evident through increasing electrification and the "energy transition". Major projects underway at the City of Ottawa to electrify public transit (whether Light Rail Transit or phase-out of the diesel bus fleet); connection and service requests from commercial and institutional customers seeking to fuel-switch to electricity for thermal energy purposes at their

[12] Climate and weather impacting Hydro Ottawa is discussed in Schedule 2-5-4 - Asset Management Process and Schedule 2-5-1 - Distribution System Plan Overview.

large campuses; or the installation of electric vehicle chargers and heat pumps by a growing number of residential and commercial customers are just a few of the changes that are affecting Hydro Ottawa's distribution planning. Further, there is also the sustained rise in the popularity of Distributed Energy Resources (DERs) across the customer base as access to electricity generation and storage technology becomes more available.[13]

As further detailed in Section 3.1 below, to keep pace with fundamental changes in how customers are relying on electricity for their day-to-day energy needs, Hydro Ottawa will need to expand and upskill certain segments of its workforce to be ready and equipped to plan, manage and operate an increasingly complex distribution system.

2.2.3. Demand Growth

The City of Ottawa has experienced significant growth in recent years. According to Statistics Canada, Ottawa had the highest growth rate (8.9%) among large municipalities between the 2016 and 2021 national censuses - a period in which the City's population surpassed 1 million people, making it the fourth-largest city in Canada. A comparable level of growth for Ottawa is anticipated over the coming years. According to the City's Official Plan, its population is expected to increase by 15% from 2021 to 2031.

2.2.4. Competitive Landscape For Talent

Recruiting and retaining talent is an ongoing challenge for the industry and for Hydro Ottawa. Electricity Human Resources Canada's Labour Market Insights Report (LMI Report) found that "Finding skilled talent has been identified as the most pressing constraint for the sector over the next five years"[14]. Between 2023 and 2028, the LMI Report also predicts labour supply gaps in the following occupational groups: *engineers, technicians & technologists* (1,600 gap), *trades* (1,400 gap), and *information and communications technology* (3,800 gap).[15] Hydro Ottawa is

[13] More information on the electrification energy transition can be found in Schedule 2-5-1 - Distribution System Plan Overview and Schedule 2-5-4 - Asset Management Process.
[14] Electricity Human Resources Canada, *Electricity in Demand: Labour Market Insights, 2023-2028*, Page 88, accessed at https://ehrc.ca/wp-content/uploads/2024/05/Electricity-in-Demand-Labour-Market-Insights.pdf.
[15] Ibid, page 97.

regularly recruiting for workers within these groups and that is expected to increase in the future.

The LMI Report also shows a decline in new apprenticeship registrations since the COVID-19 pandemic[16]. Hydro Ottawa has managed to maintain a pipeline of new apprentices for some trades roles through strategic partnerships with educational institutions, and in particular through its partnership with Algonquin College for the past 13 years, delivering the 2-year Powerline Technician Diploma Program (Program). Through in-class and hands-on learning, this Program helps students develop the skills to design, plan, construct, and maintain electrical distribution lines. Algonquin College provides classroom instruction, while Hydro Ottawa is responsible for the design, development, and onsite delivery and assessment of the practical training of the curriculum. As of 2023, Hydro Ottawa had hired 61 graduates of the Program into trades and technical roles.

The Program provides a critically important pipeline of new apprentices and has enabled Hydro Ottawa to consistently hire apprentices into Power Line Technician and Power Cable Technician roles. However, there remain ongoing challenges recruiting apprentices for other trades roles such as System Operator and Station Electrician.

An additional challenge for Hydro Ottawa is the limited talent pool to draw from. As noted by Electricity Human Resources Canada, “the most common source of competition for labour (unchanged from previous Employer Survey) is other utilities.”[17] As the labour market has tightened, the “luring” of talent from smaller utilities to larger ones has only increased. In recent years, based on anecdotal feedback in exit interviews, Hydro Ottawa has experienced greater movement of employees to larger utilities for increased compensation, different career opportunities, or for similar roles with reduced workload.

[16] Ibid, page 80.
[17] Ibid, page 20.

2.2.5. Hybrid Work

The past five years brought about a dramatic change in the external environment in which Hydro Ottawa operates. The COVID-19 pandemic presented many challenges as the continually evolving situation required ongoing adjustments to safety protocols, work arrangements, and the prioritization of projects/initiatives. Hydro Ottawa successfully adapted to the pandemic through the rapid adoption of new safety protocols which enabled the continuation of work to the standard of service expected by its customers while ensuring the safety of its employees.

At the onset of the pandemic, work arrangements for office-based employees pivoted to work from home and then variations of hybrid work arrangements. To enable continued productivity, connectedness, and employee engagement, Hydro Ottawa accelerated the deployment of digital collaboration tools and systems. These tools continued to be invaluable beyond the pandemic as Hydro Ottawa embraced hybrid work arrangements, first through a one year pilot and then as a structured program, as a means of providing flexibility to employees and to remain competitive in the tightening labour market. The pandemic changed the way work gets done both at Hydro Ottawa and globally with increased adoption of technology and employees making different decisions on where they work and where they live, resulting in greater employee movement and increased attrition. At the same time, the nature of Hydro Ottawa's work requires that its employees are located in or near Ottawa, which can limit the size of the talent pool for some skill sets.

3. IDENTIFYING WORKFORCE NEEDS

Hydro Ottawa employs a variety of strategies simultaneously to ensure that its workforce is appropriately resourced and skilled to fulfill the needs of the company and community. These strategies include:

1. Increasing positions and skill sets
2. Leveraging contracted services and temporary employment arrangements

3. Developing talent internally
4. Diversifying the talent pool

3.1. INCREASING POSITIONS AND SKILL SETS

3.1.1. Methodology for Determining New Positions

To determine what positions were required for now and for the future, two approaches were used to plan and prioritize Hydro Ottawa's resourcing needs: Workforce Planning for the Trades, and through workforce planning discussions with leadership across the company.

Hydro Ottawa continually assesses and plans the required positions for skilled trades and other technical positions through the Workforce Planning process. In order to fulfill the expanded capital plan and meet growing demand in the city, position growth is required in the trades now and through the next rate period.

3.1.2. Workforce Planning for Trades Positions

Hydro Ottawa's workforce planning was driven by significant growth in capital projects, operations, maintenance, and services to third parties. The expansion of the trades workforce is crucial to ensure the continued delivery of reliable and efficient electricity services while maintaining operational excellence.

Hydro Ottawa takes a deliberate approach to determine hiring for trades positions. Hydro Ottawa's approach to workforce planning is to compare operational demand hours with internal labour supply. This provides operational leaders with the intelligence required to create hiring plans. Operational demand is determined by forecasting the labour hours required for known and proposed programs/projects, and leveraging historical data to predict labour needs for customer demand driven work.

In order to determine labour supply, Hydro Ottawa considers the following: available number of journeypersons or skilled technical employees in a given profession or trade, retirement

eligibility, attrition rates, the apprentice pipeline feeding each trade, and supplementary resources that contribute to the work undertaken, all adjusted for productive time. Workforce planning enables Hydro Ottawa to identify its projected gaps in internal labour, and to determine how best to fill these gaps using contracted services, overtime, and/or hiring of new employees. Several factors are considered, such as: availability of contracted services, overtime utilization, labour market availability, appropriate ratio of journeypersons to apprentices, legislated and contractual allowances for overtime, and the influence of environmental factors or business considerations that may impact assumptions used to inform hiring decisions.

3.1.3. Workforce Planning for Non-Trade Positions

For all other positions, discussions were held with the senior leadership teams to explore their current workforce and skill requirements and their expected needs into the future. Discussions focused on new, growing, and evolving areas of the business and the skill sets and resourcing levels required, as well as how the use of new and emerging technologies would impact these needs. Where non-trade positions have their time charged directly to work orders, an approach similar to Workforce planning for trades was used to ensure that new positions are aligned to and commensurate with forecasted workloads and the associated labour demand requirements.

All position needs were consolidated and reviewed to ensure alignment with current and future strategic focus, operational plans, and budgetary considerations. Hydro Ottawa’s executive management team went through an exercise of challenging the staffing needs presented. Through a consolidated review of the workforce needs, Hydro Ottawa's management team further prioritized and rationalized the workforce requirements and reduced the overall ask by 11.5%.

Following the consolidation of all initial new positions and the subsequent rationalization process, a staffing plan that includes 177 new positions has been included between 2024 and 2030. This represents an approximate 29% increase in Hydro Ottawa’s headcount from the 2021 OEB Approved headcount.

A detailed explanation of the new positions in Hydro Ottawa's staffing plan is found in Attachment 4-1-3(C) - Workforce Growth, where the new positions are explained in the context of the OM&A categories as set out in the OEB filing requirements for Appendix 2-JC.

3.1.4. New Positions by Workforce Segment

For the purpose of its Workforce Strategy, Hydro Ottawa has segmented its workforce into five segments: Designated & Technical Professionals, Certified & Skilled Trades, Operational Support & Administration, Front Line Leadership, and Senior Management. Segmenting the workforce in this manner is useful from a human resources strategy perspective as recruitment and talent management approaches for each segment may vary, and categorizing Hydro Ottawa's workforce in this manner provides a high-level snapshot of the makeup of the workforce. However, these segments should not be confused with the major OM&A categories as set out in the OEB filing requirements for Appendix 2-JA or Appendix 2-JC.

Hydro Ottawa added 50 new positions in 2024, primarily in Certified & Skilled Trades and Designated & Technical Professionals as shown in Figure 9 below.

Figure 9 - New Positions by Workforce Segment, 2024

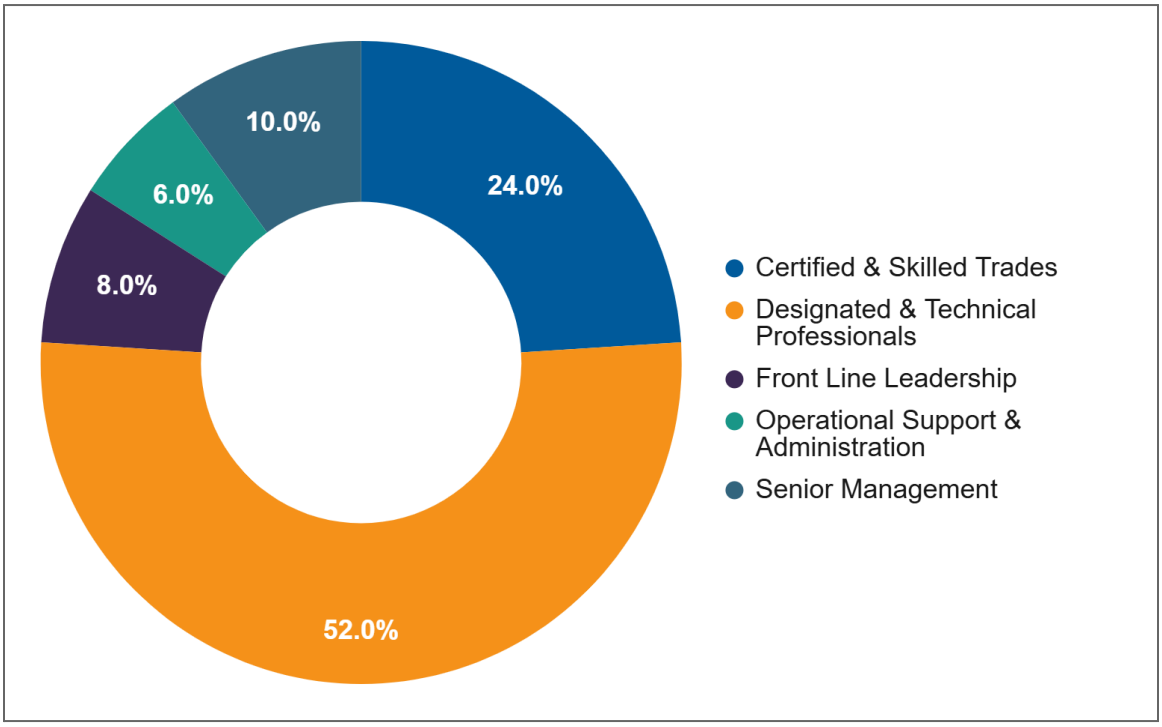


Figure 10 below displays the breakdown of all new positions from 2024-2030 into the workforce segments. The majority of new positions are in Certified & Skilled Trades and Designated & Technical Professionals.

Figure 10 - New Positions by Workforce Segment, 2024-2030

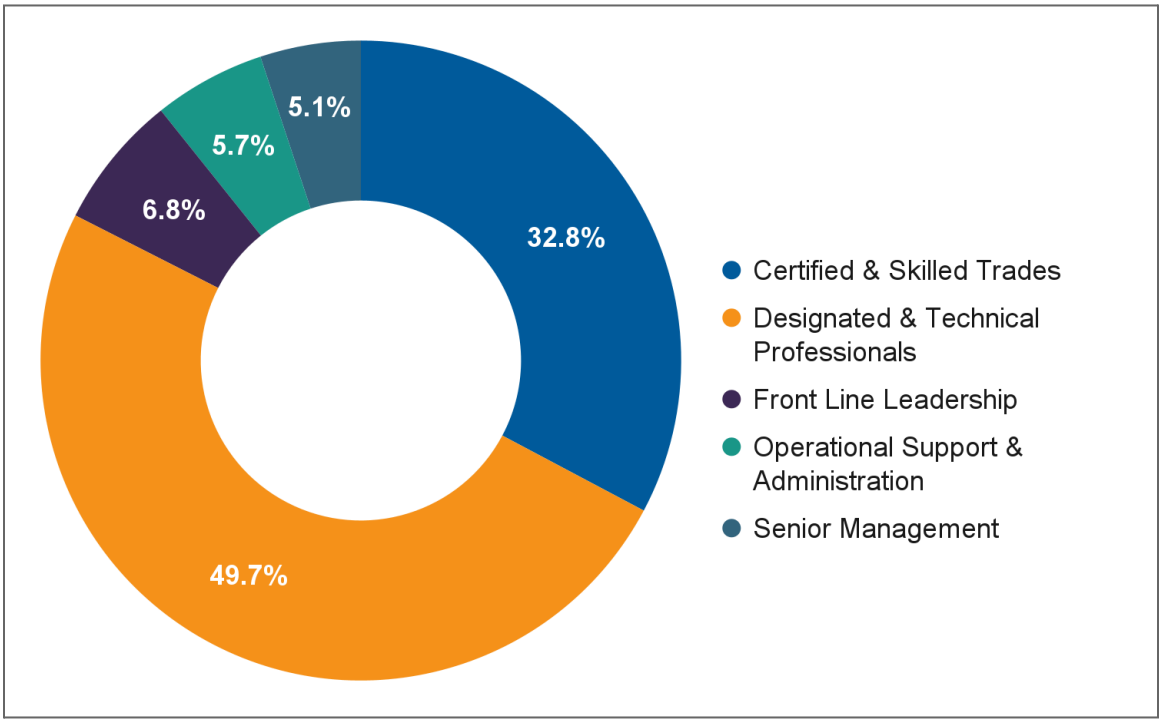
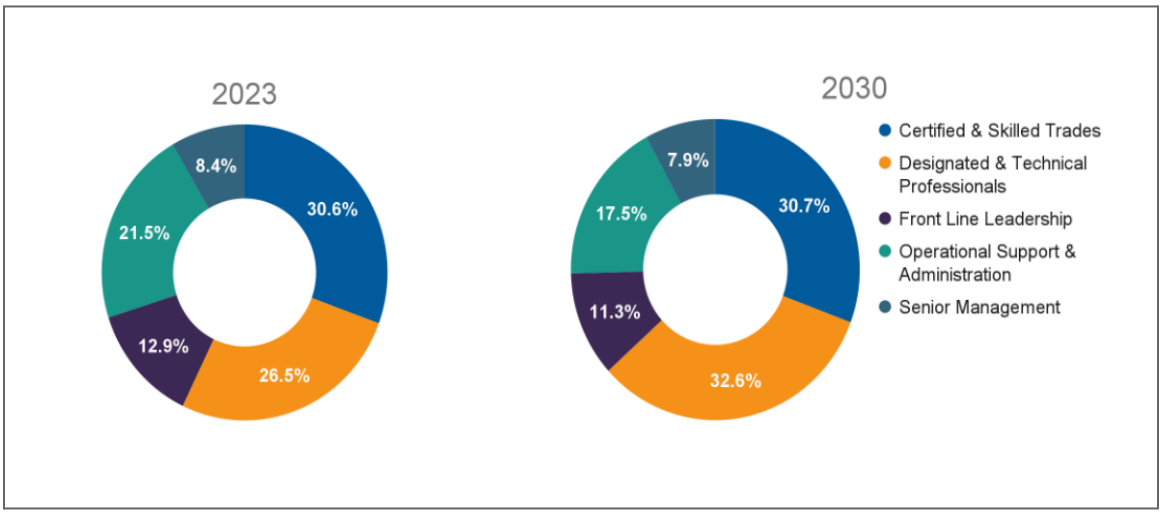


Figure 11 displays the current and future composition of the workforce by segment. While the workforce plan includes new positions in all five workforce segments, greater growth in some segments will result in proportional decreases in others. Designated & Technical Professionals will see the largest growth over this period. Conversely, there will be a proportional reduction in Operational Support & Administration, Front Line Leadership, and Senior Leadership. The proportion of employees in Certified & Skill Trades remains relatively unchanged.

As depicted above, in Figure 10, the majority of new positions are in the segments of Designated & Technical Professionals and Certified & Skilled Trades. Hydro Ottawa is committed to increasing headcount in the areas of the company that execute our programs to increase our capacity and to maintain efficiency and safety.

Figure 11 - Workforce by Segment, 2023 vs 2030



A brief description of each segment is provided below, including examples of positions within each segment. A more detailed explanation of the new positions in Hydro Ottawa's staffing plan is found in Attachment 4-1-3(C) - Workforce Growth, where the new positions are explained in the context of the OM&A categories as set out in the OEB filing requirements for Appendix 2-JC.

3.1.4.1. Designated & Technical Professionals

Designated & Technical Professionals perform a wide range of functions across Hydro Ottawa. They bring knowledge and experience to their roles that ensures that Hydro Ottawa is meeting best practices and regulatory compliance. By 2030, this will become the largest segment, growing from 26.5% of the workforce in 2023 to 32.6% of the workforce by 2030. This growth is driven by a number of factors including operating in a more complex environment driven by technology and modernization, and supporting an increased volume of capital and operating programs. Examples of roles included in Designated & Technical Professionals are Engineers, Engineering Technologists, Accountants, Business Continuity and Sustainability Specialists as well as Human Resources Professionals.

3.1.4.2. Certified & Skilled Trades

Certified & Skilled Trades are responsible for the construction, maintenance, and day-to-day oversight of the distribution system. Certified & Skilled Trades comprise just over 30% of Hydro Ottawa's workforce and this will remain proportionally consistent out to 2030. Roles included in Certified & Skilled Trades are Power Line Technicians, Power Cable Technicians, Station Electricians, System Operators, and Meter Technicians.

3.1.4.3. Operational Support & Administration

Operational Support & Administration employees provide support to a variety of functions across Hydro Ottawa. In 2023, Operational Support & Administration comprised 21.5% of Hydro Ottawa's workforce. This segment will decrease to 17.5% by 2030. The proportional decrease of workers in this segment can be attributed to streamlining work processes and the adoption of new technologies such as artificial intelligence. Examples of roles included in Operational Support & Administration are Customer Experience Agents, Billing Service Associates, and Administrative Assistants.

3.1.4.4. Front Line Leadership

Front Line Leaders manage Hydro Ottawa employees by ensuring work execution and carrying out management functions including safe work practices, development, performance management, recruitment, etc.

This segment represents 12.9% of the workforce in 2023 and is expected to proportionately decrease to 11.3% by 2030. While this segment is proportionately decreasing, as Hydro Ottawa adds new employees across the company, there is a need to add new supervisors to maintain proper oversight, strategic alignment, and safety. Front Line Leadership roles include supervisory positions across the company.

3.1.4.5. Senior Management

Senior Management develops and ensures ongoing alignment with Hydro Ottawa's strategic and operational plans. Senior Management represents 8.4% of the workforce in 2023 and is expected to proportionately decrease to 7.9% of the workforce in 2030. Senior Management roles include Managers, Directors, and Executives across the company.

3.1.5. Skills for the Workforce of the Future

Growth in the size and complexity of Hydro Ottawa's capital plan compared to historical levels translates into the need for a greater number of operational and technical staff in order to:

- Execute the growing System Renewal and System Service programs;
- Deploy field devices and technology platforms to support Electrification and DERs;
- Deploy technology and platforms to support Grid Modernization;
- Deploy Advanced Metering Technology devices and related systems; and
- Maintain service levels in a growing city.

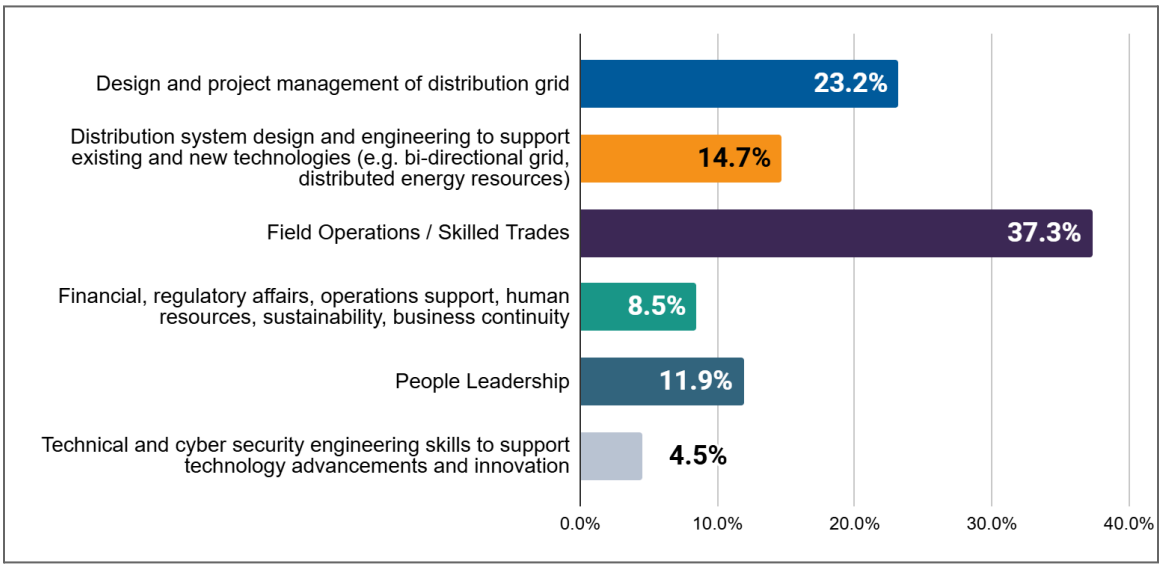
As work in all of these areas expands, the number of projects that Hydro Ottawa will execute in a given year will grow accordingly[18]. Hydro Ottawa not only requires more resources to complete the projected workload, but will also require new and more specialized skill sets. Increasing work volume requires an increasingly robust and formal approach to project management and project execution. In order to maintain efficiency and consistency across projects, Hydro Ottawa will require greater capacity in a number of existing skill sets that are emerging as increasingly critical, as well as introducing some new specialized roles such as Grid Modernization Engineers, Smart Grid Engineers and Telecommunications Engineers to support grid modernization efforts. In effect, Hydro Ottawa requires more specialists versus generalists when it comes to the design, operation, and management of the distribution grid.

[18] See Schedule 2-5-1 - Distribution System Plan Overview.

The volume of new technology being deployed creates requirements for new platforms and system integrations to be developed at an ever-increasing pace. To that end, a variety of new engineering, information technology, and cyber security roles are required in the design of new systems to ensure operational effectiveness and security. More detail on the programs and technologies that require new skill sets and capacity to support is provided in Attachment 4-1-3(C) - Workforce Growth.

Figure 12 provides a summary of the skill sets that Hydro Ottawa is adding to its workforce through the new positions in its 2024-2030 staffing plan.

Figure 12 - Skill Sets of the Future Workforce



To realize these efforts, Hydro Ottawa's staffing plan is focused on adding capacity to the following skill sets to its workforce:

3.1.5.1. Field Operations / Skilled Trades

The growing volume of field work necessitates growth related to trade skills.[19] The skills required include construction, installation, and maintenance of electrical assets in the field. With the increased emphasis on grid modernization, the growing demands for electricity and new substation and emerging distributed energy resources, the need for technology-enabled devices in the field continues to grow and with it the need for an operational and skilled trades workforce with the technical skills to maintain and support these assets. Growth in this skill category is primarily driven by increasing the capacity in existing skill sets.

3.1.5.2. Design and Project Management of Distribution Grid

Hydro Ottawa requires specialized skills to plan, estimate, design, and schedule work on the distribution grid. Expanding these skill sets will ensure continued success in delivering on Hydro Ottawa's projects by ensuring quality and consistency in project delivery. Growth in these skills is about increasing capacity as well as introducing more specialized skills related to project management and execution, and quality assurance.

3.1.5.3. Distribution System Engineering to Support Existing and New Technologies

As new technologies come online related to grid modernization, electrification, distributed energy resources, and more, Hydro Ottawa requires engineers with more varied backgrounds such as project management, grid telecommunications, smart grid, cyber, etc. to successfully plan and manage large-scale changes impacting the work that Hydro Ottawa does. Some of these skill sets currently exist within Hydro Ottawa and some do not. Hydro Ottawa is increasing its capacity in existing areas, while also adding system engineering and telecommunications engineering skills.

[19] Evidence supporting the increasing volumes of work can be found in Hydro Ottawa's Distribution System Plan in Schedule 2-5-1 - Distribution System Plan Overview. Further evidence is also summarized in Attachment 4-1-3(C) - Workforce Growth.

3.1.5.4. People Leadership

As the workforce increases, the number of people leaders will have to increase accordingly to maintain oversight, safety, and direction at a level that is manageable. Additionally, as the range of skill sets increases and capacity in emerging areas of the company grows, Hydro Ottawa requires People Leaders with capabilities and a focus in those emerging areas.

3.1.5.5. Financial, Regulatory, Operations Support, Human Resources, Sustainability, Business Continuity

As the industry becomes more complex, Hydro Ottawa requires increasingly specialized professional skill sets to navigate the future successfully. Examples include environmental management skills to deliver on green initiatives and evolving regulations, and business continuity skills to ensure continual service and rapid response during major weather events. While these areas are not new to Hydro Ottawa, there is a need for the company to increase its capabilities.

3.1.5.6. Technical and Cyber Security Engineering Skills to Support Technology Advancements and Innovation

The proliferation of digital technologies gives rise to the increasing need for technical skills to develop, deploy, and maintain an increasing variety of systems. Particularly as more digitally connected field devices are deployed, the need for cyber security skills are paramount to ensure security of Hydro Ottawa's assets and information. Hydro Ottawa is adding engineering skills that currently do not exist in cyber security, data management, and in cloud technology.

4. EXECUTION OF THE WORKFORCE PLAN

4.1. Acquiring Talent

4.1.1. External Recruitment

Increased attrition rates and sustaining the trades have in turn led to increased recruitment. Table 3 below displays the number of Hydro Ottawa's job postings from 2019-2024. The volume

of job postings creates pressure internally as hiring managers and human resources professionals spend more time recruiting and onboarding new employees.

Table 3 - Annual External Job Postings: 2019-2024

Year	2019	2020	2021	2022	2023[20]	2024
Number of Job Postings	143	45	131	247	134	187

To address increasing recruitment volumes, as well as the challenges identified in Section 2, Hydro Ottawa has taken the following actions to enhance its ability to acquire key talent and skill sets:

- Hydro Ottawa has continued to enhance its employer branding and takes a more personalized approach to connecting with candidates and potential employees though:
  - Social Media and in-person events such as career fairs
  - Educational partnerships
  - Using speaking opportunities and interviews to engage with candidates and tell its story in new ways
  - Prime Time: Hydro Ottawa's older worker engagement program has provided opportunities to hire back recent retirees to act as instructors and mentors for new apprentices, support key projects with technical expertise and knowledge transfer
  - Engaging with industry associations such as Electricity Canada and Electricity Human Resource Canada
    - Hydro Ottawa has contributed to national projects to engage youth at both the elementary and secondary school levels in learning about the electricity industry and the exciting range of career options to help build the pipeline for the workforce of the future.

[20] 2023 hiring was impacted by a 84-day strike during which recruitment was paused. The impact of this is an increased recruitment effort in 2024.

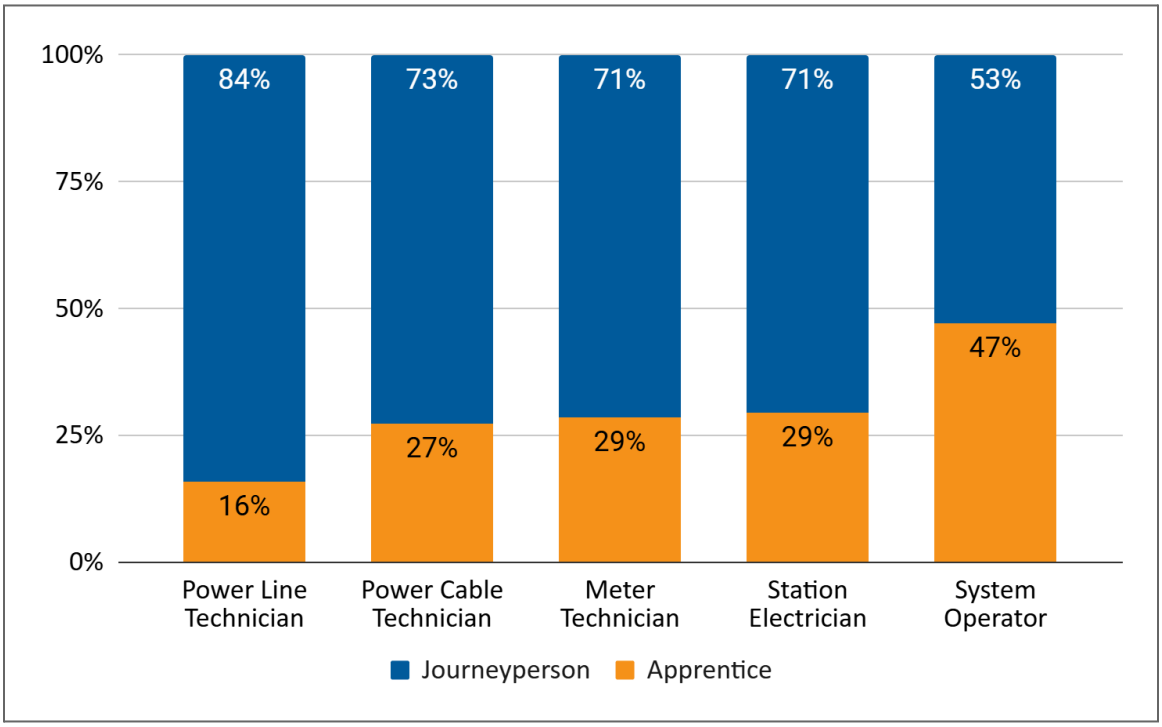
To accommodate the increasing number of new hires, Hydro Ottawa has developed a new Employee Onboarding Program titled “Wired for Success: Powering Up New Talent”. The program creates a structure that new hires follow when they first join the company and includes a digital self-service guide, networking, development opportunities, and one-on-one time with their direct supervisor. The structured program is designed as a journey that guides the new employee through their first 18 months of employment at Hydro Ottawa.

4.1.2. Sustaining the Trades

Through structured in-house apprenticeship programs, Hydro Ottawa has been revitalizing the trades employee base for over a decade to ensure a ready supply of trades talent. Hydro Ottawa has five Apprenticeship Programs in the following trades: Power Line Technician, Power Cable Technician, Meter Technician, Station Electrician, and System Operator. Together, these trades positions represent approximately 30% of Hydro Ottawa’s Workforce.

The total number of apprentices as of December 31, 2023 was 34, which represents 23% of Hydro Ottawa’s trades workforce. The number of apprentices as a proportion of each trade varies from 16% to 47%. See Figure 13 below.

Figure 13 - Percentage of Apprentices by Trade



Hydro Ottawa expects to continue investing in apprenticeships as a critical source of talent for the skilled trades. To ensure that planned training investments remain prudent and to manage overall positions, Hydro Ottawa continues to base forecasted hiring on the following principles:

- Increase overall productivity to ensure greater availability of productive time, while also establishing initiatives to gain efficiencies that increase the quality of the time worked.
- Hire apprentices by using vacancies as they become available, including the redistribution of vacancies from support functions to the trades as well as new positions established for this purpose.

- Where available in the labour market, attract and hire journeypersons to fill vacancies, with the aim of reducing the overall required training investment in apprenticeships and leverage qualified resources with a shorter lead time to achieve maximum productivity.
- Balance hiring with the appropriate use of overtime to supplement labour gaps, and continue to leverage contracted services where cost-effective and available to meet demand to offer flexibility to Hydro Ottawa in resourcing peak or temporary demands for labour, without unnecessarily inflating the overall workforce complement.
- Increase the efficiency of work through innovative practices and the introduction of new technologies and automation.

4.2. LEVERAGING CONTRACTED SERVICES AND TEMPORARY EMPLOYMENT ARRANGEMENTS

Another important strategy utilized to ensure Hydro Ottawa is appropriately resourced and has the required skills for specific projects and peaks in labour demand is through the use of contracted resources and temporary employment arrangements.

Hydro Ottawa continues to grow and develop relationships with third-party contractors to supplement its workforce in times of peak demand, maintain flexibility in operations and gain access to specialized expertise and knowledge. An ongoing discussion at Workforce Planning meetings is the access to qualified and reliable third party contractors across all of Hydro Ottawa's field-based skilled trades to support flexibility in planning and responding to events in an efficient and timely manner. The recent major weather events in Hydro Ottawa's service territory and the large-scale response required to restore power showcases the critical importance of these third-party relationships.

Contracted resources are also utilized for projects and initiatives where specialized skill sets and experience are required to supplement internal resources for the duration of the project and to train employees to maintain new processes or technologies following project implementation.

Temporary employment arrangements are also utilized, as required, to augment internal resources and capabilities to maintain effective business operations and to support peaks in workload. One area where the use of temporary employment arrangements has been highly successful is the rehiring of retirees with a wealth of knowledge and experience into part time roles as Instructors and Mentors, to support the training and development of the next generation of trades employees.

4.3. DEVELOPING TALENT INTERNALLY

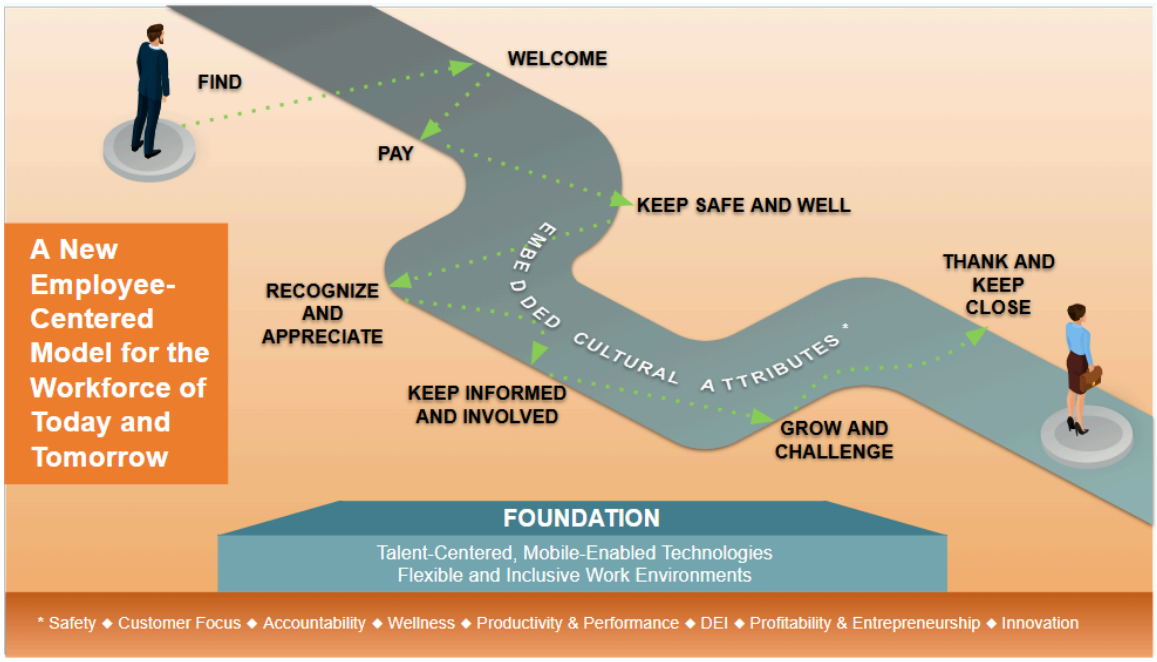
4.3.1. Talent Management Framework

Hydro Ottawa's Talent Management Framework (Framework) was renewed as part of the 2021-2025 Strategic Direction[21] in relation to Key Focus Area #7 - Ensure organizational capacity, culture, and leadership to deliver in a post-pandemic environment. This Framework is more personalized and employee-centred with embedded cultural attributes. It furthers Hydro Ottawa's journey of enhancing the candidate, employee, and People Leader experience throughout the employee lifecycle so as to minimize enterprise risk and focus on creating an environment where employees can learn, grow, contribute and develop their careers with Hydro Ottawa.

The Framework is supported by a foundation of talent-centred, mobile-enabled technologies and flexible and inclusive work environments, as well as the key cultural attributes of safety, customer-focus, accountability, wellness, productivity and performance, diversity, equity and inclusion, profitability and entrepreneurship, and innovation.

[21] Hydro Ottawa, *2021-2025 Strategic Direction*, https://hydroottawa.com/sites/default/files/2022-06/Hydro_Ottawa_2021-2025_Strategic_Direction_EN.pdf, page 5.

Figure 14 - Talent Management Framework



4.3.2. Talent Development - Grow and Challenge

What sets Hydro Ottawa apart from other companies is an ongoing commitment to employee learning and development through a comprehensive approach to Talent Development. Employees are prepared, guided and positioned for success and advancement in a way that meets their learning needs. There is a strong focus on finding new ways to engage and prepare the younger workforce as they progress through their careers.

Hydro Ottawa takes a holistic approach to talent development that ensures employees are prepared and guided to fulfill their roles. Development occurs at every level of the organization from entry level positions through to senior and executive management. On average, Hydro Ottawa invests nearly 40 hours per employee annually on training and development. Examples of programs are provided below.

Further, as part of Hydro Ottawa's Business Continuity Management program, work practices are continuously improved through after action reporting and the use of an exercise approach to learning. Over the next five years Hydro Ottawa will continue to expand and mature its exercise framework, increasing the number and frequency of internal exercises, providing more opportunities to validate processes, test and refine response strategies, identify potential weaknesses, improve communication and coordination, build confidence among employees and enhance overall organizational resilience.

4.3.2.1. Safe Supervisor Program

The Safe Supervisor Program ensures that frontline operational supervisors understand their role as implementation leaders for the occupational health, safety, and environmental (OHSE) programs. Delivered to newly-promoted supervisors, this program outlines performance expectations, defines accountability, and ensures that supervisors have the information and tools to implement, maintain, report on, and continuously improve OHSE performance and accountability in their area of responsibility.

4.3.2.2. Construction Technician Program

Leveraging the design of the Safe Supervisor Program, this program ensures that Construction Technicians are trained and competent in their new role, specifically as it relates to their responsibilities for OHSE programs. It reinforces the concept of due-diligence and reasonable precaution, how to prepare safety related communications, and the basics of overseeing a construction site in a safety-focused environment.

4.3.2.3. eLearning

Hydro Ottawa has been on a journey to modernize its approach to learning and development to ensure the company is ready to embrace change and disruption in the industry. Learner expectations have changed and finding new, modern and mobile-enabled ways to engage and prepare a younger workforce to progress in their careers remains critical. The modern learner is

digital and wants their learning in small chunks, to be highly visual or video-based, accessible on mobile devices, and to have a social component that allows them to collaborate and share.

With that context in mind, learning opportunities must meet the needs of an increasingly diverse workforce, foster agility and enhance productivity through the ability to learn any time, anywhere, on any device. Over the last years Hydro Ottawa has developed and launched effective resources for a highly skilled, properly trained and knowledgeable workforce. In order to continue cultivating a culture of innovation and continuous improvement it has put a strong focus on virtual reality, artificial intelligence and instructional video learning.

Leveraging Hydro Ottawa's human resources information system, Workday, all employees have access to a plethora of eLearning modules, audiobooks, skills benchmarking tools, live virtual courses and bootcamps, which allows access to learning - any time, anywhere, on any device.

As Hydro Ottawa has continued to introduce more eLearning opportunities, the eLearning hours per employee per year has risen from one hour per employee in 2017 to over six hours per employee in 2023. And, while the number of training activities that employees at Hydro Ottawa participate in, both in-person and digital, have increased from 172 in 2017 to over 400 in 2023, the total training hours per employee has dropped from 50 in 2017 to 33 in 2023. Hydro Ottawa is providing training on a greater variety of topics, but in a different way than in the past. Training is provided in an increasingly blended approach, with hands on and classroom learning where required, but increasingly shorter digital and elearning training is provided. Training is in smaller, manageable chunks, when and where employees need it, and is self paced and adaptable to meet the needs of a wide variety of learners and learning styles.

4.3.2.4. Virtual Reality

Hydro Ottawa has introduced the use of virtual reality (VR) for trades training. VR simulations have been created for real-work scenarios. The simulations are used for apprentice training and in the joint Algonquin College/Hydro Ottawa Power Line Technician Diploma program. The use

of VR scenarios allow apprentices and students to experience and practice full, end to end, work tasks and procedures in a low risk, virtual environment before they tackle them in the real, electrified, work environment. With this technology, multiple learners can be working on the task simultaneously with one instructor providing coaching and/or support versus learning in the field where more one-on-one support and coaching is required to ensure safety. This training is also used to reaffirm good work practices, or for introductory or recertification training, and is accessible to crews and Supervisors any time and anywhere training is required. To date, Hydro Ottawa has created the following four real-work scenarios:

- Energizing a New Residential Service/Meter
- Safe Entry into an Underground Cable Chamber
- Isolating a Mini Padmount Transformer
- Installing an Overhead Residential Triplex Service

For People Leaders, Hydro Ottawa has also added an immersive learning program for leadership through a partnership with Talespin. These simulations are designed to modernize the way Hydro Ottawa develops and empowers leaders. Through the use of technology and engaging experiences, learners are able to try out real-world challenges, make tough calls, and see the direct impact of their decisions through these simulations.

4.3.2.5. Safe Work Practices

The safety of employees and the public is a top priority for Hydro Ottawa. The company maintains certifications for its Occupational Health, Safety and Environment Management System to international standards, and provides extensive safe work practices training.

In 2023, Hydro Ottawa averaged over 18 hours of safe work practices training per employee. For trades employees, safe work practices training averaged 51 hours per employee, including training required by regulators or industry best practices.

Looking ahead to the next rate term, Hydro Ottawa anticipates an increased need for safety-related education and training for its workforce, as Hydro Ottawa will have a greater proportion of younger workers who do not yet possess the hands-on exposure to the scope and varied aspects of the electrical system in trades where these are key aspects in a worker's skill development, and these workers do not yet have experience to identify how the hazards and risks may manifest in all scenarios.

4.3.2.6. Succession Planning and Management Program

To ensure a prepared and sustainable workforce, Hydro Ottawa has a dynamic succession planning and management program. As of the end of 2023, there were 58 succession candidates in the program. Through this program, emerging leaders are identified as high potential resources via annual talent reviews and on an as-needed basis. It is a proactive, integrated, strategically aligned program focused on:

- Determining where successors will be needed in the future;
- Identifying and developing a talent pool to be positioned for success in assuming leadership roles;
- Balancing the need to cultivate talent from within to build bench strength and increase organizational effectiveness and capacity, and hiring talent externally to inject new knowledge, skills and experiences;
- Increasing engagement and retention of high potential performers; and
- Effective transfer of knowledge and ongoing development of candidates and monitoring of progress and results.

Between 2020-2023, 72% of leadership positions were filled by internal candidates. The majority of positions filled during this timeframe were at the Supervisor level (65%). The breakdown of leadership positions filled internally is as follows:

- 69% of Supervisor level positions

- 76% of Manager level positions
- 100% of Director level positions

Operational leadership positions accounted for 46% of the leadership positions filled between 2020-2023 and of those, 78% were filled internally.

4.4. DIVERSIFYING THE TALENT POOL

Hydro Ottawa's Diversity, Equity and Inclusion Framework and Corporate Plan were designed to bring greater awareness to diversity goals and commitments and to help employees better understand the key elements of the new plan, as well as their role in making it successful. The Framework outlines the key focus areas and where Hydro Ottawa will be taking action as well as accountabilities at all levels in the organization. Flowing from the Framework are goals in three areas: Diverse and Engaged Workforce, Inclusive Workplace, and Meaningful Community Partner, as well as addressing barriers to participation.

The Framework focuses on many diverse groups, including a focus on gender, accessibility, the LGBTQ+ community, visible minorities, new Canadians, and Indigenous peoples. Specifically related to gender diversity, Hydro Ottawa is committed to increasing gender equity in its trade and technical, engineering, and leadership roles by 2030 as follows:

- 30% women in Trades and Technical roles
- 50% women in Engineers and Engineering Interns roles
- 50% women in Leadership roles, which includes Supervisors, Managers, Directors, and Executives

To support these gender diversity goals, Hydro Ottawa, in partnership with Algonquin College, participated in the We Saved You a Seat Program designed to attract young women to the College's Science, Technology, Engineering, Math (STEM) programs and give them the support they need to pursue careers in these fields. This means that 30% of the seats in the jointly

delivered Powerline Technician Diploma Program are now saved for women. To support these women as they navigate their career possibilities Hydro Ottawa has provided mentors to the program participants and hosted Coffee Clubs where students can meet with women in trades and technical roles as well as hiring supervisors.

Hydro Ottawa has also partnered with Carleton University's Faculty of Engineering and Design on the Women in Engineering and IT Program. This program works to help close the gender gap in engineering and information technology. The program runs throughout the academic year and provides women students studying in a STEM discipline at Carleton with networking, mentorship, and soft-skill development opportunities.

To further strengthen diversity, equity and inclusion knowledge at Hydro Ottawa, leveraging the partnership with the Canadian Centre for Diversity and Inclusion, a three-part Inclusive Leadership Program was rolled out to all People Leaders over the past year. As the company continues to grow and become more diverse, having leaders who are knowledgeable in creating an inclusive and welcoming environment is critical.

Further, as reported in Electricity Human Resources Canada, Electricity in Demand: Labour Market Insights 2023 - 2028, "data from the 2021 census reveal that racialized groups and immigrants are largely under-represented in the sector, compared to the total economy."[22] Hydro Ottawa has worked to increase hiring of new Canadians through partnerships with organizations such as World Skills whose goal is to support new immigrants in finding employment in Canada. Through participation in career events and targeted recruitment initiatives a greater number of candidates and new employees are newer Canadians, bringing a breadth of knowledge and skills from other countries and other industries.

Hydro Ottawa continues to seek out and strengthen partnerships that support the stated goals of a more diverse and inclusive workforce and workplace. Pride at Work Canada, Indigenous

[22] Electricity Human Resources Canada, *Electricity in Demand: Labour Market Insights, 2023-2028*, Page 14.

Works and Helmets to Hardhats not only provide opportunities to promote career opportunities to a more diverse candidate pool, they also support Hydro Ottawa's diversity, equity and inclusion programming with new insights and support for projects such as the creation of Land Acknowledgements that are appropriate and respectful.

WORKFORCE GROWTH

1. INTRODUCTION

This Attachment provides a detailed overview and justification for the new headcount proposed in Hydro Ottawa's Workforce Planning Strategy. It supports and expands upon the broader Workforce Strategy and the associated challenges described in Attachment 4-1-3(B) - Workforce Planning Strategy. While Attachment 4-1-3(B) - Workforce Planning Strategy outlines the strategic context, workforce considerations, and approach to talent management, this Attachment provides the detailed rationale for headcount requirements within each work program, demonstrating the direct link between staffing requests and the organization's evolving operational needs, strategic objectives, and commitment to delivering reliable service to its customers.

As discussed in Attachment 4-1-3(B) - Workforce Planning Strategy, and further expanded in this attachment, Hydro Ottawa's historically lean approach to headcount is no longer sustainable and not increasing investment in its workforce would result in risks to its ability to deliver necessary services to customers, creating unsustainable workloads for staff and the potential for health and safety concerns. These issues contributed to a near-strike in 2021 and an 84-day labour strike in 2023, where one of the key concerns was workload and its impact on safety.

Section 2 of this Attachment provides an overview of the proposed workforce growth by work program, summarizing the proposed headcount additions and their distribution across the organization. Section 3 provides detailed justifications for the required headcount increases within each individual program, outlining the key drivers and demonstrating the necessity of these new positions to support Hydro Ottawa's continued success and the risks associated with not growing the workforce in key areas. All references to headcount in this Attachment refer to budgeted full time positions, not full-time equivalents (FTEs).[1]

[1] The relationship between positions and FTEs is discussed in Schedule 4-1-3(A) - Employee Compensation Strategy, Section 5.0.

2. WORKFORCE PLAN OVERVIEW

In order to meet its strategic and operational goals, Hydro Ottawa plans to expand its workforce by 177 full time positions between 2024 and 2030. This represents an increase of 29% from the 2021 OEB-Approved headcount. Of these new positions, 131 are slated to be filled by the end of 2026, with the remaining 46 to follow by 2030. To account for expected payroll, position turnover, and recruitment timelines, a vacancy assumption was incorporated as outlined in Table 10 of Attachment 4-1-3(A) - Employee Compensation Strategy. Therefore, these 131 positions translate to a projected growth of 100 full-time equivalent positions in 2026 (or 16%), compared to the 2021 OEB-Approved level after the vacancy assumption is applied. The rest of this attachment however will focus on the total increase of 177 positions out to 2030.

The most recent OEB-Approved headcount is from 2021. While the overall headcount has remained relatively flat for the last two rate periods, evolving operational and customer demands, regulatory changes, as well as operational and technological efficiencies have resulted in the redeployment of resources to where they would provide the most value. In other words, while Hydro Ottawa's headcount has not grown, the distribution of resources has changed and evolved to support business needs and operating context. Hydro Ottawa is a dynamic organization that continues to assess its environment and respond to changing and growing operational requirements, customer demands, regulatory requirements, technological developments, workforce demographic shifts and safety needs. These factors, among others, impact the workload within Hydro Ottawa's work programs and as such, positions have been reallocated accordingly to support internal efficiency and resource optimization.

The proposed addition of 177 new positions represents a strategic investment in Hydro Ottawa's workforce, designed to address increased workload demands, emerging business priorities and new skill set requirements. Table 1 below shows the distribution of the new positions by Appendix 2-JC Programs (2-JC represents the OM&A Programs as outlined in Schedule 4-1-2 - Operations, Maintenance and Administration Program Costs). As depicted in Table 1, the majority of new positions are in Distribution Operations, Engineering & Design, and Metering,

which reflects Hydro Ottawa's growing operational need as outlined in the Distribution System Plan (Schedules 2-5-1 through to 2-5-9).

Table 1 - New Positions by Appendix 2-JC OM&A Programs

	Bridge Years		Test Years					
	2024	2025	2026	2027	2028	2029	2030	Total
Metering	3		3	2				8
Engineering & Design	17		22	13	4		2	58
Distribution Operations[2]	22		43	21				86
Customer Billing			1					1
Customer & Community Relations			1					1
Information Management & Technology	2		5					7
Safety, Environment & Business Continuity	2		4		1			7
Human Resources	1		2					3
Finance	1			1	1	1		4
Regulatory Affairs	2							2
TOTAL	**50**		**81**	**37**	**6**	**1**	**2**	**177**

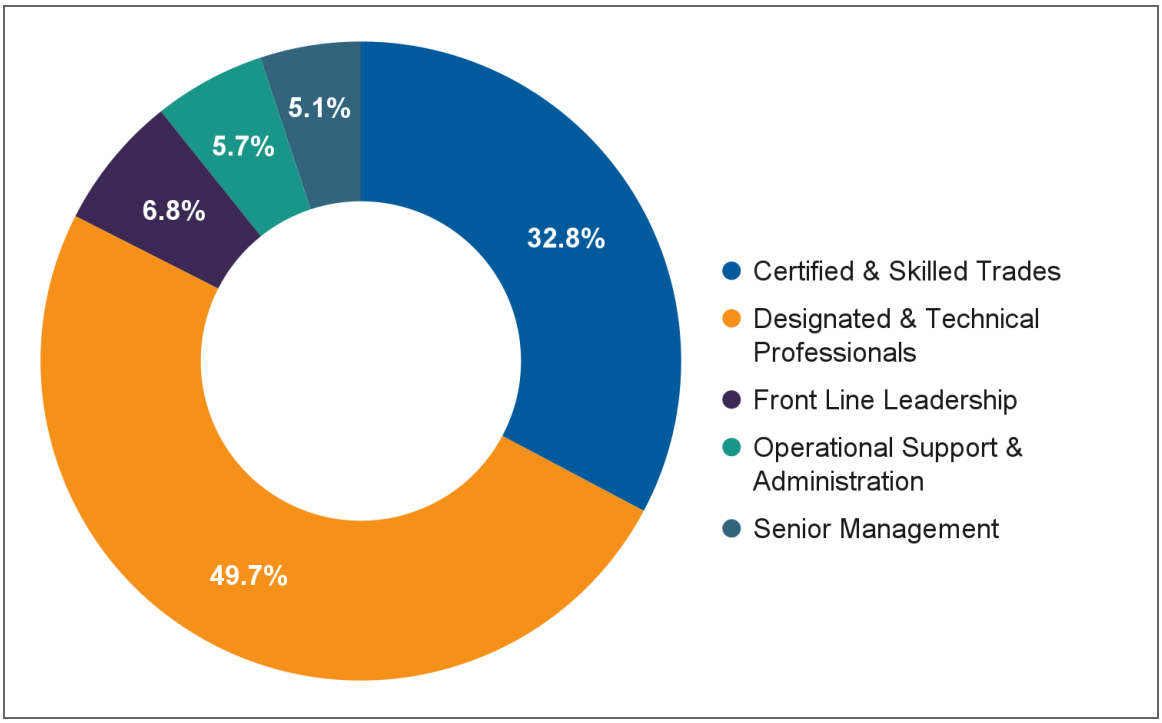
3. WORKFORCE PLAN BY PROGRAM

The sub-sections below are organized by program area. Under each program, the drivers and justifications for headcount growth are provided, explaining why Hydro Ottawa requires additional headcount to meet its strategic and operational objectives. In some cases, the drivers and justifications for new positions align across programs. In these instances, the programs have been combined into a single sub-section to avoid duplication and repetitive text.

[2] Distribution Operations is an umbrella term for the following Appendix 2-JC programs: System Ops & 24/7, Vegetation Management, Underground Locates, Distribution Support, Distribution Overhead & Underground Maintenance, Stations Maintenance, Minor Maintenance, and Testing, Inspection & Maintenance.

Each sub-section begins with a table that breaks down the headcount growth in that program by the workforce segments described in Schedule 4-1-3(B) - Workforce Planning Strategy. These workforce segments are Certified & Skilled Trades, Designated & Technical Professionals, Front Line Leadership, Operational Support & Administration, and Senior Management. A breakdown of the new positions by workforce segment is provided in Figure 1 below.

Figure 1 - New Positions by Workforce Segment, 2024-2030



3.1. DISTRIBUTION OPERATIONS, ENGINEERING & DESIGN, AND METERING

As outlined in Table 1 and further summarized in Table 2, workforce growth and new positions are primarily within the Distribution Operations, Engineering & Design, and Metering programs. Headcount growth is further broken down by workforce segment in Table 3. Given their collective responsibility for the execution of operations-based programs, workforce planning for these three categories was undertaken as a unified effort and is therefore collectively discussed and referred to as “Operations”.

Table 2 - Operations New Positions by OM&A Program

	Bridge Years Total	Test Years Total	Total
Metering	3	5	8
Engineering & Design	17	41	58
Distribution Operations[3]	22	64	86
TOTAL	**42**	**110**	**152**

Table 3 - Operations New Positions by Workforce Segment

	Bridge Years		Test Years					
	2024	2025	2026	2027	2028	2029	2030	Total
Certified & Skilled Trades	12		28	18				58
Designated & Technical Professionals	23		28	16	3		2	72
Front Line Leadership	3		5	1	1			10
Senior Management	3		2					5
Operational Support & Administration	1		5	1				7
TOTAL	**42**		**68**	**36**	**4**		**2**	**152**

While Hydro Ottawa aimed to maintain a relatively stable level of permanent positions throughout the 2021-2025 rate period, a confluence of factors, including the escalating volume and complexity of both capital and maintenance programs, a historic Derecho storm in 2022 causing extensive damage to the system, 11 other severe weather events requiring emergency response, and an 84-day labour strike in 2023 (and a near strike in 2021), rendered the continued operation with existing resources unsustainable and impractical. Due to the immediate demands of a heightened workload and evolving skillset requirements, Hydro Ottawa

[3] Distribution Operations is an umbrella term for the following Appendix 2-JC programs: System Ops & 24/7, Vegetation Management, Underground Locates, Distribution Support, Distribution Overhead & Underground Maintenance, Stations Maintenance, Minor Maintenance, and Testing, Inspection & Maintenance.

identified the need to add 42 positions in these three pivotal areas in 2024. Moreover, the strategic initiatives identified in the 2026-2030 Distribution System Plan will necessitate the addition of 110 positions, a critical augmentation to ensure the sustained delivery of reliable and efficient electrical services, upholding the highest standards of safety and operational excellence.

3.1.1. 2024 Headcount Growth

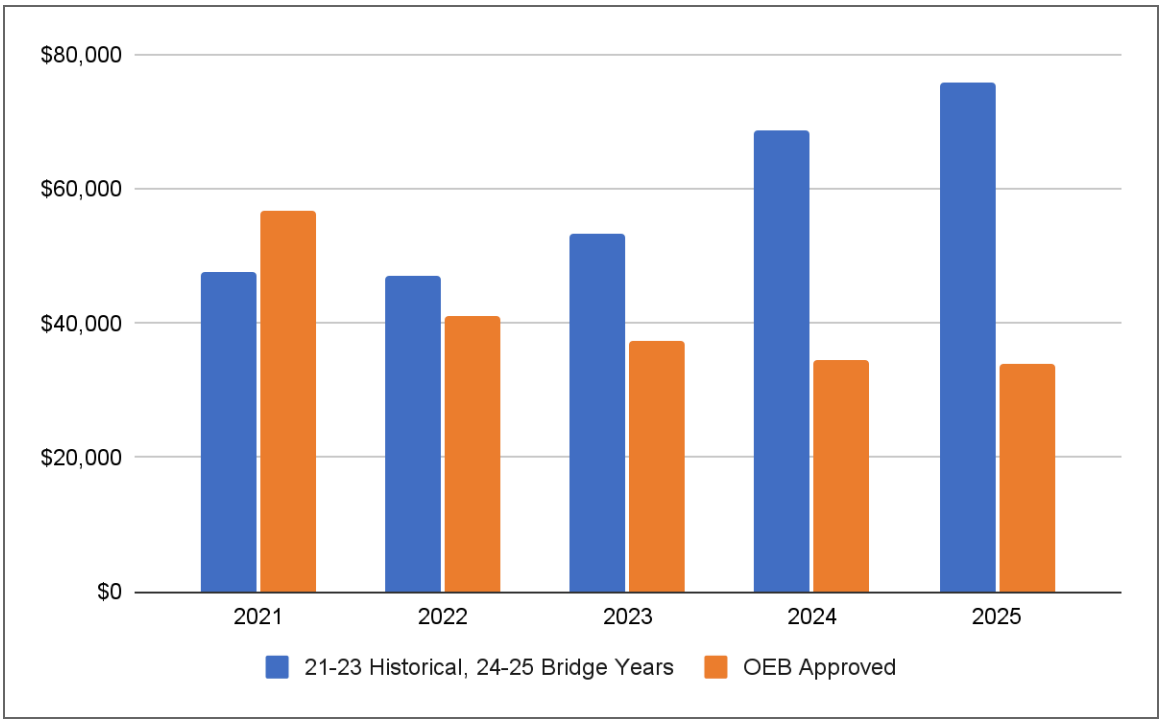
Hydro Ottawa added 42 new positions in 2024 to support Operations. The specific headcount increase in 2024 is predominantly attributable to four discrete drivers, each demanding a particular set of skills and competencies: System Access and Capacity Program Growth, Distributed Energy Resources (DERs) and Capacity Connection Request Complexity, Grid Modernization, and Enhanced Leadership and Oversight.

3.1.1.1. Customer Connection and Capacity Program Growth:

Hydro Ottawa experienced an unprecedented volume of customer driven growth projects in the 2021-2025 period. Specifically, the City of Ottawa's Zero Emission Bus project and the Department of National Defence (DND) Dwyer Hill Road project, both entirely unforeseen, were not included in the OEB-Approved 2021-2025 rate application. Further, Hydro Ottawa's Residential Subdivision program experienced a surge in connection volumes resulting from the province's "More Homes Built Faster Act, 2022" and the pandemic-induced housing boom. These combined unforecasted increases were the predominant drivers of the unprecedented gross expenditure increase that occurred in the System Access investment category, as shown in Figure 2 below.

In addition to the growth in projects driven by residential and commercial customers, Hydro Ottawa also experienced significant unbudgeted growth in the Capacity Upgrades program due to the Mer Bleue MTS station capacity upgrade that was identified late in 2020 through regional planning. Additional details related to the growth in System Access and Capacity Upgrades is provided in Section 5 of Schedule 2-5-5 - Capital Expenditure Plan.

Figure 2 - System Access Actual/Bridge and OEB Approved Gross Expenditures by Year

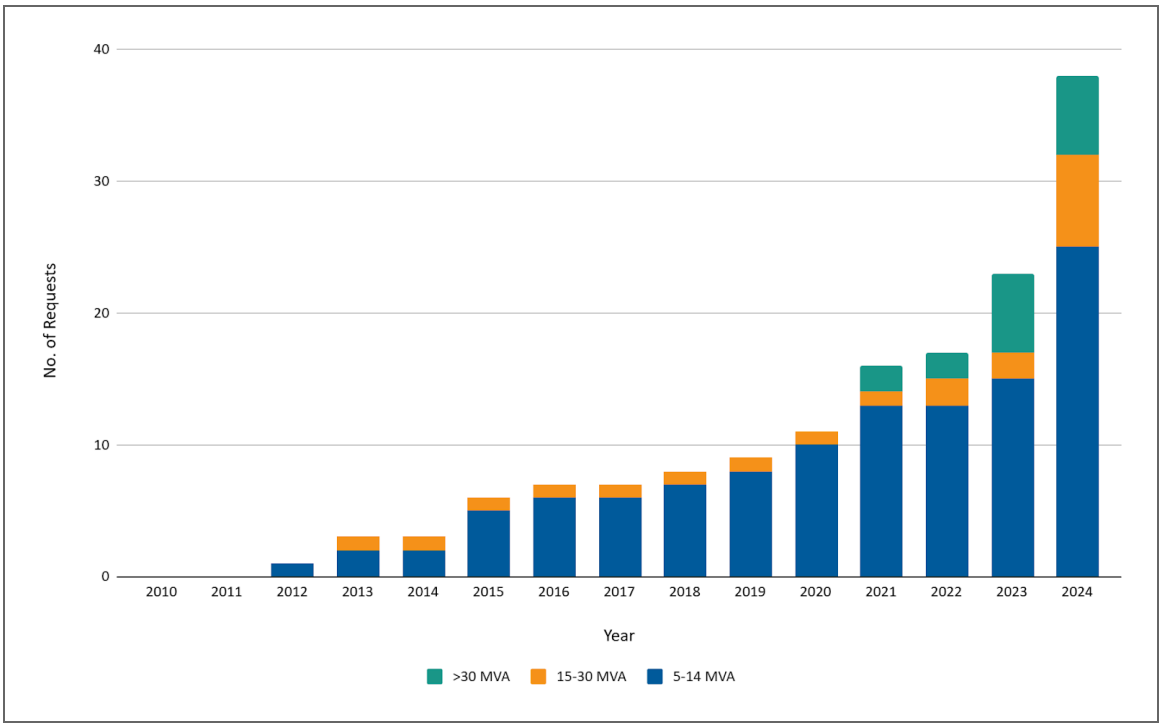


In aggregate, Hydro Ottawa added 22 new positions to directly support the execution of projects stemming from the aforementioned growth. Expanding the electricity network requires building new stations, feeders, and feeder ties. This necessitates additional project managers (engineers, coordinators and administrators) and engineering design technologists to design and oversee the execution of the project and stations electricians, power line technicians (PLTs) and power cable technicians (PCTs) to construct and commission these new assets. Additionally, new residential and commercial volumes also require additional meter technicians. Hydro Ottawa's decision to increase headcount rather than leverage contracted resources was informed by forward looking projections of capital and OM&A program increases for the 2026-2030 period and beyond.

3.1.1.2. DER and Capacity Connection Request Complexity

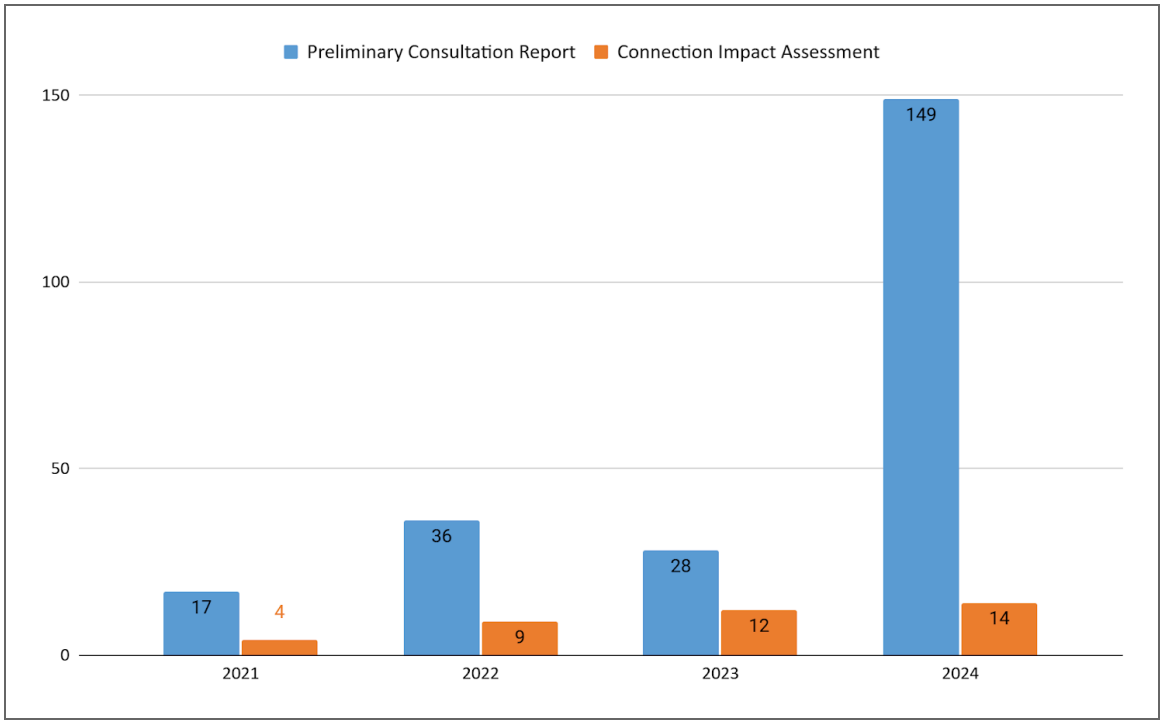
Since 2021, Hydro Ottawa has experienced a significant surge in complex large load (>5MVA) connection requests, placing considerable strain on engineering resources. Notably, Figure 3 illustrates the overall increase in large load connection requests, jumping to 94 between 2021 and 2024, a notable rise from the 55 handled between 2010 and 2020. In addition, the utility has received 16 requests exceeding 30 MVA since 2021. This size of load request was not experienced prior to this period. These exceptionally large load requests, exceeding 30 MVA, are significantly more complex and resource-intensive than previous inquiries. This heightened volume and the increased complexity of these larger requests have placed a substantial burden on resources. Furthermore, Hydro Ottawa's planning and forecasting tools require extensive manual input to process inquiries and load summary forms, further straining Distribution Engineers responsible for system planning.

Figure 3 - Large Load Connection Requests by Year



In addition to the large load inquiry and connection increase, Hydro Ottawa also experienced on-going growth in both volume and complexity of DER connection requests since 2021, as demonstrated in Figure 4 below. The preliminary consultation report (PCR), connection impact assessments (CIA) and engineering related to protection and control and overall system impacts are labour intensive and require a specific and highly specialized skill set. Further, the integration of new technologies behind the meter requires the development of new standards to ensure the safety and integrity of the distribution system. To respond to the increased volume and complexity related to the aforementioned growth, Hydro Ottawa added four new Distribution Engineering positions in 2024.

Figure 4 - Volume of PCRs and CIAs related to Distributed Energy Resource Connections



3.1.1.3. Grid Modernization

Hydro Ottawa commenced the implementation of its Advanced Distribution Management System (ADMS) in 2023. This initiative is critical to modernize the operational technologies leveraged by Hydro Ottawa's control room and are foundational to safely and effectively integrate DERs into Hydro Ottawa's distribution system. During the ADMS planning phase, Hydro Ottawa revealed significant gaps in the initial budget and a lack of internal dedicated resources to support the implementation. Concurrently, Hydro Ottawa developed a Grid Modernization Strategy in 2023 (see Section 3.4.2 in Schedule 2-5-4 - Asset Management Process), emphasizing a need for a data-driven and technologically-advanced approach to grid management. This underpinned the decision to add 10 new engineering positions to support both the implementation of the ADMS and on-going activities and projects related to the grid modernization strategy.

3.1.1.4. Enhanced Leadership and Oversight

Hydro Ottawa's need for expanded oversight and leadership, driven by larger, more complex projects, a less tenured workforce, and the growing demands on management, has resulted in the creation of several new positions. To address these challenges, Hydro Ottawa has bolstered its leadership and oversight team with five new leadership positions, supporting intake volumes, project governance, and strategic oversight. Additionally, a Data Engineer position was added to enhance analytics and reporting related to program oversight and productivity. The increased demand for management time, fueled by more frequent severe weather events, a growing customer base, evolving regulatory and energy security priorities, climate change implications, digital transformation, and the lessons learned from both the 2023 strike and the closely averted 2021 strike, further necessitates this expansion. The growing complexity of the utility's operations, coupled with the need to ensure effective project oversight amidst a less experienced workforce, underscores the critical importance of these new roles.

3.1.2. 2026 to 2030 Headcount Growth

Incremental growth beyond what was experienced in the 2021-2025 period will require Hydro Ottawa to further expand its workforce, beginning in 2026. The majority of Hydro Ottawa's historical programs in System Access, System Renewal and System Service are forecasted to grow in volume, along with an associated increase in operating, maintenance, inspection and testing activities. In addition, new programs related to resilience, grid modernization and non-wires solutions will drive increased work volumes and new types of work.

Hydro Ottawa determined its forward-looking headcount requirements through two distinct but complementary methodologies: Workforce Planning for Trades and Workforce Planning for Non-Trades, both of which are detailed in Section 3.1 of Schedule 4-1-3(B) - Workforce Planning Strategy. These analyses identified the need for an additional 110 positions as previously outlined in Table 2 and further broken down by year in Table 4 below.

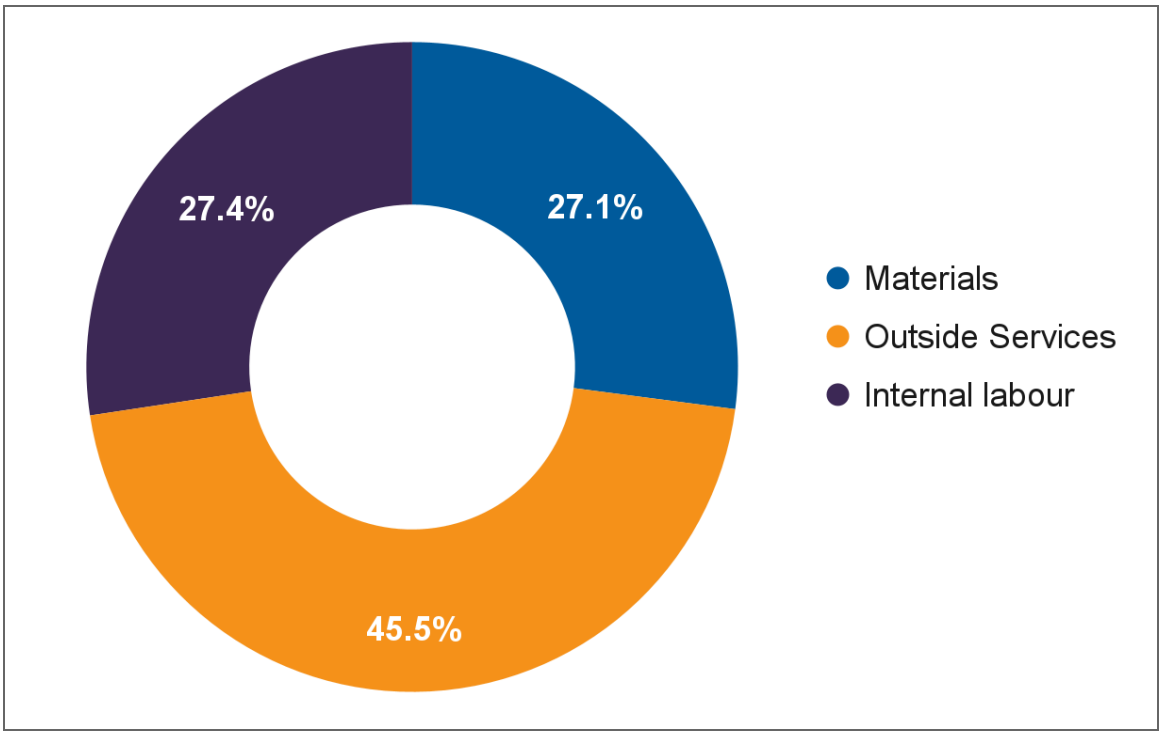
Table 4 - 2026 to 2030 Headcount Growth by Year

	Test Years					
	2026	2027	2028	2029	2030	Test Year Total
Metering	3	2				5
Engineering & Design	22	13	4		2	41
Distribution Operations	43	21				64
TOTAL	**68**	**36**	**4**	**0**	**2**	**110**

3.1.2.1. Approach to External Contracted Support (Outside Services)

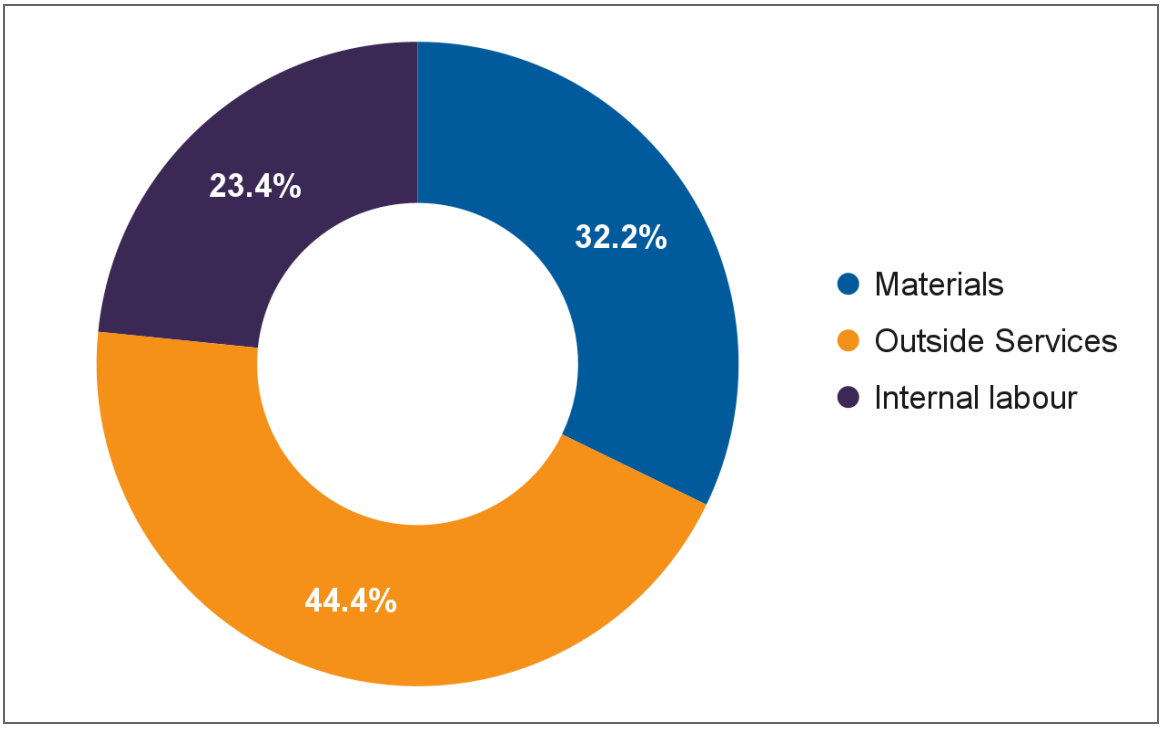
Hydro Ottawa's Workforce Planning for Trades includes specific provisions for external contracted workforce support. This involves strategic considerations by trade and contemplates both business continuity, projected work volume fluctuations and availability of contracted workers in the region. Hydro Ottawa endeavors to maintain the number of headcount required to support the lowest volume of work on both an annual and long term basis. Hydro Ottawa procures services from external resources to support volume fluctuations associated with seasonal and annual program volumes. In the 2021-2025 period, Hydro Ottawa's contracted services accounted for approximately 45% of its overall gross expenditures whereas internal labour accounted for approximately 27%, as shown in Figure 5 below.

Figure 5 - 2021-2025 Gross Operations Expenditures by Object



After accounting for the additional positions budgeted in Table 3, Hydro Ottawa projects the internal labour percentage to reduce to 23% percent of overall expenditures and Outside Services to remain at a similar level (44%), as depicted in Figure 6 below. This shift is partially due to the increased material volumes associated with complex stations projects as well as a marginal shift to external contracted services compared to historical levels. This relatively stable proportion of direct labour within the overall expenditure framework suggests that the proposed headcount increases are appropriately calibrated to the anticipated growth of the programs, ensuring a balanced and efficient allocation of resources.

Figure 6 - 2026-2030 Gross Operations Expenditures by Object



In the subsequent sections, the anticipated growth in both capital and OM&A is described in totality and does not distinguish between which growth will be addressed through external contractors and which will be executed by internal resources. These determinations are dynamic and consider a number of factors including but not limited to, cost and efficiency, risk management, annual work volumes and contracted resource availability. The estimated incremental trades and technical headcount required to support the direct labour requirements related to the growth in capital and OM&A programs described in Sections 3.1.2.2 and 3.1.2.3 is 76 across the 2026-2030 period. Positions include a subset of Certified and Skilled Trades: PLTs, PCTs, Station Electricians and Meter Technicians (does not include System Operators) as well as a subset of the Designated Technical and Professionals: Project Engineers, Project Coordinators, Project Administrators, Engineering Technologists, Station Technicians, Grid Technologists and Field Operators. The remaining 34 headcount are contemplated in Section 3.1.2.4 and collectively referred to as Business Support. As these positions are more discretely

defined, the individual headcount needs are identified for each of the areas, namely System Office, Engineering, Contractor Management and Oversight, Project Execution Planning and Leadership. Table 5 provides a breakdown of the overall headcount growth between Direct Labour and Business Support by year for the 2026-2030 period.

Table 5 - Headcount Requirements for Direct Labour and Business Support for 2026-2030

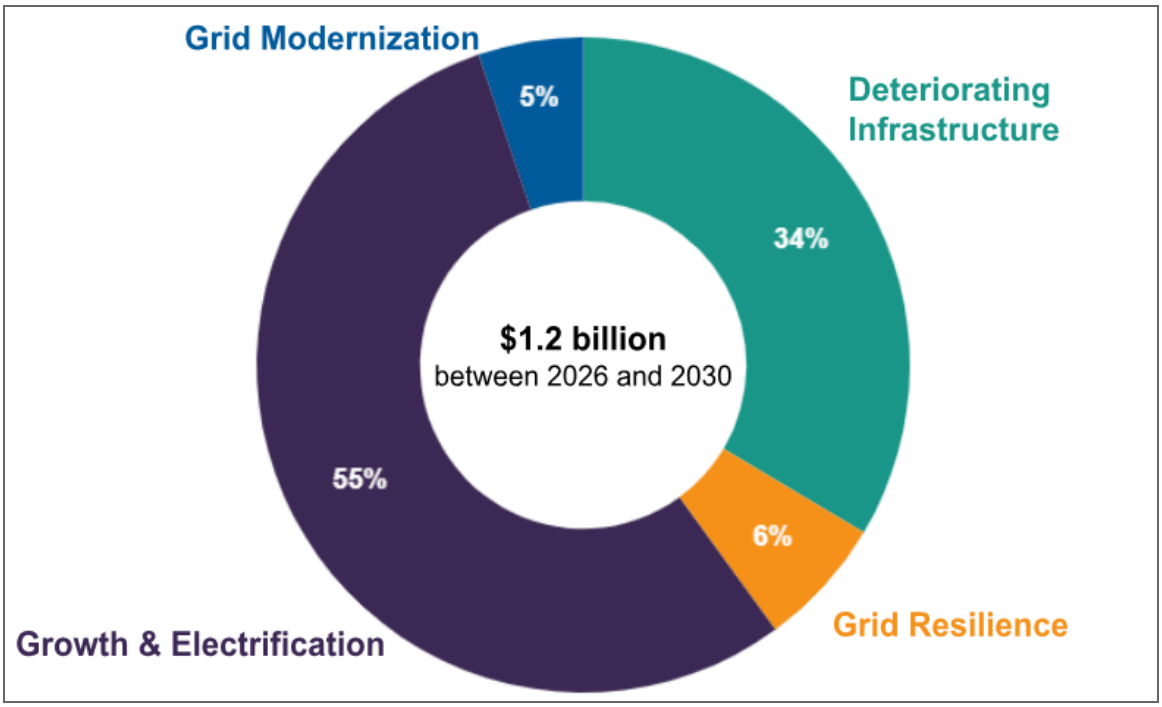
	Test Years					
	2026	2027	2028	2029	2030	Total
Direct Labour	**45**	**27**	**3**	**0**	**1**	**76**
System Operations	*2*	*1*	*0*	*0*	*0*	*3*
Engineering	*6*	*6*	*0*	*0*	*0*	*12*
Contractor Management & Oversight	*5*	*1*	*0*	*0*	*0*	*6*
Project Execution Planning	*3*	*0*	*0*	*0*	*1*	*4*
Leadership	*7*	*1*	*1*	*0*	*0*	*9*
Business Support Subtotal	**23**	**9**	**1**	**0**	**1**	**34**
TOTAL	**68**	**36**	**4**	**0**	**2**	**110**

3.1.2.2. Growth in Capital Programs

Hydro Ottawa's capital investment plan for 2026-2030 marks a substantial increase, almost twice the investment seen in 2021-2025. This significant growth, detailed in the 2026-2030 Distribution System Plan (DSP), addresses four strategic investment priorities: Growth & Electrification - Powering the Growing Community, Renewing Deteriorating Infrastructure, Grid Modernization - Enabling the Energy Transition, and Enhancing Grid Resilience[4]. The investment levels, as shared with customers, are visualized in Figure 7. To execute these essential plans, a substantial workforce expansion is required. The following sections provide a thorough analysis of the capital growth and the required headcount increases by investment priority.

[4] Further detail on the four strategic investment priorities can be found in Schedule 2-5-5 - Capital Expenditure Plan.

Figure 7 - 2026-2030 Capital Expenditure by Investment Priority



1. **Growth & Electrification - Powering the Growing Community:** *Focusing on expanding grid capacity to serve a growing community and ensure a reliable, resilient electricity system capable of meeting increasing demand driven by new customer connections and distributed energy resources (DERs).*

The resource related growth in this investment priority is attributed to increased volumes in the Station and Distribution Capacity programs and the introduction of new Battery Energy Storage Systems within the Non-Wire Solutions Program.

Station and Distribution Capacity Upgrades:

Building on the 22 positions added in 2024 (as outlined in Section 3.1.1) to address unforecasted capital expenditures from customer connections and organic population growth, Hydro Ottawa will again see substantial capacity expansion between 2026 and 2030. To

illustrate this growth, consider substation construction: Hydro Ottawa built one greenfield substation (Cambrian MTS) in the 10 years from 2011 to 2020, this tripled to three (Piperville MTS, Mer Bleue MTS, and Hydro Road - City of Ottawa's Zero Emission Bus project) in 2021-2025, and is expected to nearly double again to five concurrent projects (including continued work on the previous three and new projects at New Kanata North and Greenbank MTS) in 2026-2030. Further, four major station capacity upgrades (Richmond South - Department of National Defence (DND) Dwyer Hill Road project , Riverdale, Cyrville, and Bronson) are planned for the 2026-2030 period.

Beyond the substation build, expanding the electricity network requires construction of new feeders, and feeder ties and as such, each of the major substation projects has associated distribution related projects, both in overhead and underground. The significant capital growth driving these projects necessitates a substantial expansion of Hydro Ottawa's workforce. This includes project management personnel—engineers, coordinators, and administrators—along with engineering design technologists to manage distribution design. On the construction side, Hydro Ottawa requires additional skilled trades, specifically stations electricians, stations technicians, PLTs, and PCTs, to ensure the successful construction and commissioning of these new assets.

Battery Energy Storage Systems:

In response to the continued growth forecast for 2026-2030, Hydro Ottawa will be installing 30MVA of utility-owned Battery Energy Storage System (BESS) capacity across 4 substations over the 2026-2030 period. These installations will mark the first major investments in BESS technology for Hydro Ottawa and will thus require new skills and expertise to both construct and commission the assets and then to ultimately operate and maintain. The planning phase will require expanded activities for distribution engineers specifically related to standards, protection and control, and smart grid. Project execution will require incremental project engineering support to oversee the projects and growth of existing trade and technical positions, specifically stations electricians and technicians and grid technologists for installation and commissioning.

2. **Renewing Deteriorating Infrastructure:** *Focusing on mitigating reliability risk by strategically upgrading or replacing deteriorating and critical infrastructure, prioritizing assets with the greatest impact on system reliability and safety based on condition assessments.*

The resource related growth in this investment priority is attributed to increased volumes of renewal of Hydro Ottawa's stations, overhead, underground, and metering assets.

Stations and Building Infrastructure Renewal

The Stations and Buildings Infrastructure Renewal program invests in renewing station assets and station buildings that are in a degraded condition and at a high risk of failure. These critical assets serve numerous customers and provide essential flexibility and backup capacity. As of 2024, 59% of Hydro Ottawa's stations assets reached their typical useful life and 13% are in a degraded condition and at high risk of failure. Further details related to the stations and building infrastructure renewal program are provided in Section 2 of Schedule 2-5-7 - System Renewal Investments. In response to the growing risk related to stations assets, capital expenditures in this category are budgeted to grow by $76.3M for the 2026-2030 period when compared to the historical period.

This growth is primarily driven by the decommissioning of five high-risk 4kV stations which will be completed through an End of Life (EOL) Voltage Conversion Program. As a result of the confluence of the number of 4kV assets in degraded condition and the inability of the 4kV system to support the future forecasted loads, EOL Voltage Conversion projects are expected to continue for many years beyond the 2026-2030 period. What sets the EOL voltage conversion project apart is the significant volumes of activity across multiple trades. It includes substation modifications, necessitating the expertise of station electricians and technicians, alongside a high volume of distribution activities - reconductoring and individual customer service transitions - that require PLTs, PCTs, and Meter Technicians. The high volume of design and project oversight will require additional engineering technologists, project engineers and project coordinators.

The remainder of the growth is driven by the replacement of high-risk station breakers at four stations which will be completed through a Stations Switchgear Renewal Program. The volume in this program is increasing in response to catastrophic failures in the historical period. In light of the aforementioned equipment failures and a comprehensive assessment of the current condition of existing switchgear population, Hydro Ottawa has prioritized the replacement of end-of-life Sulfur Hexafluoride (SF_6) and air-type switchgear at designated critical stations. This program increase will predominantly increase headcount requirements for stations electricians and technicians as well as incremental project engineering support.

Distribution Overhead and Underground Renewal

The Overhead and Underground Renewal programs invest in renewing distribution assets that are in a deteriorated condition and at a high risk of failure. These critical assets distribute electricity to individual homes and businesses and provide flexibility in the event of an outage. As of 2024, approximately 25% of overhead and underground assets have reached their typical useful life and approximately 6% are in degraded condition and at a high risk of failure. Further details related to the overhead and underground renewal programs are provided in Section 3 and Section 4 of Schedule 2-5-7 - System Renewal Investments. In response to the growing risk related to Overhead and Underground assets, capital expenditures in this category are budgeted to grow by $64.4M or 61% for the 2026-2030 period when compared to the historical period.

A significant increase in resourcing is projected as a result of increased replacement rates in two key programs: the Overhead (OH) Switch/Recloser Renewal Program and the Vault Renewal Program. In both cases the driver for the increase is the increasing risk profile. The escalating risk profile, evidenced by the growing number of outages related to overhead and vault switchgear failures during the 2021-2025 period (details provided in Section 3 and Section 4 of Schedule 2-5-3 - Performance Measurement for Continuous Improvement), has necessitated a substantial increase in the number of units slated for replacement within these programs, directly resulting in the projected resourcing growth. The project design and oversight

will require additional engineering technologists and project coordinators and the execution will require additional PLTs and PCTs.

Metering Renewal (AMI 2.0)

Hydro Ottawa's metering fleet is a critical component of the distribution system, essential for accurate customer billing, settlement with the Independent Electricity System Operator (IESO), and effective grid operations. Due to the aging metering fleet, Hydro Ottawa is proactively addressing the challenges presented by functional obsolescence in this metering infrastructure. Approximately 81% of the revenue meters will reach the end of their typical useful life by 2030 if no replacement action is taken. A phased replacement of Hydro Ottawa's meters is therefore being proposed to mitigate against the risk of failure and to unlock the incremental benefits associated with AMI 2.0 technology. To this end, Hydro Ottawa has proposed to invest $86.4M in the Metering Renewal Program over the 2026-2030 rate application period. Further details related to the Metering Renewal Program are provided in Section 5 of Schedule 2-5-7 DSP - System Renewal Investments. This wide scale deployment will require significant incremental meter technician and project engineers and coordinators to support both project oversight and execution.

3. **Grid Modernization - Enabling the Energy Transition:** *Focusing on modernizing the grid through strategic technology adoption and infrastructure upgrades to enable the energy transition, facilitate customer participation, and optimize DER integration, thereby enhancing grid capabilities and efficiency.*

The resource related growth in this investment priority is attributed to new and growing activities related to grid modernization, namely in Distribution System Observability, Advanced Flexible Load Management, Grid Technologies, Control and Optimization, and Field Area Network programs.

Distribution System Observability

Distribution System Observability is the program under the Grid Modernization investment priority that is the most resource intensive. It is a new budget program introduced to enhance grid reliability, flexibility, resilience, and customer engagement, while promoting sustainability through remote feeder control. This will be achieved by installing 100 automated overhead switches and 25 automated underground switches. The deployment of this program will increase resourcing requirements predominantly for PLTs, PCTs, station technicians, and grid technicians. The program development will require additional resourcing from the distribution engineers (planning, protection and control (P&C) and standards) and the oversight and execution will require project coordinators.

Other Programs

The other programs (Distribution Enhancements, Grid Technologies, Control and Optimization and Field Area Network) include key investments in operations technology, software and field devices and are essential to enabling future system operator models, wide scale deployment of DERs and enhanced customer programs. Resource requirements for the activities associated with the remainder of the programs have largely been fulfilled through the incremental headcount associated with Grid Modernization identified in Section 3.1.1. As these programs mature and new operational processes and activities related to network model management and other advanced planning and forecasting tools emerge, it is anticipated that new roles which are not yet defined will be required to fill these unique skillsets. Hydro Ottawa is anticipating a growing need for engineers and technicians to maintain and oversee the network model once in an operational state. There is also an anticipated need for advanced system operators with an enhanced skillset to oversee the expanded control room related activities. These roles are not yet defined, however Hydro Ottawa will work within the approved envelope to fill these positions as the specific duties are established.

4. **Enhancing Grid Resilience:** *Focusing on enhancing grid resilience by proactively upgrading infrastructure and implementing measures to protect against increasingly frequent and intense severe weather events and cyber threats.*

The Distribution System Resilience Program is a new budget program designed to enhance the resilience of the electricity distribution network against the increasing frequency and intensity of adverse weather events. Over the five years, $36.3M will be invested in strategic distribution system resilience for feeder undergrounding of vulnerable OH sections, line reinforcement, feeder reconfiguration, station egress undergrounding and line relocations. This new program will require incremental project coordinators and engineering technologists to design and oversee the projects and PLTs and PCTs for field implementation.

3.1.2.3. Growth in Operating, Maintenance and Administration

The Operations, Maintenance and Administration (OM&A) program is also undergoing a significant expansion, with new resourcing requirements to address the increasing complexity of assets that are aging and deteriorating at a growing rate. The introduction of new assets, such as Battery Energy Storage Systems and the increased levels of automated field devices are also driving both new and expanded maintenance activities.

Testing, Inspection, and Maintenance (TIM) Programs

Hydro Ottawa's TIM program is focused on maintaining the reliability, safety, and performance of the distribution system through systematic evaluations and preventative maintenance of overhead and underground assets. Through 2026-2030, Hydro Ottawa is enhancing its Testing, Inspection and Maintenance program by shifting towards a more proactive and technologically advanced approach. Some key changes include increased inspection frequency of assets that have reached their typical useful life and the implementation of drone technology in support of advanced inspections of overhead infrastructure. In both circumstances, the enhancements will strengthen Hydro Ottawa's condition information and serve to advance its condition and

risk-based decision-making framework. These new and expanded programs will require incremental PLTs, PCTs, distribution engineers and project administrators.

Stations Maintenance

The rate at which Hydro Ottawa's stations (particularly 4kV stations assets) are deteriorating exceeds the pace at which Hydro Ottawa can reasonably intervene. The 4kV EOL Voltage Conversion projects are particularly resource intensive and costly, as described in section 3.1.2.2. In light of this reality and subsequent to the decision in 2023 to defer two voltage conversion projects to the 2026-2030 period, Hydro Ottawa expanded its stations monitoring and maintenance program. Key improvements included advanced diagnostic testing and increased maintenance activities of 4kV assets. Further, unlike distribution assets, stations assets are conducive to remediation activities in the event of a failure. Hydro Ottawa has provisioned for incremental reactive maintenance to support these efforts. The new and expanded programs will require incremental station electricians and technicians, distribution engineers, and project engineers.

Battery Energy Storage Systems:

The integration of BESS into the grid will require new operating and maintenance programs related to specialized upkeep, software and cyber security needs, safety compliance, data analysis, operational complexity, and expanded network maintenance. Although Hydro Ottawa expects to outsource a large portion of the on-going monitoring and maintenance of the systems, the stations team will be required to troubleshoot, isolate, and potentially maintain the batteries in the event of an issue. As such, there will be increased resourcing and specialized training required for stations electricians and technicians.

3.1.2.4. Additional Headcount Growth Considerations

The resourcing considerations mentioned in both the capital and operating predominantly describe the direct labour requirements and do not account for other key resources that are required to support the expanded programs. Additional resourcing requirements also need to be

considered for key functions such as System Operations, Engineering, Contractor Management, Project Execution, and Leadership.

System Operations

The increased capital and maintenance programs will concurrently drive increased activity within the control room. System Planners will see a substantial rise in planning of switching operations related to maintenance, repairs and planned outages, load balancing and contingency analysis. System Operators will likewise see an increase in coordination activities with field crews, other departments, and external entities. Field Operators, responsible for executing the switching operations in preparation for planned work, will also see an increased volume. Over the 2026-2030 period, Hydro Ottawa anticipates the need for 3 additional headcount related to system operations. Of note, Field Operator headcount are not included in this number as they are contemplated within the direct labour analyses.

Engineering

The confluence of grid modernization, increased DER integration, and an aging and deteriorating asset base is placing new and growing demands on the Distribution Engineers that support the development of new programs and the oversight of the implementation and integration of new technologies. Hydro Ottawa added 4 new Distribution Engineers in 2024 in support of the increased volumes related to Large Load Requests and DERs, as described in Section 3.1.1 above. Incremental engineering resource requirements will be required from 2026-2030 to support the following activities:

- **New Technologies and Standards:** Standards Engineers will focus on developing and maintaining standards for new technologies, ensuring their safe and effective integration into the grid. This includes staying abreast of industry best practices and adapting standards to accommodate rapid technological advancements.
- **Large Load Requests and DERs:** The increasing complexity and volume of large load requests, coupled with the rise of DERs like solar panels and battery storage, require

specialized expertise. Planning and P&C Engineers will be dedicated to managing these requests, ensuring efficient integration of DERs and minimizing their impact on grid stability.

- **Evolving Grid Operations:** The grid is undergoing a significant transformation, with higher volumes of two-way power flow and the need for specialized P&C schemes. Grid Modernization and P&C Engineers will focus on adapting operational practices to these changes, ensuring continued reliability and safety.
- **Enhanced Maintenance and Reliability (M&R) Programming:** With the expansion of M&R programs, M&R Engineers will be dedicated to supporting these initiatives. This includes optimizing maintenance schedules, developing new maintenance strategies, and ensuring the effective utilization of data and analytics to improve asset management.
- **Enhanced Data Analytics:** Hydro Ottawa will begin the implementation of Enterprise Asset Management as noted in Attachment 4-1-1(A) - Transition to Cloud Computing, which will require skilled Data Engineers to manage the influx of complex data (master data management). These engineers will be vital for integrating diverse data sources, building robust pipelines, developing efficient data models, ensuring data quality, and supporting advanced analytics. Their expertise will enable Hydro Ottawa to leverage data for real-time monitoring, predictive maintenance, and informed investment decisions, ultimately contributing to a smarter and more resilient electrical grid.

In total, Hydro Ottawa anticipates the need for an additional 12 engineering resources across the 2026-2030 rate period.

Contractor Management and Oversight:

As capital and maintenance programs expand, a significant increase in contracted resources will be required in order to maintain the ratios of contractors to internal positions detailed in Section 3.1.2.1. Hydro Ottawa projects substantial growth in contracted services for PLTs, PCTs, Civil, Electricians, and Meter Technicians from 2026-2030. Successfully managing this influx of contracted resources, which are leveraged through various contracting methods with differing oversight requirements, is crucial. To mitigate potential risks and ensure quality outcomes,

Hydro Ottawa must prioritize contractor onboarding, rigorous review of safety and quality control protocols and results, and meticulous preparation, documentation, and administration of quality assurance procedures. Effective financial administration depends on leveraging quality assurance and control documentation. Moreover, strategic alignment and planning with contracted groups are paramount for optimal program execution. Therefore, additional field and office resources are necessary to support inspection, quality assurance, contract administration, and cost administration of the increased volume of contracted resources. Hydro Ottawa anticipates the need for an additional six resources within Contractor Management and Oversight over the 2026-2030 period.

Project Execution Planning:

The increased volume of capital projects and maintenance activities will drive a significant increase in work estimation, job planning and resource (work) scheduling. Work planners play an invaluable role in ensuring jobs are estimated and planned in a manner that is constructable and that material and resourcing requirements are forecasted as accurately as possible. Accuracy of forecasting and constructability are key components of budget and resource planning. Using this information, Work Schedulers are crucial for forecasting short and long term resource requirements and for scheduling resources in an effective manner. Hydro Ottawa anticipates the need for an additional 4 resources within Project Execution Planning over the 2026-2030 period.

Leadership:

The anticipated substantial increase in trades, technical, and engineering positions necessitates a proportional expansion of Hydro Ottawa's leadership team to ensure safe operations, effective oversight and support of the growing team. This expansion is crucial not only for providing effective people leadership, with a strong emphasis on onboarding, ongoing training, and development to foster employee growth with a younger, less tenured workforce, but also for ensuring strategic oversight of new initiatives. However, this expansion will be implemented strategically, recognizing that not all teams and groups require additional people leaders. Hydro

Ottawa will leverage resource planning and review people leader-to-staff ratios to determine the appropriate level of leadership complement. This will ensure that both new and existing positions are adequately supported and developed, while optimizing the number of people leaders. Hydro Ottawa anticipates the need for an additional 9 Leadership positions over the 2026-2030 period.

3.2. INFORMATION MANAGEMENT & TECHNOLOGY, CUSTOMER BILLING, AND CUSTOMER & COMMUNITY RELATIONS

Information Management & Technology, Customer Billing, and Customer & Community Relations are discussed as one in this sub-section. The two positions in Customer Billing and Customer & Community Relations are technical roles that support the ongoing development of technology platforms associated with those programs. For simplicity and efficiency, these roles are discussed in conjunction with the Information & Technology Program.

Table 7 - New Information Management & Technology, Customer Billing, and Customer & Community Relations Positions

	Bridge Years		Test Years					
	2024	2025	2026	2027	2028	2029	2030	Total
Customer Billing			1					1
Customer & Community Relations			1					1
Information Management & Technology	2		5					7
TOTAL	**2**		**7**					**9**

Table 8: New Information Management & Technology, Customer Billing, and Customer & Community Relations Positions by Workforce Segment

	Bridge Years		Test Years					
	2024	2025	2026	2027	2028	2029	2030	Total
Designated & Technical Professionals	1		5					6
Front Line Leadership			1					1
Senior Management	1		1					2
TOTAL	**2**		**7**					**9**

Hydro Ottawa's Information Technology (IT) Division plays a crucial role in supporting the organization's digital transformation and ensuring the reliable delivery of power to Canada's capital. Given the criticality of this service, cyber security is a top priority. During the 2021-2023 period, the Division maintained a flat headcount while strategically realigning existing positions to facilitate the digital strategy. Looking to the future, to effectively support new and evolving initiatives, and to bolster its cyber security posture, additional IT and Operational Technology (OT) positions are now required across multiple programs as noted in Tables 7 and 8 above.

The Organization engaged Gartner to conduct a benchmarking exercise on IT spend. The benchmark analysis determined that overall IT spend was slightly lower than the peer group. IT staffing was on par or with the peer group for IT resources. However the benchmarking exercise was not conducted for OT resources and does not account for workforce required to support a growth in complex OT systems. Over the next five years of the rate period significant investments are expected to support the grid modernization plan such as Control Systems, AMI 2.0 and Enterprise Asset Management. The incremental headcount proposed is focused on supporting the implementation of these programs.

While the core IT/OT group will increase by seven staff members, a total of nine new IT positions are being added across the organization to address the following needs:

- **Cyber Security:** With the increasing reliance on technology and the expanding IT/OT landscape, strengthening cyber security posture is paramount to protect critical infrastructure and sensitive data from evolving threats. This is highlighted in Schedule 2-5-1 - Distribution System Plan Overview. Key projects such as Grid Modernization, AMI 2.0 and EV Everywhere will see a large expansion of OT including but not limited to sensors, advanced meters, upgraded sub stations, interconnected devices, increased remote access capabilities and real-time services. Ensuring the attack surface is managed correctly for the various OT networks is of vital importance and the cyber security team must be adequately staffed to meet this requirement. Currently there is only one Cyber Security Engineer dedicated to OT and given the demand to support the Distribution System Plan and its strategic investment priorities, an increase in resources is required to manage cyber security demand. In addition, the *OEB's Ontario Cyber Security Framework,* effective October 1, 2024, mandates more stringent cyber security requirements that must be met. These initiatives and requirements highlight the need for dedicated cyber security expertise to proactively mitigate risks and ensure the resilience of Hydro Ottawa's systems. Hydro Ottawa has a strategic vision for cyber security that provides governance and oversight into cyber security goals. This is further highlighted by program roadmaps that are derived from organization risks, recommendations from both internal and external parties engaged on a regular basis to provide a reflection point of Hydro Ottawa's program progress, gaps, and to improve overall program maturity. Additional headcount will be required in order to meet these program objectives.
- **Cloud Computing:** The ongoing migration to cloud-based solutions introduces new complexities and requires specialized expertise in cloud infrastructure, security, and management. While some existing on-premise IT resources can be redeployed, the shift to cloud computing demands new skillsets and a deeper understanding of cloud technologies to ensure seamless integration, optimize performance, and maintain security in this dynamic

environment. The addition of a position in this area will support improved reporting and data analysis needed to support grid modernization.

- **Enhanced Customer Experience & Artificial Intelligence:** Improving the customer experience relies heavily on digital platforms and technologies, including the strategic use of Artificial Intelligence (AI). An additional IT position within the Community and Customer Relations program will focus on developing and supporting customer-centric solutions, including online self-service portals, mobile applications, personalized communication channels, and AI-driven enhancements to customer service and engagement. Leveraging AI for efficiency and productivity gains in the customer experience area requires specialized skills in AI development and implementation. In addition, AI models will need to be developed for grid modernization and operational improvements.
- **Meter to Cash:** While the core functions of meter reading and billing have been in place for many years, the meter-to-cash process is becoming increasingly complex. The integration of smart meters, advanced metering infrastructure (AMI), and data analytics platforms requires specialized IT expertise. An additional IT position within the Customer Billing program is needed to support the AMI 2.0 program and will focus on managing data flows, ensuring system compatibility, and leveraging data insights to optimize billing accuracy and efficiency. This role will also support evolving customer expectations and regulatory requirements for enhanced capabilities in areas such as real-time data access, flexible billing options, and outage management.
- **Data and Systems Integration and Program Management:** Effective data management and systems integration are essential for operational efficiency and informed decision-making. This includes managing the increasing number of complex technology projects and initiatives. Additional IT staff, including program management expertise, is needed to support Operational Technology projects, ensuring they are delivered on time and within budget, and that systems integrate seamlessly to support business needs. This requires specialized skills in project planning, execution, risk management, and stakeholder communication.

The seven new positions within the core IT group include new skill sets in specialized roles such as Cloud Engineers, Cyber Security Engineers, IT Program Managers, and Systems Engineers. The phased approach to adding these positions is as follows:

- **2024:** Two new positions were added to address immediate needs, with a particular focus on cyber security and cloud infrastructure.
- **2026:** Five new positions will be added to further enhance cyber security capabilities, support AI initiatives, lead and manage the growing demand for technology projects, and provide expertise in systems architecture and engineering.

These additional positions will enable Hydro Ottawa to:

- **Bolster Cyber Security Posture:** Strengthen cyber security defenses to protect critical infrastructure and sensitive data from evolving threats
- **Enhance Customer Experience:** Develop and support digital platforms that improve customer satisfaction and engagement
- **Evolve Employee Experience:** Implement technologies that enhance employee productivity and collaboration
- **Improve Productivity and Automation:** Develop and deploy AI and automation solutions to streamline processes and improve efficiency

Investing in these additional IT resources is essential to ensure the organization can effectively implement and leverage technology to achieve its strategic goals, improve operational efficiency, enhance customer satisfaction, and maintain the highest level of cyber security for critical infrastructure serving Canada's capital.

3.3. SAFETY, ENVIRONMENT & BUSINESS CONTINUITY

Table 9: New Safety, Environment, & Business Continuity Positions by Workforce Segment

	Bridge Years		Test Years					
	2024	2025	2026	2027	2028	2029	2030	Total
Designated & Technical Professionals	1		4					5
Senior Management	1				1			2
TOTAL	**2**	**0**	**4**	**0**	**1**	**0**	**0**	**7**

Hydro Ottawa's Safety, Environment, and Business Continuity program is critical to maintaining the organization's commitment to safe, sustainable, and resilient operations. The program encompasses a wide range of activities, including occupational health and safety, public safety, safety training, environmental stewardship, and business continuity management. As Hydro Ottawa grows and faces new challenges, increased staffing is essential to ensure the continued effectiveness of this vital program.

Several key factors drive the need for additional staff:

- **Increased Safety Training Requirements:** As the organization grows, so do the training requirements to ensure employee and public safety. Hydro Ottawa is committed to providing comprehensive safety training, with goals exceeding industry standards for both general safe work practices and specialized trades training. The increasing complexity of the work performed by employees, coupled with a growing and evolving workforce, necessitates additional resources to develop, deliver, and manage this essential training. This includes compliance training, which increases substantially with the hiring of new apprentices, and specialized training to address the evolving needs of the organization. Table 10 below displays the annual hours of safe work practice training that Hydro Ottawa's trades

employees participate in. Hydro Ottawa's annual target for this training program is 40 hours per trades employee. This ensures ongoing learning and safe practices when working in the field including introduction and safe handling of new tools, equipment and technologies. The number of training hours per employee is increasing due to the volume of hiring, including new apprentices, who require a significant amount of safe work practice training, including compliance training, to prepare them for field work.

Table 10 - Annual Safe Work Practice Training Hours per Trades Employee

Year	2020	2021	2022	2023[5]	2024
Safe Work Training Hours per Trades Employee	20.3[6]	44.3	53.0	51.3	76.5

- **Enhanced Business Continuity Management:** The increasing severity, frequency and impact of extreme weather and other disruptive events requires Hydro Ottawa to expand and strengthen the organization's overall resilience[7]. Staffing increases focused on business continuity will support effective preparation through program and exercise framework enhancements, which will in turn increase the organization's readiness to respond effectively to the range and type of events facing the organization which may impact customers. Hydro Ottawa initiated these enhancements in 2024, with the introduction of two positions focused on the type of event and response that is most likely to impact customers. A renewed and expanded Electricity Emergency Response Plan has been launched and continues in 2025, which includes the introduction of a more robust exercise framework. This work is necessary to ensure that Hydro Ottawa is prepared to restore service as safely, rapidly, and effectively as possible through these more frequent weather events, including when the organization is impacted by compounding events such as the COVID-19 pandemic and labour disruptions. The hazards and risks that Hydro Ottawa is facing has evolved, and it is imperative the

[5] 2023 hiring was impacted by a 84-day strike during which training was paused. The impact of this is an increased training effort in 2024.
[6] The amount of training conducted in 2020 was impacted by the COVID-19 pandemic.
[7] A list of recent extreme weather events is discussed in Section 3.4 of Schedule 1-2-3 - Business Plan.

organization continues to adapt its approach to business continuity to mitigate these risks and the impact to customers.

- **Growing Sustainability Initiatives:** With the impact of climate change, in addition to enhancing Hydro Ottawa's business continuity posture, the organization has embraced the need to reduce carbon emissions, with decarbonization forming a key aspect of the company's strategic direction. As outlined in Hydro Ottawa's 2021-2025 Strategic Direction: "Hydro Ottawa is striving to take action that measures up to the magnitude and urgency of the challenge at hand." To take this action, the organization requires an increased effort and focus to identify and implement solutions to achieve net zero targets which in turn requires staff to conduct the work. Taking action on climate change is an expectation of the community in which Hydro Ottawa operates, with the City of Ottawa setting its own emission reduction goals, and is a necessity with federal targets for a net zero electricity grid and economy.

To effectively address these increasing demands, the Safety, Training, Environment, and Business Continuity program requires seven additional position staff members: two in 2024, four in 2026, and one in 2028. This phased approach will allow the program to strategically scale its capacity to meet the organization's evolving needs.

These additional positions will enable Hydro Ottawa to:

- **Design, Enhance and Deliver Essential Safety Training:** Ensure comprehensive and effective safety training programs are developed/procured, and delivered to employees, to meet the growing needs of a changing workforce, including a younger and less tenured demographic.
- **Strengthen Business Continuity:** Improve organizational resilience and emergency preparedness through enhanced planning, exercises, and response capabilities. The two new positions in 2024 fall within this program area. Hydro Ottawa could not wait until 2026 to bring in new capacity in business continuity management given the increasing prevalence of

extreme weather events, and potential cyber security disruptions, particularly as the age and tenure of the workforce is trending downward. More detail on Hydro Ottawa's business continuity management response to events can be found in Section 6.2 of Attachment 4-1-3(E) - Health, Safety and Environmental Compliance, Sustainability and Business Continuity Management.

- **Advance Sustainability Initiatives:** Implement programs and practices to reduce Hydro Ottawa's carbon footprint and achieve its net-zero targets.
- **Improve Environmental Performance:** Minimize the environmental impact of Hydro Ottawa's operations through proactive environmental stewardship.

Without this increase in headcount, Hydro Ottawa risks gaps in critical safety training, reduced business continuity planning, and delays in achieving its sustainability goals. These potential deficiencies could lead to increased safety risks, reduced organizational resilience, and a failure to meet environmental commitments. Investing in these additional resources is essential to ensure Hydro Ottawa maintains its commitment to safe, sustainable, and resilient operations, and continues to provide reliable service to its customers. This is particularly important as Hydro Ottawa's workforce demographics are trending towards a younger and less tenured workforce. Investing in safety, training, and business continuity promotes safe practices and procedures and maintains productivity levels in a workforce that has fewer years of experience.

3.4. HUMAN RESOURCES

Table 11 - New Human Resources Positions by Workforce Segment

	Bridge Years		Test Years					
	2024	2025	2026	2027	2028	2029	2030	Total
Designated & Technical Professionals			1					1
Operational Support & Administration	1		1					2
TOTAL	**1**		**2**					**3**

Hydro Ottawa's Human Resources (HR) program is essential to supporting the organization's strategic priorities by ensuring a skilled, engaged, and high-performing workforce. The program encompasses a wide range of areas, including recruitment, compensation and benefits, employee and labour relations, wellness, organizational development, talent management, internal communications, diversity and change management. Through the implementation of policies, frameworks, and programs, the HR program ensures Hydro Ottawa has the right talent, skills, and organizational capacity to meet its objectives. It supports employees in adapting to industry and technological changes while maintaining a safe, healthy, and inclusive work environment.

As Hydro Ottawa continues to grow and evolve, the demands placed on the HR program have increased significantly. The primary factors driving the need for additional HR staff are recruitment and onboarding, employee and leadership support and development, as well as the evolution of HR technology.

Increased Recruitment and Onboarding: Headcount growth across Hydro Ottawa, coupled with internal movements and departures, requires a substantial increase in recruitment and onboarding workloads. Filling new positions created as part of Hydro Ottawa's workforce plan

necessitates increased HR resources dedicated to talent attraction, acquisition and integration. In recent years, Hydro Ottawa has experienced a high degree of attrition[8] as well as internal movements, either through promotion, lateral job changes, or temporary assignments[9]. While filling positions internally is positive from an employee development and retention perspective, it does not reduce the recruitment workload as a vacancy is then created in the employee's original position. This has placed a greater burden on Human Resources' recruitment efforts[10].

Hydro Ottawa has already taken some important steps towards addressing these challenges, such as the development of a new Employee Onboarding Program titled "Wired for Success: Powering Up New Talent". The program creates a structure that new hires follow when they first join the company and includes a digital self-service guide, networking, development opportunities, and one-on-one time with their direct supervisor. The structured program is designed as a journey that guides the new employee through their first 18 months of employment at Hydro Ottawa. Hydro Ottawa also added one resource in Human Resources in 2024 to address and support the growing recruitment workload.

Increased Employee and Leader Support: As the organization's headcount increases, so does the demand for HR support for employees and people leaders. This includes increased activity in areas such as the HR Service Centre and Employee and Labour Relations, requiring additional staff to provide timely and effective support. As discussed in Attachment 4-1-3(B) - Workforce Planning Strategy, Hydro Ottawa is increasing its headcount for front line leadership and senior management by 10 and 11, respectively. This increase translates into increased demand for HR services, as people leaders seek support for recruitment, employee development, labour relations, performance management, program/project support, and more.

[8] Annual attrition has been relatively high for a number of years, peaking in 2023 with a 9.21% attrition rate. See Attachment 4-1-3(B) - Workforce Planning Strategy for more information.
[9] The number of positions filled through internal movements has been growing annually, with only 15 cases in 2019 up to 62 cases in 2024. More information can be found in Section 2.1.3 of Attachment 4-1-3(B).
[10] Hydro Ottawa has had a consistently high amount of external job postings as discussed in Section 4.1 of Attachment 4-1-3(B).

To effectively address these increasing demands, the Human Resources program requires three additional staff members: one in 2024 and two in 2026. This phased approach will allow the HR team to strategically scale its capacity to meet the organization's evolving needs.

These additional HR staff members will enable Hydro Ottawa to:

- **Effectively Manage Workforce Growth:** Ensure timely recruitment and onboarding to fill critical roles and support the organization's expansion. The one new position that was added in 2024 was created to support workforce growth, given the increasing volume of recruitment workload Hydro Ottawa is already experiencing, and to ensure there is sufficient recruitment capacity to execute the staffing plan into the future. Additionally, Hydro Ottawa is already experiencing a high recruitment workload driven not only by workforce growth, but also driven by increased attrition and internal movements, as discussed in Section 2.1.3 of Attachment 4-1-3(B) - Workforce Planning Strategy.
- **Enhance Employee and Leader Support:** Provide timely and effective support to employees and people leaders across all HR functions.
- **Human Resources Technology:** Support the ongoing deployment and enhancements of platforms to ensure HR services are delivered to employees efficiently and that access to the information employees need is available any time, anywhere, on any device.
- **Strengthen Employee and Labour Relations:** Proactively address employee and labour relations matters to maintain a positive and productive work environment.
- **Support Strategic Priorities:** Contribute to Hydro Ottawa's strategic priorities by ensuring the organization has the workforce, skill development, and organizational capacity to achieve its objectives.

Without this increase in HR capacity, Hydro Ottawa risks operational inefficiencies that could impact its ability to execute its 2026-2030 plans. Delays in filling critical roles that bring new and in demand skill sets, and gaps in employee and labour relations support could arise, not only affecting workforce readiness but also introducing potential safety and productivity risks.

Investing in HR ensures that Hydro Ottawa can effectively manage workforce growth, sustain employee development and engagement, and maintain a high standard of operational excellence. It is crucial for supporting the company's overall success and ensuring it can continue to deliver reliable service to its customers and meet the growing demands for electricity in the community.

3.5 FINANCE

Table 12 - New Finance Positions by Workforce Segment

	Bridge Years		Test Years					
	2024	2025	2026	2027	2028	2029	2030	Total
Designated & Technical Professionals	1			1	1	1		4

While the Finance group's overall headcount has remained relatively stable since 2016, the nature and demands of its work have changed significantly. Between 2016 and 2023, three positions were reallocated from Finance to support growth in other areas of the organization, demonstrating a history of internal efficiency and resource optimization. However, the increased workload, complexity, and evolving requirements now necessitate an increase in Finance staff to ensure the group can effectively support the organization's strategic goals and operational needs.

Several factors contribute to this increased demand on Finance resources:

- **Increased Capital and OM&A Activity:** The organization's capital program is nearly doubling in size as described in Section 3.1 above. This growth, coupled with increased operating and maintenance activities, translates to a substantial increase in financial transactions requiring processing, analysis, and reporting.
- **Increased Complexity:** New initiatives such as cloud computing and non-wires alternatives programs introduce significant accounting complexity. For example, cloud computing

acquisitions now require in-depth analysis against complex accounting rules and the preparation of supporting memos for each acquisition. These complexities require specialized skills and significantly increase the time and resources required from Finance staff.

- **Evolving Reporting Requirements:** The emergence of new Environmental, Social and Governance (ESG) reporting standards and evolving regulatory reporting requirements necessitates additional resources within Finance. The organization needs to ensure it has adequate processes for data collection, analysis, and reporting to meet these requirements and support audits. Further, Finance plays a key role in monitoring and ensuring transactions are accounted for properly in accordance with these evolving standards and regulations.
- **Financial Resilience:** The organization faces escalating complexity and change driven by both increasingly severe and frequent extreme weather events and an evolving risk profile. This heightened complexity necessitates robust financial oversight, including detailed accounting for storm-related costs, and demands strengthened internal controls, policies, and staff readiness.

While efficiency gains have been achieved through software and automation tools like Esker and Google Workspace, these are limited as most new software requires staff to ensure master data is correct as well as to ensure benefits are realized through reporting, etc (system subject matter experts). The deferral of the Enterprise Resource Planning (ERP) program has also delayed the realization of further efficiency improvements. Certain tasks and processes, particularly those related to complex analysis and decision-making, still require significant staff time and cannot be fully automated.

To address immediate escalating complexity and demands, one staff member was urgently needed in 2024. Subsequently, one staff member in each of 2027, 2028, and 2029 is crucial to ensure the Finance program can effectively support the organization's strategic goals and operational needs. This increase will enable the group to:

- Maintain accurate and timely financial reporting
- Ensure compliance with accounting standards and evolving regulatory requirements
- Provide effective support to operational teams
- Strengthen internal controls and risk management
- Adapt to the rapidly evolving complexities of the business environment

This measured increase in staffing is essential for the Finance function to continue fulfilling its critical role in the organization's financial governance and operational success.

3.6. REGULATORY AFFAIRS

Table 13 - New Regulatory Affairs Positions by Workforce Segment

	Bridge Years		Test Years					
	2024	2025	2026	2027	2028	2029	2030	Total
Front Line Leadership	1							1
Operational Support & Administration	1							1
TOTAL	**2**							**2**

Hydro Ottawa's Regulatory Affairs Group plays a critical role in navigating the complex regulatory landscape and ensuring the organization's compliance with evolving requirements. The Group provides information, direction and guidance to all divisions on the financial, economic, political, and operational implications of current and proposed codes, regulations, and market changes. Regulatory Affairs is also instrumental in defining opportunities and mitigating risks through proactive advocacy and recommendations on potential business process changes.

Over time, the demands placed on Regulatory Affairs have increased significantly. Rate application options, filing requirements, and commitments stemming from proposals, settlements, and mandated outcomes have grown in complexity and volume. Historically, the

Group has managed these increased demands by relying on existing staff and, for the last two rate applications, hiring temporary support. This approach has proven unsustainable and creates confusion of responsibilities, causes starts and stops in critical work as resources are shifted to other priorities, and hinders continuity, planning, and management of commitments and future applications.

The expanding scope of regulatory requirements, including framework changes, compliance monitoring, and ongoing application management, necessitates an increase in regulatory capacity. Without this, effective management of strategic projects, such as compliance programs and policy work, remains challenging.

To address these challenges and ensure the Group can effectively fulfill its critical mandate, two new full-time permanent positions were required in 2024. Hydro Ottawa could not wait until the next rate period to add these positions as the capacity was critically required in support of this current rate filing. These additions will provide dedicated resources to support the following key areas:

- **Rate Application Management:** lead the coordination and preparation of all applications submitted to the Ontario Energy Board, including rebasing rate applications. This dedicated focus will ensure continuity, improve planning, and enhance the management of commitments and future applications.
- **Regulatory Compliance Program:** oversee the regulatory compliance program, allowing for a more organized and strategic approach to monitoring alignment with regulations, codes, and guidance, while also supporting corporate strategic goals by identifying opportunities and mitigating risks.
- **Policy and Reporting:** Increased focus on policy initiatives, enhanced reporting and benchmarking, and ability to provide better support and reporting to leadership, allowing for more specialized attention to these critical functions.

The addition of these two new positions will provide continuous support and focus on outcomes, commitments, and planning of rate setting applications. It will also enable a more proactive and strategic approach to regulatory compliance, ensuring that Hydro Ottawa is well-positioned to navigate the evolving regulatory landscape. Additionally, some work will be transitioned from Rates and Revenue to Policy and Compliance to manage the increased workload required to support operations and billing. This strategic investment in Regulatory Affairs will ensure that Hydro Ottawa can effectively manage its regulatory obligations, mitigate risks, and capitalize on opportunities within the changing regulatory environment.

Attachment 4-1-3(D) - OEB Appendix 2-K - Employee Costs

(Refer to the attachment in Excel format)

HEALTH, SAFETY AND ENVIRONMENTAL COMPLIANCE, AND SUSTAINABILITY AND BUSINESS CONTINUITY MANAGEMENT

1. INTRODUCTION

As a utility with deep roots in the community, established through more than 100 years of providing an essential service to homes and businesses, Hydro Ottawa is responsible for delivering electricity in a manner that protects the health and safety of employees, contractors, customers, and the broader community, while also being a good steward of the shared environment. Hydro Ottawa is fully committed to meeting this responsibility and requires adequate funding and staffing for the Health, Safety and Environment, and Business Continuity Management programs to continue to be successful in doing so in the 2026-2030 rate period.

One of the key ways in which Hydro Ottawa seeks to maximize value across the customer experience is through a rigorous commitment to sustainability and the implementation of sustainable business practices. In delivering Hydro Ottawa's 2021-2025 Strategic Direction[1], heightened emphasis is placed on sustainability of the workforce, technologies, processes, operations and environment with a particular focus on the generational challenge of climate change. This positions Hydro Ottawa to meet the needs of an evolving electricity marketplace, and enhance its responsiveness to customer and stakeholder priorities.

Hydro Ottawa's 2021-2025 Strategic Direction features strong links to the health and safety, environment and business continuity management programs and objectives, as evidenced by the areas of focus related to: (i) achieving carbon reduction and net-zero emissions, (ii) enabling sustainable business practices, (iii) growing the utility's social license to operate, (iv) ensuring organizational capacity and (v) delivering best in class customer service.

[1] Hydro Ottawa 2021-2025 Strategic Direction

2. EMPLOYEE SAFETY

At the core of Hydro Ottawa's business is the fundamental commitment to protecting the health and safety of employees, contractors and the public. The internal responsibility system is the foundation of occupational health and safety in Ontario, and at Hydro Ottawa. This model defines the roles and responsibilities for all parties in the workplace, including for those that have decision-making or financial authority for the organization.

2.1. INTERNAL RESPONSIBILITY SYSTEM

The internal responsibility system is entrenched in the organization as both a general philosophy of shared accountability, and as a direct reflection of the specific roles and responsibilities required by legislation and regulations. Building upon this basic model, Hydro Ottawa has a corporate Occupational Health, Safety, and Environmental (OHSE) Accountability Program which details a number of specific OHSE activities required by each party in the workplace, in addition to their job-specific duties.

Further strengthening the internal responsibility and accountability model is the OHSE Management Framework – a structured system of management review, discussion, and recommendation involving employees from the Supervisor to the Executive levels. In addition to oversight at each level of management, Hydro Ottawa has a multi-workplace Joint Health and Safety Committee (JHSC) which functions within a mandate established by the Terms of Reference approved by the Ministry of Labour, Immigration, Training and Skills Development. This mandate includes inspection, recommendation, and worker representation functions for the various occupations and workplaces at Hydro Ottawa.

As part of the OHSE Management Framework, Hydro Ottawa exercises due diligence and complies with legislative and regulatory requirements through the following work activities:

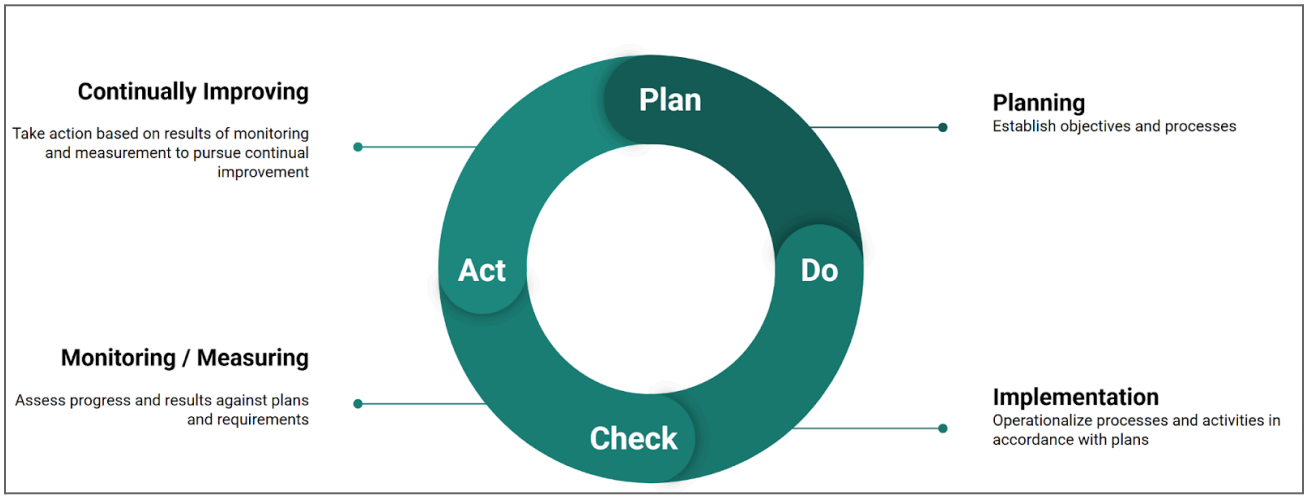
- Establishing instruction, training, and orientation programs for operational areas;
- Auditing or reviewing the workplace for foreseeable health, safety, and environmental risks;

- Developing and maintaining policies, programs, procedures, processes, and work instructions to protect workers and the environment against risks;
- Actively demonstrating a strong, sustainable level of commitment to the health and safety of workers and to minimizing harm to the environment by reviewing regular reporting on the operation of the OHSE programs to identify trends, take action and make improvements, particularly incidents and cases of non-compliance with legislation and regulations; and
- Maintaining documents and records via a formal document/records management system.

2.2. INTEGRATED OCCUPATIONAL HEALTH, SAFETY AND ENVIRONMENT MANAGEMENT SYSTEM

Hydro Ottawa utilizes a structured focus on compliance, together with a formal, documented approach to continual improvement, to ensure that the utility's OHSE programs are current, effective, and well-managed. This approach has been applied through the adoption of an integrated OHSE management system that is third party audited and registered to the ISO 14001 Environmental Management Systems Standard, and the ISO 45001 Occupational Health and Safety Management Systems Standard. Both of these internationally recognized Standards are based on the principles of planning, implementing, monitoring, measuring, and pursuing continuous improvement in Hydro Ottawa's OHSE programs and performance.

Figure 1 - Hydro Ottawa's Approach to Continual Improvement



The utility's integrated OHSE management system includes program elements on risk management, legal requirements, roles and responsibilities, competence and training, communication and consultation, document and record management, emergency preparedness and response, compliance evaluation, investigation and corrective action processes, and audit and management review processes.

In accordance with Hydro Ottawa's focus on continual improvement, the OHSE management system was updated to meet the requirements of the revised ISO environmental standard in 2018, and the new ISO 45001 health and safety standard in 2021.

2.3. SAFETY TRAINING

Training is not only a legislative requirement under the *Occupational Health and Safety Act* and other key statutes and codes that govern Hydro Ottawa, but also contributes to higher employee competence and efficiency, and is critical to delivering safer operations. Over the past five years, Hydro Ottawa provided an average of forty-nine hours of safe work practices training annually for all trades employees whose work is carried out in higher hazard environments, and an average of eighteen hours for all employees.

Training requirements are tailored to be responsive to internal and external demands. Internal drivers include the increasing training needs that accompany apprenticeship programs, younger workers and new entrants to the electrical utility sector. External drivers include the increase in legislated health and safety-related education and training in the province of Ontario (both the initial training required and the mandated training refreshers). In recent years, legislative changes related to worker and supervisor knowledge of the *Occupational Health and Safety Act*, the new Working at Heights training standard, new requirements for naloxone kits and automated external defibrillators (AEDs) in the workplace, and new requirements for the management of excess soils have all placed additional cost pressures on Hydro Ottawa in both direct program/training development and delivery, and loss of productive time. This pressure is expected to continue as regulators continue to develop and mandate additional requirements and training standards over the next five years.

2.4. CONTRACTOR MANAGEMENT

The importance of safety in Hydro Ottawa's operations extends beyond its own employees to include contractors who perform work on the utility's behalf. Continued use of contractors is required to meet Hydro Ottawa's construction, maintenance and other needs on an ongoing basis. Safe, efficient, and high-quality performance from contractors is essential to the delivery of electricity to the utility's customers. To effectively manage projects involving contractors, Hydro Ottawa utilizes a project management methodology and a Contractor OHSE Management Program, which align project planning and implementation activities as they relate to contractors and sub-contractors.

Hydro Ottawa ensures robust due diligence in relation to contractor safety and performance through a partnership with an external provider of contractor OHSE management pre-qualification and compliance monitoring services. This partnership operates through a shared cost subscription-based model, with fees borne by both Hydro Ottawa and its contractors. This partnership provides a more comprehensive and cost-effective program that has delivered automation of previously manual processes; provides contractor performance

monitoring, benchmarking and trending capabilities; and the ability to perform more in-depth tracking and analysis of contractor safety programs, worker training, competencies, and work performance.

Hydro Ottawa continues to identify ways to leverage this partnership to further enhance the quality and efficient use of contractor resources. For example, Hydro Ottawa has expanded the use of detailed on-site audits to include all of its electrical and civil construction contractors, to verify that their documented safety programs are implemented at the working level; and has recently implemented an online module for the recording and monitoring of worker training and competencies, replacing a much less efficient paper-based process. This approach to continual improvement in contractor OHSE management is expected to continue over the 2026-2030 period.

2.5. SAFETY PERFORMANCE - PLANNING, MONITORING AND CONTINUAL IMPROVEMENT

Safety planning, monitoring, and continual improvement at Hydro Ottawa are undertaken through workplace/worksite inspections, tailboard conferences, jobsite coaching, pre-construction meetings, audits, and investigations of incidents, injuries, and hazards/near misses. These are critical activities which support safety performance at Hydro Ottawa.

In 2020, Hydro Ottawa implemented a new cloud-based OHSE software solution to automate the manual paper-based processes and workflows associated with these and other OHSE activities. This digital solution provides enhanced reporting and analytics functionality, allowing Hydro Ottawa to more efficiently and effectively identify and report on the findings and follow-up actions resulting from safety performance management activities. Enhanced analytics have equipped Hydro Ottawa to make more informed and timely decisions with respect to additional OHSE training, communications, and programming needs. Further leveraging this software, Hydro Ottawa is piloting an electronic tailboard, a key job planning tool, for adoption across the utility in the next year. For further details on Hydro Ottawa's business automation plans, please

see Attachment 1-3-4(B) - Digital Strategy under Schedule 1-3-4 - Facilitating Innovation and Continuous Improvement.

Furthermore, as described in Attachment 4-1-3(B) - Workforce Planning Strategy, Hydro Ottawa's evolving workforce includes a larger share of younger workers, and workers that are new to the electrical utility sector. With a greater proportion of younger workers who do not yet possess the hands-on exposure to the scope and varied aspects of the electrical system in trades where these are key aspects in a worker's skill development, these workers do not yet have experience to identify how the hazards and risks may manifest in all scenarios. To mitigate these risks over the 2026-2030 rate period, Hydro Ottawa must have an enhanced focus on key safety planning activities such as tailboard conferences, safety inspections, jobsite coaching, pre-construction meetings, and independent reviews of work practices is essential in mitigating safety risks.

2.6. SAFETY PERFORMANCE RESULTS

From a comparative perspective, as shown in Figures 2 and 3, Hydro Ottawa's approach to safety showed positive performance results over the past five years, with injury frequency and severity rates at or below the Electricity Canada (EC) Group II[2] averages from 2019-2023, with some exceptions in 2021 and 2023 where some rates were slightly above the Group II average.

[2] Group II is comprised of Electricity Canada member organizations with 301 - 1,500 employees.

Figure 2 - Hydro Ottawa vs. EC Group II: All Injury Frequency Rate (AIFR)

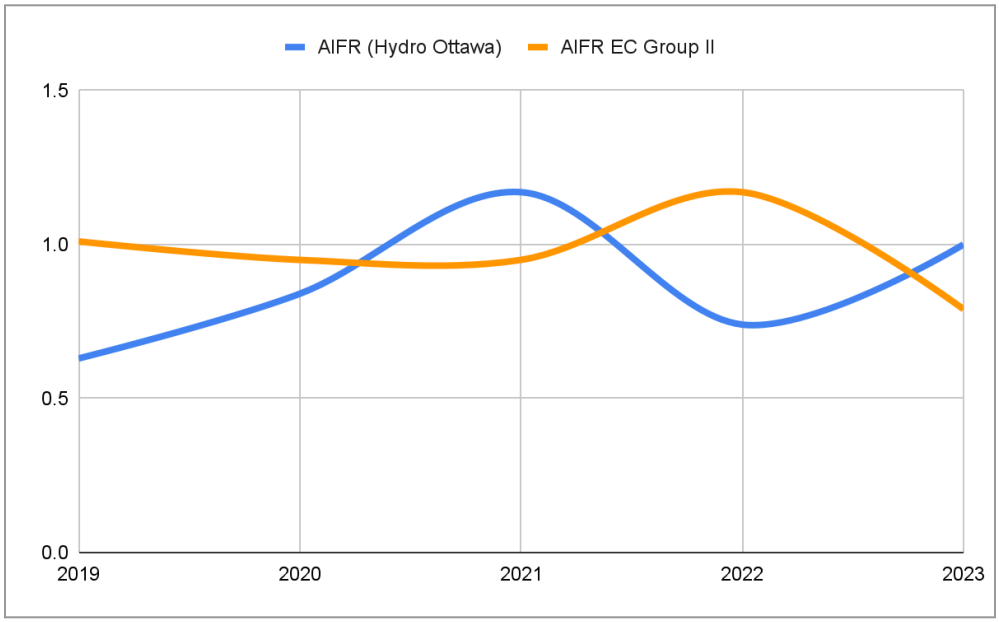
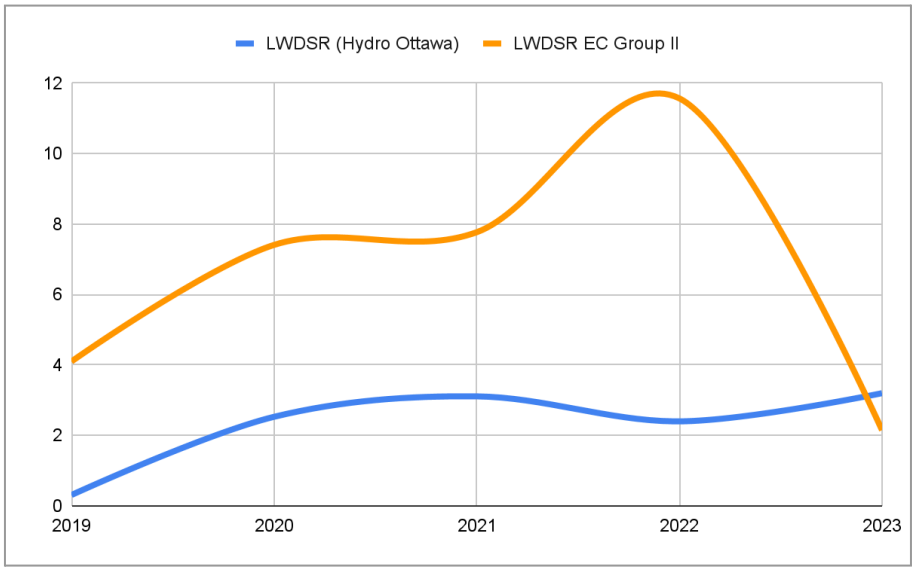
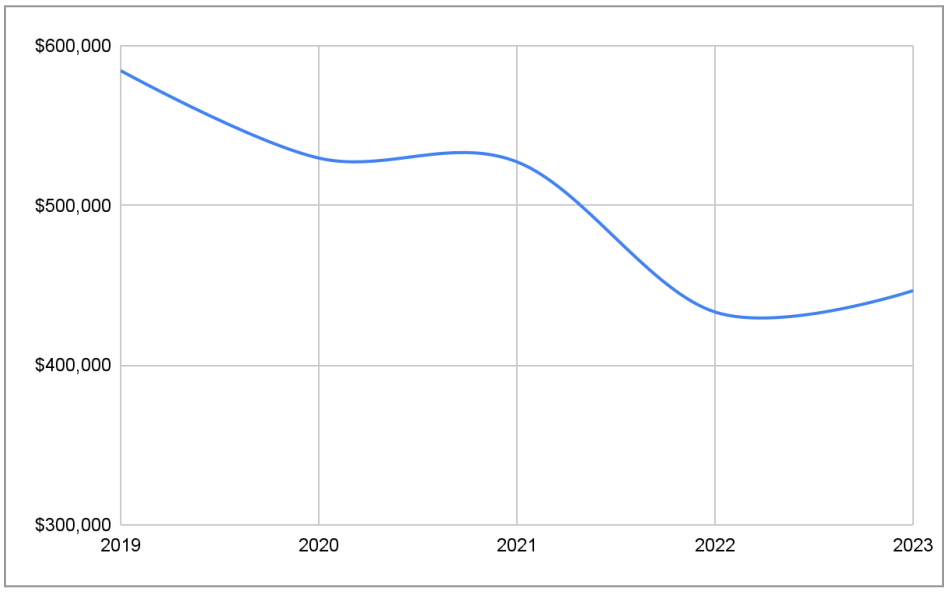


Figure 3 - Hydro Ottawa vs. EC Group II: Lost Workday Severity Rate (LWDSR)



The Workplace Safety and Insurance Board (WSIB) classifies firms into groups based on their activities, and establishes premium rates for each rate group. Hydro Ottawa is classified in the Oil, Power and Water Distribution rate group. Hydro Ottawa's WSIB premium costs from 2019-2023 August are shown in Figure 4 below.

Figure 4 – Hydro Ottawa WSIB Premiums



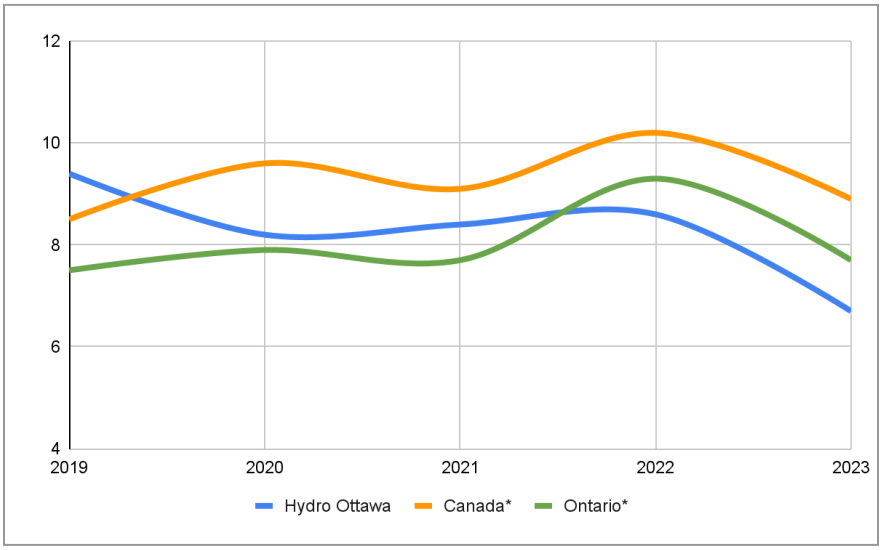
As of January 1, 2020, the WSIB moved to a new industry classification system and rate framework based on the North American Industry Classification System (NAICS). The new rate framework assesses premium rates based on the collective risk profile of all businesses within their class and the class's share of responsibility to maintain the insurance fund. In 2020, businesses were assigned a starting point rate as well as a projected premium rate based on previous rates, claims experience, size of business, NAICS classification, and whether or not they were previously in an experience rating program. Following these changes, Hydro Ottawa experienced a reduction in rates and thus premiums in 2022 and 2023.

3. EMPLOYEE HEALTH AND WELLNESS

Along with the emphasis on safety, Hydro Ottawa recognizes that to have a productive workforce, employees need to be healthy and well. This results in an engaged and resilient workforce, a safe and healthy workplace and a culture where everyone can thrive. Hydro Ottawa has strategies in place to help prevent illness and injury, and reduce the associated lost time, in five areas of focus - Physical Health, Financial Fitness, Healthy Workspaces, Mental Wellbeing and Disability Management and Work Reintegration.

Hydro Ottawa's occupational and non-occupational illness/injury disability management and work reintegration approach ensures that employees return to work as early and as safely as possible, and perform in a meaningful way. As indicated in Figure 5 below, Hydro Ottawa's average number of sick days per employee have remained consistent between eight and ten days over the past five years, with the exception of 2023 when numbers were lower due largely to a labour disruption experienced during that year. Hydro Ottawa's sick leave usage has trended considerably below the Canadian average over the past four years, and has been consistent with the Ontario average for the same time period. A toolkit of resources was developed to support people leaders with leave management, and continued focus on this and workplace accommodations will be required in the 2026-2030 period to further improve upon Hydro Ottawa's sick leave usage.

Figure 5 – Average Usage of Sick Leave Days: Hydro Ottawa vs. Ontario and Canadian Benchmarks[3]



4. PUBLIC SAFETY

4.1. COMPLIANCE

Hydro Ottawa takes the health and safety of the public as seriously as it does the health and safety of its employees. Public safety is considered in all phases of Hydro Ottawa's operations, from facility and equipment design through construction to operations and maintenance. All job planning activities take into account public safety, so that the public is not adversely affected by construction and maintenance activities conducted on Hydro Ottawa property, on customer property, and along the many municipal roadways where infrastructure is located.

To ensure compliance with *Ontario Regulation 22/04: Electrical Distribution Safety*, which requires electrical utilities to design, build, and maintain their distribution infrastructure to recognized standards, Hydro Ottawa participates in multiple Electrical Safety Authority (ESA) due diligence inspections per year, as well as an annual ESA compliance audit. The results of the utility's ESA compliance audits from 2019 to 2023 consistently demonstrated that Hydro

[3] Statistics Canada, Table 14-10-0390-01, Days Lost per Worker in a Year, Illness or Disability.

Ottawa remains compliant in the five key compliance sections examined. In light of the utility's consistently good performance in due diligence inspections (DDIs), in 2020 the ESA reduced the number of annual DDI inspections that Hydro Ottawa is required to participate in from four to three.

4.2. PUBLIC EDUCATION

The other major component of public safety is education. Hydro Ottawa provides highly visible signage warning of hazards on all of its distribution substations and ground level transformers. The utility also works to foster a culture of safety and energy conservation in the community through a number of education and safety awareness campaigns, including the following:

- Hydro Ottawa works with local schools and boards to provide educational presentations covering how electricity works, how to stay safe around it, and how to conserve it at home and at school. Age-appropriate presentations are tailored to two cohorts, kindergarten to grade four, and grades five through eight. As in-person activities were paused during the pandemic, a virtual presentation was designed to ensure continuity, and in 2023 in-person classroom presentations were resumed. Between January 2021 and April 2024, a total of 77,423 kindergarten to grade eight students took part.

Electrical safety awareness campaigns:

- To tie its community safety campaign and elementary school educational programs together, Hydro Ottawa continues to deliver and promote the "Smart as a Fox Whiz Quiz" contest. After participating in one of Hydro Ottawa's in-school safety presentations, students are encouraged to complete the Whiz Quiz to test their newly acquired knowledge. The quiz also educates parents as they assist younger children in navigating through it on the website. More than 4,300 students and their parents have completed the online Whiz Quiz, which is available in French and English.
- From November 2021 to March 2022 Hydro Ottawa ran its *Know Safety, No Accident* campaign to raise customer awareness of electrical safety. The campaign included

newsletters, blogs, web, video, social media, radio and digital advertising, and generated more than 67,000 website visits.

- In support of efforts to rebuild stakeholder trust following the 2022 Derecho storm, a community presentation called “Keeping Ottawa Connected” was developed. It focuses on emergency preparedness, the power outage restoration process, vegetation management, and generator safety, while also touching on energy efficiency. These presentations continue to be delivered to Hydro Ottawa customers either in-person or virtually, through their community associations and respective City of Ottawa Councillor offices. Since launching in 2023, and as of May 2024, close to 750 people had attended twenty sessions, and gained insights on how Hydro Ottawa is integrating learnings from recent storms and better preparing itself for subsequent emergencies.

Additional information on electrical safety and energy conservation is provided on the utility’s website, via social media channels, and through on-bill messages. Please see Schedule 1-4-1 - Customer Engagement Ongoing for additional information.

5. ENVIRONMENT

5.1. ENVIRONMENTAL COMPLIANCE

Hydro Ottawa is subject to federal, provincial, and municipal environmental legislation and regulations and undertakes a range of strategies and activities to ensure compliance with these requirements. The utility proactively monitors multiple information sources for legislative and regulatory changes that may impose additional duties, requirements, or costs on the organization, and revises its practices and procedures as required. Hydro Ottawa is also an active participant in industry consultations and a member of a number of industry and trade associations. Furthermore, Hydro Ottawa proactively monitors its existing regulatory approvals and permits on a regular basis, to ensure timely compliance and renewal, as required.

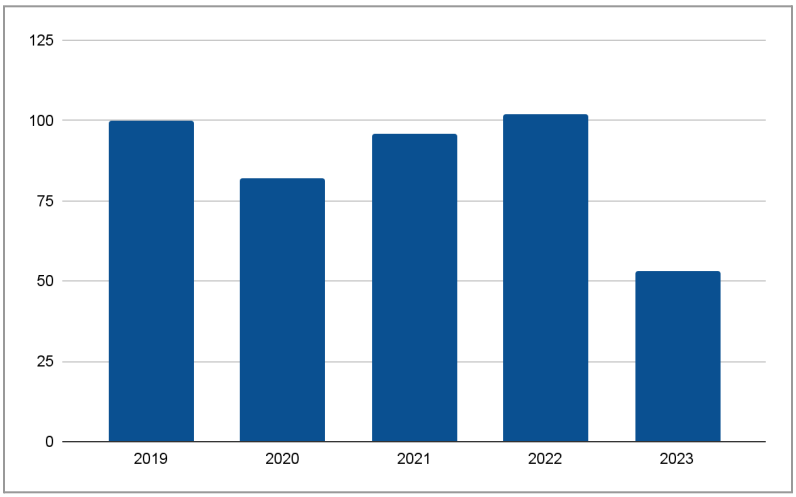
Hydro Ottawa’s operations are subject to a variety of environmental reporting at scheduled and ad-hoc intervals throughout the year to ensure compliance. Examples include the Ontario

Ministry of Environment, Conservation and Parks' (MECP) Director's Instructions related to the safe storage and destruction of polychlorinated biphenyls (PCBs), the National Pollutant Release Inventory, and the Ontario Hazardous Waste Inventory Network. In addition, Hydro Ottawa performs quarterly chemical and waste storage inspections and provides ad-hoc spill reporting to the MECP.

Throughout any year, Hydro Ottawa may experience a number of unexpected releases of substances into the environment, with the majority of these releases coming from oil-filled transformers that fail due to age or damage. The utility has a 24-hour response system, with employees qualified to promptly report releases to the MECP and to organize immediate response through an on-call spill remediation contractor. Field employees receive periodic training in spill reporting and containment, and in March 2024 a new online Spills Awareness Training Module was rolled out to all employees to enhance employee understanding of their role in responding to spills at Hydro Ottawa. All of Hydro Ottawa's large vehicles carry spill response kits containing protective equipment for employees, and absorbent materials and mats to prevent spill entry into sensitive areas.

As shown in Figure 6, between 2019 and 2022, the number of spills and the cost to remediate them remained relatively consistent, with the notable reduction in identified spills in 2023 being due to a labour disruption that occurred that year. Due to proactive measures and practices that are in place, such as infrared scanning, Hydro Ottawa has been able to proactively identify and address leaking equipment before the leaks become larger spills, which are more impactful and costly to remediate. This proactive approach is planned to continue over the next five years.

Figure 6 – Hydro Ottawa Total Number of Spills



Hydro Ottawa is actively working to eliminate PCBs from its electrical distribution system. Federal regulations introduced in 2008 established end-of-use dates for all PCBs from 2009-2025, depending upon the location and concentration of PCBs. Hydro Ottawa has fulfilled all requirements to date to ensure compliance with the 2025 end-of-use deadlines. The utility is on target to remove all the remaining PCBs from its system in accordance with its Asset Management Plan.

On January 1, 2021, Ontario's new *On-Site and Excess Soil Management Regulation,* O. Reg 406/19, came into effect under the province's *Environmental Protection Act,* and is being implemented in phases over five years. The Regulation introduced a new framework for the excavation, removal and transport of excess soils between two or more sites, that will apply to all construction projects that generate excess soil. The regulation imposes requirements for soil testing, transportation, temporary storage at processing sites or transfer facilities, the interim clean-up of soils, data tracking, re-use (on-site or at other sites) and disposal at a landfill or dump. These regulatory changes will affect property owners, developers, consultants, and the construction industry as a whole, exposing Hydro Ottawa to new costs, risks, and legal requirements on all projects that involve excavation of soil. Hydro Ottawa consulted with the

regulator, environmental specialists, industry partners, its civil contractors, and legal counsel to clarify requirements and develop an excess soil management process within the Hydro Ottawa project management methodology. Implementation of the process has commenced, in partnership with civil construction contractors, which has added cost and complexity to the company's asset management and project management activities.

5.2. ENVIRONMENTAL SUSTAINABILITY AND COMMITMENT TO NET-ZERO EMISSIONS

Since 2010, Hydro Ottawa's has had a commitment to environmental sustainability, and has received recognition of its efforts in this area.

In 2016, Hydro Ottawa also committed to, and in 2021 was successful in achieving, Electricity Canada's designation as a Sustainable Electricity Company©; further embedding environmental stewardship into the way the utility does business. Designation requirements are closely aligned with Environmental, Social and Governance (ESG) principles, and include adherence to the ISO 14001 Environmental Management Systems Standard and the ISO 26000 Social Responsibility guidelines; declaring a commitment to sustainable development; establishing a governance framework for social responsibility; and securing verification from a third-party that Hydro Ottawa complies with the designation criteria and reporting regularly and transparently on performance. Hydro Ottawa is the third company in Ontario, and one of only thirteen in Canada to achieve this designation.

Hydro Ottawa's environmental sustainability efforts have been focused on three priority areas:

5.2.1.1. Reducing the utility's carbon footprint through improvements in fleet, facilities, technology infrastructure, non-hazardous waste management, and recycling;

5.2.1.2. Greening procurement and the supply chain; and

5.2.1.3. Building a culture of environmental sustainability in Hydro Ottawa's business practices and workforce.

These priorities have remained in place over the 2021-2025 period, covering many aspects of the utility's operations and addressing matters of importance to customers, governments, and the electricity sector as a whole. They also provide the utility with the best options for reducing its environmental impacts and improving its environmental performance, while considering costs and return on investment.

5.2.1. Net-Zero Progress

5.2.1.1. Reducing Hydro Ottawa's Carbon Footprint

In alignment with its refreshed 2021-2025 Strategic Direction, and in recognition of the ever increasing incidence of extreme weather events, in December 2021 Hydro Ottawa Holding Inc. committed to becoming the first municipally-owned utility in Canada to achieve net-zero operations by the year 2030.

Hydro Ottawa Limited's contributions to achieving its parent company's commitment have commenced. This journey is being guided by recognized environmental frameworks and principles, and includes:

- Identifying and quantifying emissions;
- Reducing emissions to unavoidable levels; and
- Continuing to work with all customer classes to achieve their climate change goals, including the City of Ottawa's Climate Change Master Plan.

Hydro Ottawa's continuing focus on reducing its environmental impacts and improving its environmental performance has resulted in the utility receiving numerous recognitions over the years including the *Canada's Greenest Employers* designation every year from 2011 to 2016, and 2018 to 2024.

Hydro Ottawa has completed identifying and quantifying its Scope 1 and 2 emissions (fleet, facilities, sulphur hexafluoride (SF6) gas, line losses), and has done preliminary work with

respect to identifying and quantifying its Scope 3 emissions. Following completion of the Scope 1 and 2 emission identification and quantification steps, Hydro Ottawa commenced activities to reduce its emissions to unavoidable levels. Progress against plans is outlined in the Hydro Ottawa Holding Inc. Annual Report 2023.[4]

Facilities and Stations:

- In 2019, Hydro Ottawa completed the construction of two new campuses consisting of a main office and two operational centres. The environment was top of mind during design and construction, with the new facilities built to Leadership in Energy and Environmental Design (LEED) Gold Standards so as to decrease energy consumption, emit fewer greenhouse gases (GHGs), preserve natural resources, and reduce waste. The main office facility uses less energy when compared to a building designed according to standard building codes, uses less water due to the installation of efficient and innovative washroom fixtures and a rainwater recovery system, and offsets energy consumption with solar arrays at each campus. Hydro Ottawa continues to operate these facilities under LEED Gold standards - for example, any furniture products ordered follow the same LEED Gold criteria as was used for the construction of the facilities.
- Building assessments of four of the utility's facilities were conducted to identify opportunities for energy efficiency gains at these locations, primarily related to opportunities for replacing legacy mechanical equipment to reduce GHG emissions. The assessment also includes reviewing the addition of electric vehicle (EV) chargers at all campuses, the impact of the resulting increased load, and how to manage and upgrade systems to handle the increased loading at peak charge intervals. Looking forward over the next five years, Hydro Ottawa plans to review any gas fired equipment that is reaching end of life in that time period and, on a case by case basis, determine the feasibility of replacing it with electrically powered equipment.
- Two new low-carbon municipal transformer stations are being planned - Piperville to support growth in Ottawa's eastern region, and Hydro Road to support the City of Ottawa's transition

[4] Hydro Ottawa Holding Inc. Annual Report 2023

of their bus fleet to clean, zero-emission electric buses. For more details on the need for these two stations please refer to Section 3 of Schedule 2-5-1 - Distribution System Plan. In keeping with sustainability commitments outlined in the 2021-2025 Strategic Direction, Hydro Ottawa intends to use lower Global Warming Potential materials, and employ innovative design, procurement and construction techniques to address the embodied carbon associated with both substations.

- Maintenance planning for equipment containing SF6 gas has been enhanced to improve leak prevention and detection.

Fleet:

- Hydro Ottawa continues to invest in green fleet vehicles and technology, where it is available for commercial fleets, and to replace vehicles, as per the established fleet replacement schedule, with hybrid or more energy efficient vehicles, where available; hybrid technology to operate hydraulics for aerial devices, where it is effective; battery technology to eliminate idling for heating and lighting, while servicing underground cabling; and electric vehicles, where appropriate.
- To date, seventy EV chargers have been installed across Hydro Ottawa campuses and all have been commissioned to accept existing and incoming EVs. These include a mix of Level II and III chargers to meet charging needs based on daily travel requirements.
- Hydro Ottawa has made good progress in replacing internal combustion engine (ICE) vehicles with EVs. So far, ten medium and raised roof ICE work vans have been replaced with EV vans; twelve ICE pickup trucks with EV pickups; three small ICE vans with EV sport utility vehicles (SUV's); three small ICE vans with Hybrid compact SUVs; and one small ICE van with a Hybrid van. Hydro Ottawa has commenced adding plug-in hybrid batteries to medium duty vehicles to operate accessories, and is currently looking at fully electric medium duty step vans for future ICE van replacement. Hydro Ottawa is also testing a hybrid battery pack on a 65' aerial elevator truck to determine if it is feasible for use in its operating conditions. The expectation is to have 48 battery electric vehicles, 16

hybrid/plug-in hybrid vehicles, and 28 vehicles with hybrid equipment by the end of 2025, representing more than 30% of the fleet units.

- Hydro Ottawa will continue to look for opportunities to retrofit and/or rightsize its fleet, along with enhancing route selection and driving behaviours such as vehicle idling practices, in its ongoing efforts to reduce vehicle emissions.
- Good progress is being made on replacing gasoline powered tools with battery powered tools, and in replacing work van fuel fired generators with battery inverters.

Technology Infrastructure

- Reducing the environmental impact of information technology platforms also remains an important part of Hydro Ottawa's approach to reducing the utility's carbon footprint. Examples of actions undertaken over the past five years include:
  - Adoption of a cloud based Office Productivity Solution facilitated effective virtual collaboration, as well as hybrid meetings, reducing the need for employees to travel to meet in person;
  - Grid modernization / automation. Grid Modernization looks specifically at enabling the Democratization, Decarbonization, Deregulation, Decentralization and Digitization of the electricity sector for Sustainability and Carbon Reduction; and
  - Continued best practices of upgrading/replacing technology responsibly. Examples where solutions have been replaced with more carbon neutral ones include:
    - Replacement of desktop phones with softphones that are installed on the employee's laptop.
    - Implementation of a cell phone allowance program to reduce the number of corporate devices destined for e-waste.
    - Established strategic partnerships with suppliers who have strong net-zero/ sustainability programs:
      - Google has a strong Sustainability program and funds carbon removal initiatives
      - IBM received a Global Corporate Social Responsibility platinum award for Best Environmental Excellence in 2021

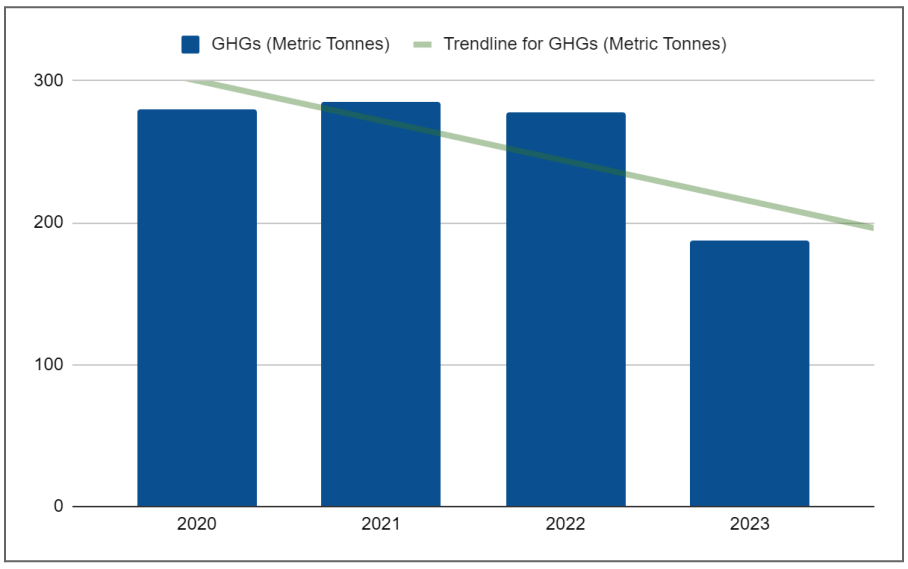
- Salesforce
- ServiceNow
- Workday

○ Recycling e-waste: All older hardware is first considered for sale to employees as a way of reducing e-waste, and any hardware and batteries not eligible for re-use are responsibly recycled through a reputable local recycler.

For additional examples, please see Attachment 1-3-4(B) - Digital Strategy to Schedule 1-3-4 - Facilitating Innovation and Continuous Improvement.

As outlined in Figure 7, Hydro Ottawa's calculated GHG emissions in tonnes (including vehicle fuel combustion emissions, facility fuel combustion emissions, and SF6 gas emissions) per 200,000 hours worked have remained consistent since introducing this metric in 2020, with the exception of 2023 where emissions were lower due to a labour disruption that year.

Figure 7 – Hydro Ottawa GHG Emissions

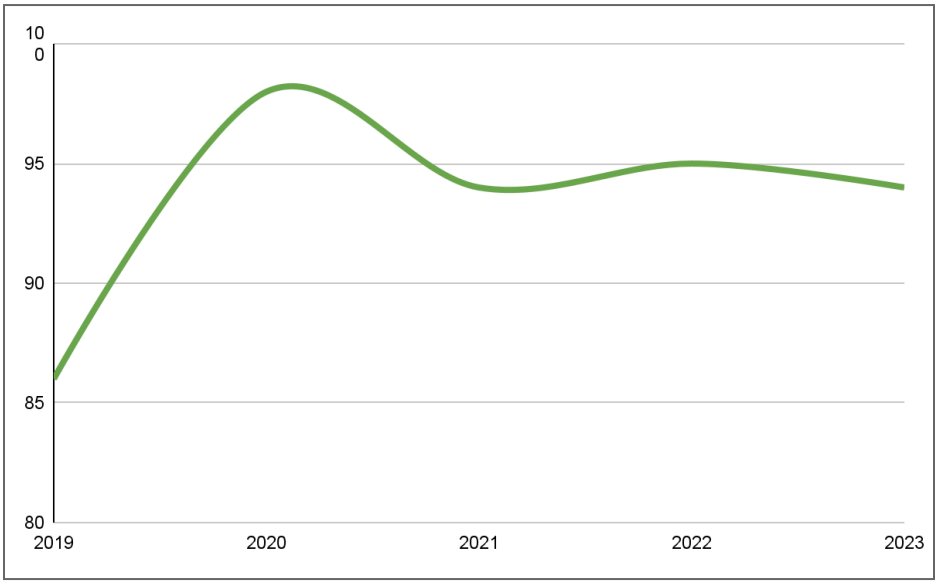


Reducing the amount of non-hazardous waste that is generated, and diverting more away from landfill are also important elements of reducing the utility's carbon footprint. Hydro Ottawa tracks

all solid and liquid wastes, including operational waste streams, and has systems in place to ensure high diversion rates are maintained. Hydro Ottawa recycles many items including cans, glass, cardboard, paper, plastic, wood, tree trimmings, transformers and electrical equipment, tires, meters, e-waste (laptops, servers, desktops, printers, and cell phones) and metals. In 2019, in conjunction with the move to its new facilities, the utility discontinued waste management at the desk/office level, and a centralized four-stream waste collection system (landfill, paper/cardboard, glass/can, and organics) was introduced.

Since 2020, Hydro Ottawa's annual non-hazardous waste diversion rate has averaged 95% as illustrated in Figure 8. The waste diversion rate can vary slightly from year to year, depending on the type and volume of materials being removed from service and the availability of recycling options for the resulting waste.

Figure 8 - Hydro Ottawa Percentage of Non-Hazardous Waste Diversion

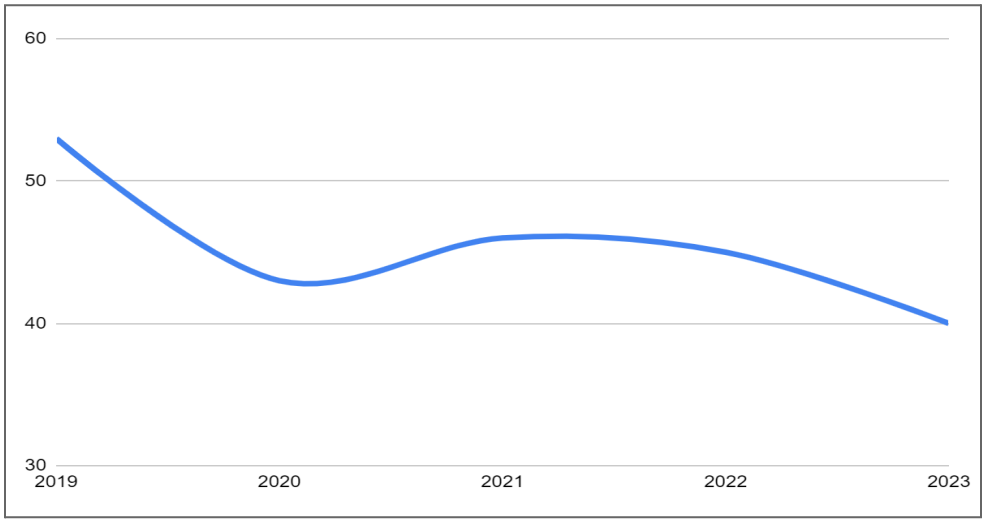


5.2.1.2. Greening Procurement and the Supply Chain

Hydro Ottawa's approach to green procurement ensures that environmentally friendly purchasing decisions are made, where opportunities exist, while also making certain that the procurement process delivers value for money. Hydro Ottawa uses a point system for evaluating supplier proposals, and includes environmental designations and practices in proposal requirements as appropriate.

Hydro Ottawa sources goods and services locally, where it is cost-effective to do so, to minimize transportation and associated impacts on the environment. To that end, Hydro Ottawa tracks the relative proportion of purchase orders placed with firms in and surrounding the National Capital Region. Sourcing of goods and services from local suppliers within a 100 km radius of the National Capital Region (NCR), measured in terms of dollars spent, has averaged 45% over the past five years. Going forward, Hydro Ottawa is planning to expand its tracking to include metrics for suppliers in the NCR, Ontario and Canada.

Figure 9 - Hydro Ottawa Percentage of Local Procurement



5.2.1.3. Building a Culture of Environmental Sustainability

By fostering a culture of environmental stewardship within the utility, employees become champions for the greening of Hydro Ottawa's operations, and a key source of ideas for how to further reduce environmental impacts.

Hydro Ottawa works to ensure employees have the tools they need to reduce waste and conserve energy, whether through the default settings on their electronic devices, the availability of waste collection systems in the workplace, default black only and double-sided printing, campus-wide Wi-Fi, and mechanisms for electronic collaboration and communication.

The ongoing transition to online services and self-service for employees, customers and vendors is providing an enhanced user experience and reducing Hydro Ottawa's impact on the environment. Additionally, an ongoing focus to digitize records is continuing to move Hydro Ottawa closer to a paperless environment. The use of technology also allows Hydro Ottawa to remote disconnect and reconnect customers reducing the need to dispatch workers and vehicles, and thus further reducing its impact on the environment.

Hydro Ottawa continues to refresh and enhance "green" communications and education for employees by:

- Promoting the use of the "green" attributes of the new facilities - drinking bottle fill stations, recycling stations, food waste dehydrator, electric vehicle chargers, carpool preferred parking, bicycle parking and hiking path;
- Enhancing environmental sustainability content in new employee onboarding;
- Establishing an intranet presence for employee engagement on environmental sustainability, leveraging Employee Connect (electronic employee newsletter), HydroBUZZ (intranet), blogs, etc. for regular communications and idea sharing; as well as for articles and promotional materials and events provided by Carbon 613 (Ottawa's Sustainable Business Network); and

- Expanding green messaging beyond the workplace to include employees' home environment, activities, purchasing and commuting.

6. BUSINESS CONTINUITY MANAGEMENT

6.1. BUSINESS CONTINUITY MANAGEMENT (BCM) PROGRAM

The purpose of the Hydro Ottawa BCM program is to ensure resilience by proactively identifying potential threats, mitigating their impacts, and establishing effective response and recovery strategies. The BCM Program aims to safeguard employees, protect assets, maintain critical business functions, and uphold reputation in the face of unforeseen disruptions. Over the past ten years, Hydro Ottawa's BCM program has evolved from one focused primarily on preparing for and responding to electricity outages, to one that takes an all hazards approach and encompasses overarching crisis management, life safety, incident management and business continuity plans.

The BCM Program at Hydro Ottawa is comprehensive in its approach, integrating governance, risk management, planning, testing/exercising, training and continuous improvement to safeguard the organization's ability to operate under adverse conditions. The BCM Program provides oversight, coordination and management of business continuity activities, including business impact assessments; Life Safety, Crisis Management, Divisional Business Continuity and/or Incident Management Plans; the after action reporting process, and the associated Exercise Framework. The Program plays a crucial role in fostering a culture of preparedness within the company, enabling it to thrive in an ever evolving threat landscape.

The after action reporting process and the exercise approach are pivotal for continual improvement, as they provide insights from simulated exercises and real-world incidents. Recommendations for improvements are derived from event and exercise responses, and lessons learned are actioned to enhance the program's effectiveness and adaptability. The Exercise Framework outlines the nature and frequency of the different types of exercises, including periodic plan reviews and response team roster confirmations, tabletop exercises,

drills, and functional and full scale exercises. For example, plan owners conduct plan/roster reviews on quarterly basis to ensure they remain current; tabletop exercises are conducted twice per year at the plan/team level (e.g. crisis communications, cyber security incident response); building evacuation drills are conducted annually, and Hydro Ottawa participates in functional exercises on a biennial basis (e.g. NERC GridEx II, III, IV and V North American grid security exercises from 2013 to 2019, NRCAN Energy Command 2022 exercise, etc.).

Over the next five years Hydro Ottawa will continue to expand and mature its exercise framework, increasing the number and frequency of internal exercises, providing more opportunities to validate processes, test and refine response strategies, identify potential weaknesses, improve communication and coordination, build confidence among employees and enhance overall organizational resilience.

6.2. EVENT RESPONSE - PLANNING, ACTIVATION AND CONTINUAL IMPROVEMENT

In addition to the BCM Program and the exercising of plans, Hydro Ottawa derives experience from responding to real life events. From 2018 to 2024, Hydro Ottawa has had to respond and adapt to disruptive events of a variety, severity, frequency and duration never before experienced by the utility in succession, including but not limited to:

- 2017 - record flood levels in Ottawa;
- 2018 - tornados causing significant disruption and damage to electrical infrastructure;
- 2019 - record flooding;
- 2020 - onset of a multi-year pandemic (COVID-19);
- 2022 - Freedom Convoy protest in Ottawa, Rogers telecommunications outage and the first-ever service territory-wide Derecho storm event and significant freezing rain event; and
- 2023 - a spring ice storm of unusual magnitude and an 84 day strike by its largest union local.

Hydro Ottawa navigated these events while continuing to safely and reliably deliver electricity to its customers. Each of these events required unique planning and response approaches, and resulted in debrief sessions, after action reporting and continual improvement actions that are being implemented to enhance Hydro Ottawa's preparedness and response capabilities for future events.

One of the primary learnings from debriefing these numerous event responses was that Hydro Ottawa needed to bolster its BCM team in order to ensure ongoing maintenance and continual improvement of Hydro Ottawa's BCM Program and event response capabilities. In 2024, steps were taken to create and staff a new BCM Manager position, and an additional BCM Specialist position dedicated to providing enhanced program support to operational groups. This increased the BCM Program team's resourcing from one person to three, with plans to add an additional BCM Specialist position by 2026 to continue to enhance preparedness and response against an ever increasing threat landscape. Hydro Ottawa has effectively used the two positions added in 2024 to advance work on a significantly updated and strengthened Electricity Emergency Response Plan, shifting to use an 'always on' approach and built upon the internationally recognized Incident Command System structure which is used by the City of Ottawa. These positions are required to maintain this strengthened response posture and build and implement a robust tabletop and exercise framework.

As the electricity distributor to the nation's capital of 1 million people, and 364,000 residential and commercial customers, Hydro Ottawa needs to be able to respond quickly and effectively to power disruptions at all times, regardless of cause. Power outages can have far reaching impacts for the city of Ottawa which hosts numerous federal, provincial and municipal government offices and facilities, military establishments, foreign embassies, large educational institutions and museums, major hospitals, research facilities and long term care homes, an international airport, hotels and conference centres, an expanding light rail transit system and one of the country's largest technology hubs. Add to this the province's / nation's move toward increased electrification, more people working from home, increasing physical and cyber

security threats and changing weather patterns/extreme weather events, and Hydro Ottawa's BCM Program needs to be ready to meet increasing customer expectations and societal demands for system reliability, and prompt outage response and power restoration.

Hydro Ottawa Limited
Post-Employment Benefit Plans

ACTUARIAL REPORT FOR ACCOUNTING PURPOSES
IN ACCORDANCE WITH IAS 19
FOR THE PERIOD ENDING DECEMBER 31, 2023
AND PROJECTED RESULTS FOR FISCAL 2024 AND 2025

December 16, 2024

Prepared by:

Eckler Ltd.
5140 Yonge Street, Suite 1700
Toronto, Ontario
M2N 6L7

ECKLER

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ECKLER

Section 1. EXECUTIVE SUMMARY

We are pleased to present this report which provides the results of an actuarial valuation of the Hydro Ottawa Limited (the "Company") Non-Pension Post-Employment Benefits Plans (the "Plans") in accordance with the International Accounting Standard 19 ("IAS 19"). This report has been prepared at the request of Hydro Ottawa Limited and is intended for use by the Company and its external auditor in the support of amounts appearing on the Company's financial statements. Please note that all financial amounts shown are in Canadian dollars only.

The Plans are funded on a pay-as-you-go basis by contributions from the Company; and the benefits are administered by Sun Life Financial. The benefits included in the Plans and considered in this report are:

- Post-retirement life insurance benefits for the management and unionized retirees;
- Retirement grant benefits for the unionized employees; and
- Accumulating non-vesting sick leave benefits for the unionized employees.

Actuarial Valuation

Full actuarial valuations of the Plans were performed as of December 31, 2022, based on membership data as of October 31, 2022. The defined benefit obligation as of December 31, 2023 and the estimated amounts for Fiscal 2024 and Fiscal 2025 are based on this valuation. The Fiscal 2023 defined benefit costs were extrapolated from the results of the December 31, 2022 valuations. The results of the December 31, 2022 valuations are summarized in our actuarial report dated January 18, 2023.

Included in this Report

The following information is included in this report:

Section 2	**Reliance and Certification** • Additional information on the data, methods and assumptions used to determine the disclosure amounts shown in this report, as well as our actuarial opinion
Section 3	**Fiscal 2023 Disclosure Information** • Full disclosure schedules for each legal entity
Section 4	**Estimated Fiscal 2024 Disclosure Information** • Estimated disclosure schedules for each legal entity
Section 5	**Estimated Fiscal 2025 Disclosure Information** • Estimated disclosure schedules for each legal entity
Section 6	**Comparator Fiscal 2022 Valuation results** • Prior year Valuation results for comparison purposes
Appendices	Summary of supporting information used in the actuarial valuations including: **A.** Membership Data **B.** Actuarial Assumptions and Methods **C.** Plan Provisions **D.** Employer Certification

Please note that all the information provided for Fiscal 2024 and 2025 are estimates only and can be materially different from what is shown dependent on significant events that may occur during and at the end of Fiscal 2024 and 2025. We will confirm or update these estimates at the time of the preparation of the respective disclosure results.

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Highlight of Result for Fiscal 2023 and Projected 2024 and 2025

The table below highlights the key financial reporting results for Fiscal 2023 and the projected defined benefit cost for Fiscal 2024 and Fiscal 2025. For accounting under IAS 19, the life insurance and retirement grant plans have been categorized as Post-Employment Benefits and gains or losses for these plans are recognized through Other Comprehensive Income (OCI) in the year they arise. The NVSL Plan, however, have been categorized as Other Long-Term Employee Benefits, and gains or losses are recognized immediately through the Defined Benefit Cost in the year they arise. Details of the results are provided in Section 3.

Fiscal 2023 Disclosure Information	Life Insurance	Retirement Grant	Nonvested Sick Leave	Total
	$	$	$	$
Components Defined Benefit Cost/(Income)				
Service cost in the Income Statement				
Current service cost	97,500	32,300	134,900	264,700
Past service cost	0	0	0	0
Interest on the net defined benefit liability in Income Statement	458,800	31,800	77,900	568,500
Remeasurements of the net defined benefit liability in Income Statement	n/a	n/a	44,500	44,500
Defined benefit cost/(income) reflected in Income Statement	**$556,300**	**$64,100**	**$257,300**	**$877,700**
Funded Status at End of Period				
Plan assets at end of period	0	0	0	0
Defined benefit obligation at end of period	9,708,500	590,200	1,576,400	11,875,100
Funded status at end of period	**($9,708,500)**	**($590,200)**	**($1,576,400)**	**($11,875,100)**
Reconciliation of Defined Benefit (Liability)/Asset				
Defined benefit (liability)/asset at start of period	(9,343,800)	(687,600)	(1,495,100)	(11,526,500)
Defined benefit (cost)/income reflected in Income Statement	(556,300)	(64,100)	(257,300)	(877,700)
Remeasurements of the net defined benefit liability reflected in OCI	(387,100)	73,300	n/a	(313,800)
Employer contributions	578,700	88,200	176,000	842,900
Defined benefit (liability)/asset at end of period	**($9,708,500)**	**($590,200)**	**($1,576,400)**	**($11,875,100)**
IAS 24 disclosure information for Key Management Personnel	**$400**	**$0**	**$0**	**$400**
Weighted average assumptions for defined benefit cost/(income)				
Discount rate	5.05%	5.05%	5.05%	5.05%
Annual salary increase	2.00%	2.00%	2.00%	2.00%
Initial weighted average health care trend rate	n/a	n/a	n/a	n/a
Ultimate weighted average health care trend rate	n/a	n/a	n/a	n/a
Year ultimate health care trend rate is reached	n/a	n/a	n/a	n/a
Weighted average assumptions for disclosure				
Discount rate	4.65%	4.65%	4.65%	4.65%
Annual salary increase	2.00%	2.00%	2.00%	2.00%
Initial weighted average health care trend rate	n/a	n/a	n/a	n/a
Ultimate weighted average health care trend rate	n/a	n/a	n/a	n/a
Year ultimate health care trend rate is reached	n/a	n/a	n/a	n/a

Fiscal 2024 Disclosure Information (Estimate)	Life Insurance	Retirement Grant	Nonvested Sick Leave	Total
	$	$	$	$
Estimated Fiscal 2024 Defined Benefit Cost				
Service cost in the Income Statement	115,900	35,600	146,100	297,600
Interest on the net defined benefit liability in Income Statement	441,800	27,900	75,900	545,600
Remeasurements of the net defined benefit liability in Income Statement	n/a	n/a	0	n/a
Defined benefit cost/(income) reflected in Income Statement	**$557,700**	**$63,500**	**$222,000**	**$843,200**

Fiscal 2025 Disclosure Information (Estimate)	Life Insurance	Retirement Grant	Nonvested Sick Leave	Total
	$	$	$	$
Estimated Fiscal 2025 Defined Benefit Cost				
Service cost in the Income Statement	121,300	37,200	152,900	311,400
Interest on the net defined benefit liability in Income Statement	438,800	29,300	78,000	546,100
Remeasurements of the net defined benefit liability in Income Statement	n/a	n/a	0	n/a
Defined benefit (cost)/income reflected in Income Statement	**$560,100**	**$66,500**	**$230,900**	**$857,500**

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Section 2. RELIANCE AND CERTIFICATION

We have prepared accounting disclosure information in accordance with IAS 19 for the non-pension post-employment benefit plans (the "Plans") sponsored by the Hydro Ottawa Limited (the "Company") as of December 31, 2023, based on an extrapolation of results from full actuarial valuations of the Plans prepared as of December 31, 2022.

We have relied on the following information which was provided by the Company:

1. Confirmation that there were no significant changes to the membership data as of October 31, 2022, which was based on the data as of October 31, 2022
2. Premiums paid for the life insurance benefits and retirement grant payments in 2023; and
3. Plan provisions in effect as of December 31, 2023.

This report has been prepared exclusively for the Company and its external auditor as support of amounts used for financial reporting purposes. This report may not be relied upon or be appropriate for other purposes.

The Plan's actual costs will depend on a number of factors including the amount of benefits paid, the number of members covered for benefits, the amount of plan expenses and other external influences on the plan costs. These amounts are not known at the measurement date and are uncertain, but expected to fall within a reasonable range of possibilities. To prepare this report, the selected actuarial assumptions produce one scenario from a range of possible scenarios. The results of the single scenario are summarized in this report. However, actual plan experience will differ from the assumptions used and the difference may be material or significant.

Another reasonable set of assumptions could have been selected and the results would have been different. As well, valuation assumptions are likely to change at each valuation due to plan changes, data or experience changes, legislated events or changed expectations about the future. Provided there are no significant changes to the membership data or plan provisions, the next full valuation is due on or before December 31, 2025.

Membership Data

The Fiscal 2023 year-end disclosure is based on membership data provided by the Company as of October 31, 2022 for all plans, which was assumed to be as of December 31, 2022 for valuation purposes and is summarized in Appendix A of this report. At the time of preparation of the December 31, 2022 valuation, the data was subjected to a number of tests for reasonableness and consistency (e.g. on service, dates of birth, gender, etc.).

Premiums and Claims Information

We received information on the actual payments made for all plans in 2023. With respect to the non-vesting sick leave benefits, actual payments are difficult to calculate, so we have reflected expected benefit payments in Fiscal 2023 from our valuation. These amounts are as follows, and were disclosed as the annual cash contributions made in Fiscal 2023 for financial reporting purposes:

Employer contribution in Fiscal 2023	$
Life Insurance	578,700
Retirement Grant	88,200
Non-Vesting Sick Leave	176,000
Total	**$842,900**

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Assumptions

The disclosure results have been prepared using the best estimate assumptions developed by Eckler Ltd. in discussions with management. The assumptions used as of December 31, 2023 are the same as those used as of December 31, 2022, except for the following:

- **Discount rate:** As of Decemer 31, 2023, a discount rate of 4.65% per annum was used, compared to a discount rate of 5.05% per annum as of December 31, 2022. According to IAS 19, the discount rate used to determine the defined benefit obligation is the market interest rate on high quality debt instruments with duration similar to the duration of the Plan. The rates were determined based on the combined expected cash flows for all Plans.

More detailed information on the actuarial assumptions and methodology used are included in Appendix B of this report.

Actuarial Method

The total value of the Plan's costs for financial reporting purposes at a particular date can be measured by the defined benefit obligation ("DBO"). The DBO at a particular date for an employee is the total present value of all expected future benefit payments that is attributed to service earned to that date, and the current service cost is the amount that is attributed to the current year. According to IAS 19, actuarial method used to determine the DBO and current service cost should be the projected unit credit method. This method assumes that the post-retirement benefits are attributed over the years of service to the date when future service no longer leads to a material amount of additional benefits from the plan. This is typically the date when an employee is first eligible to retire and receive benefits for the plan.

More information on the actuarial method is provided in Appendix B.

Plan Provisions

There have been no significant plan changes since the last Valuation as of December 31, 2022. The plan provisions have been provided and confirmed by the Company and are summarized in Appendix C of this report.

Subsequent Events

To the best of our knowledge and based on discussions with the Company, it is our understanding that there were no events which occurred between December 31, 2023 and the date this report was completed which would have a material impact on the results of the valuations or the year-end disclosures as of December 31, 2023.

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Statement of Actuarial Opinion

In our opinion,

- the membership data is sufficient and reliable for the purpose of the valuation;
- the preparers of the financial statements have selected the assumptions and they are in accordance with accepted actuarial practice in Canada; and
- the calculations have been made in accordance with our understanding of the requirements of International Accounting Standard 19 under the International Financial Reporting Standards.

This report has been prepared, and our opinion given, in accordance with accepted actuarial practice in Canada.

Respectfully submitted,

Kwame Smart, FCIA, FSA

December 16, 2024

Date

Steve Cheon, FCIA, FSA

December 16, 2024

Date

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Section 3. FISCAL 2023 IAS 19 DISCLOSURE INFORMATION

Fiscal 2023 Disclosure Information	Life Insurance	Retirement Grant	Nonvested Sick Leave	Total
	$	$	$	$
Reconciliation of Plan Assets				
Plan assets at start of period	0	0	0	0
Employer contributions	578,700	88,200	176,000	842,900
Benefit payments	(578,700)	(88,200)	(176,000)	(842,900)
Interest income	0	0	0	0
Return on plan assets excluding amounts included in interest income	0	0	0	0
Plan assets at end of period	**$0**	**$0**	**$0**	**$0**
Reconciliation of Defined Benefit Obligation				
Defined benefit obligation at start of period	9,343,800	687,600	1,495,100	11,526,500
Current service cost	97,500	32,300	134,900	264,700
Interest expense	458,800	31,800	77,900	568,500
Benefit payments	(578,700)	(88,200)	(176,000)	(842,900)
Past service cost/(credit)	0	0	0	0
Actuarial (gains)/losses from changes in experience	(134,600)	(93,800)	0	(228,400)
Actuarial (gains)/losses from changes in demographic assumptions	0	0	0	0
Actuarial (gains)/losses from changes in financial assumptions	521,700	20,500	44,500	586,700
Defined benefit obligation at end of period	**$9,708,500**	**$590,200**	**$1,576,400**	**$11,875,100**
Components Defined Benefit Cost/(Income)				
Service cost in the Income Statement:				
Current service cost	97,500	32,300	134,900	264,700
Past service cost	0	0	0	0
Curtailment & Settlement (gain)/loss	0	0	0	0
	97,500	**32,300**	**134,900**	**264,700**
Interest on the net defined benefit liability in Income Statement:				
Interest income	0	0	0	0
Interest expense	458,800	31,800	77,900	568,500
	458,800	**31,800**	**77,900**	**568,500**
Remeasurements of the net defined benefit liability in Income Statement	**n/a**	**n/a**	**44,500**	44,500
Defined benefit cost/(income) reflected in Income Statement	**$556,300**	**$64,100**	**$257,300**	**$877,700**
Remeasurements of the net defined benefit liability in OCI:				
Return on plan assets excluding amounts included in interest income	0	0	n/a	0
Actuarial (gains)/losses from changes in experience	(134,600)	(93,800)	n/a	(228,400)
Actuarial (gains)/losses from changes in demographic assumptions	0	0	n/a	0
Actuarial (gains)/losses from changes in financial assumptions	521,700	20,500	n/a	542,200
Remeasurements of the net defined benefit liability reflected in OCI	**$387,100**	**($73,300)**	**$0**	**$313,800**
Funded Status at End of Period				
Plan assets at end of period	0	0	0	0
Defined benefit obligation at end of period	9,708,500	590,200	1,576,400	11,875,100
Funded status at end of period	**($9,708,500)**	**($590,200)**	**($1,576,400)**	**($11,875,100)**
Reconciliation of Defined Benefit (Liability)/Asset				
Defined benefit (liability)/asset at start of period	(9,343,800)	(687,600)	(1,495,100)	(11,526,500)
Defined benefit (cost)/income reflected in Income Statement	(556,300)	(64,100)	(257,300)	(877,700)
Remeasurements of the net defined benefit liability reflected in OCI	(387,100)	73,300	n/a	(313,800)
Employer contributions	578,700	88,200	176,000	842,900
Defined benefit (liability)/asset at end of period	**($9,708,500)**	**($590,200)**	**($1,576,400)**	**($11,875,100)**
Reconciliation of amounts in OCI (Gain)/Loss				
Accumulated amounts in OCI at start of period	280,400	(172,400)	0	108,000
Remeasurements of the net defined benefit liability reflected in OCI	387,100	(73,300)	n/a	313,800
Accumulated amounts in OCI at end of period (Gain)/Loss	**$667,500**	**($245,700)**	**$0**	**$421,800**

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Fiscal 2023 Disclosure Information	Life Insurance	Retirement Grant	Nonvested Sick Leave	Total
	$	$	$	$
Determination of interest cost				
Defined benefit obligation at start of period	9,343,800	687,600	1,495,100	11,526,500
Current service cost weighted for timing (beg-year)	97,500	32,300	134,900	264,700
Past service cost weighted for timing (beg-year)	0	0	0	0
Expected benefit payments weighted for timing (mid-year)	(356,650)	(91,000)	(88,000)	(535,650)
Average weighted DBO	9,084,650	628,900	1,542,000	11,255,550
Discount rate	5.05%	5.05%	5.05%	5.05%
Interest cost for period	458,800	31,800	77,900	568,500
Additional disclosure information				
Expected employer contributions in next reporting period	648,100	50,500	180,600	879,200
Duration[1]	12.2	12.2	12.2	12.2
IAS 24 disclosure information for Key Management Personnel				
Defined benefit cost/(income) reflected in Income Statement				
EEID 12037	400			400
Total	400	0	0	400
Sensitivity on defined benefit obligation at end of period				
Discount rate				
Effect of 0.25% increase	(332,000)	(13,000)	(28,200)	(373,200)
Effect of 0.25% decrease	353,300	13,500	29,200	396,000
Salary scale				
Effect of 0.25% increase	38,900	15,500	31,800	86,200
Effect of 0.25% decrease	(37,700)	(15,000)	(30,900)	(83,600)
Future mortality				
Effect of 1 year age increase	0	0	0	0
Effect of 1 year age decrease	0	0	0	0
Trend rates				
Effect of 1% increase	n/a	n/a	n/a	n/a
Effect of 1% decrease	n/a	n/a	n/a	n/a
Weighted average assumptions for defined benefit cost/(income)				
Discount rate	5.05%	5.05%	5.05%	5.05%
Annual salary increase	2.00%	2.00%	2.00%	2.00%
Initial weighted average health care trend rate	n/a	n/a	n/a	n/a
Ultimate weighted average health care trend rate	n/a	n/a	n/a	n/a
Year ultimate health care trend rate is reached	n/a	n/a	n/a	n/a
Weighted average assumptions for disclosure				
Discount rate	4.65%	4.65%	4.65%	4.65%
Annual salary increase	2.00%	2.00%	2.00%	2.00%
Initial weighted average health care trend rate	n/a	n/a	n/a	n/a
Ultimate weighted average health care trend rate	n/a	n/a	n/a	n/a
Year ultimate health care trend rate is reached	n/a	n/a	n/a	n/a

[1] Duration is based on expected cash flows of the employee benefit plans combined

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Section 4. FISCAL 2024 IAS 19 DISCLOSURE INFORMATION (ESTIMATE)

Fiscal 2024 Disclosure Information (Estimate)	Life Insurance	Retirement Grant	Nonvested Sick Leave	Total
	$	$	$	$
Reconciliation of Plan Assets				
Plan assets at start of period	0	0	0	0
Employer contributions	648,100	50,500	180,600	879,200
Benefit payments	(648,100)	(50,500)	(180,600)	(879,200)
Interest income	0	0	0	0
Return on plan assets excluding amounts included in interest income	0	0	0	0
Plan assets at end of period	**$0**	**$0**	**$0**	**$0**
Reconciliation of Defined Benefit Obligation				
Defined benefit obligation at start of period	9,708,500	590,200	1,576,400	11,875,100
Current service cost	115,900	35,600	146,100	297,600
Interest expense	441,800	27,900	75,900	545,600
Benefit payments	(648,100)	(50,500)	(180,600)	(879,200)
Past service cost/(credit)	0	0	0	0
Actuarial (gains)/losses from changes in experience	0	0	0	0
Actuarial (gains)/losses from changes in demographic assumptions	0	0	0	0
Actuarial (gains)/losses from changes in financial assumptions	0	0	0	0
Defined benefit obligation at end of period	**$9,618,100**	**$603,200**	**$1,617,800**	**$11,839,100**
Components Defined Benefit Cost/(Income)				
Service cost in the Income Statement:				
Current service cost	115,900	35,600	146,100	297,600
Past service cost	0	0	0	0
Curtailment & Settlement (gain)/loss	0	0	0	0
	115,900	**35,600**	**146,100**	**297,600**
Interest on the net defined benefit liability in Income Statement:				
Interest income	0	0	0	0
Interest expense	441,800	27,900	75,900	545,600
	441,800	**27,900**	**75,900**	**545,600**
Remeasurements of the net defined benefit liability in Income Statement	**n/a**	**n/a**	**n/a**	**n/a**
Defined benefit cost/(income) reflected in Income Statement	**$557,700**	**$63,500**	**$222,000**	**$843,200**
Remeasurements of the net defined benefit liability in OCI:				
Return on plan assets excluding amounts included in interest income	0	0	n/a	0
Actuarial (gains)/losses from changes in experience	0	0	n/a	0
Actuarial (gains)/losses from changes in demographic assumptions	0	0	n/a	0
Actuarial (gains)/losses from changes in financial assumptions	0	0	n/a	0
Remeasurements of the net defined benefit liability reflected in OCI	**$0**	**$0**	**$0**	**$0**
Funded Status at End of Period				
Plan assets at end of period	0	0	0	0
Defined benefit obligation at end of period	9,618,100	603,200	1,617,800	11,839,100
Funded status at end of period	**($9,618,100)**	**($603,200)**	**($1,617,800)**	**($11,839,100)**
Reconciliation of Defined Benefit (Liability)/Asset				
Defined benefit (liability)/asset at start of period	(9,708,500)	(590,200)	(1,576,400)	(11,875,100)
Defined benefit (cost)/income reflected in Income Statement	(557,700)	(63,500)	(222,000)	(843,200)
Remeasurements of the net defined benefit liability reflected in OCI	0	0	n/a	0
Employer contributions	648,100	50,500	180,600	879,200
Defined benefit (liability)/asset at end of period	**($9,618,100)**	**($603,200)**	**($1,617,800)**	**($11,839,100)**
Reconciliation of amounts in OCI (Gain)/Loss				
Accumulated amounts in OCI at start of period	667,500	(245,700)	0	421,800
Remeasurements of the net defined benefit liability reflected in OCI	0	0	n/a	0
Accumulated amounts in OCI at end of period (Gain)/Loss	**$667,500**	**($245,700)**	**$0**	**$421,800**

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Section 5. FISCAL 2025 IAS 19 DISCLOSURE INFORMATION (ESTIMATE)

Fiscal 2025 Disclosure Information (Estimate)	Life Insurance	Retirement Grant	Nonvested Sick Leave	Total
	$	$	$	$
Reconciliation of Plan Assets				
Plan assets at start of period	0	0	0	0
Employer contributions	604,500	20,700	184,900	810,100
Benefit payments	(604,500)	(20,700)	(184,900)	(810,100)
Interest income	0	0	0	0
Return on plan assets excluding amounts included in interest income	0	0	0	0
Plan assets at end of period	**$0**	**$0**	**$0**	**$0**
Reconciliation of Defined Benefit Obligation				
Defined benefit obligation at start of period	9,618,100	603,200	1,617,800	11,839,100
Current service cost	121,300	37,200	152,900	311,400
Interest expense	438,800	29,300	78,000	546,100
Benefit payments	(604,500)	(20,700)	(184,900)	(810,100)
Past service cost/(credit)	0	0	0	0
Actuarial (gains)/losses from changes in experience	0	0	0	0
Actuarial (gains)/losses from changes in demographic assumptions	0	0	0	0
Actuarial (gains)/losses from changes in financial assumptions	0	0	0	0
Defined benefit obligation at end of period	**$9,573,700**	**$649,000**	**$1,663,800**	**$11,886,500**
Components Defined Benefit Cost/(Income)				
Service cost in the Income Statement:				
Current service cost	121,300	37,200	152,900	311,400
Past service cost	0	0	0	0
Curtailment & Settlement (gain)/loss	0	0	0	0
	121,300	**37,200**	**152,900**	**311,400**
Interest on the net defined benefit liability in Income Statement:				
Interest income	0	0	0	0
Interest expense	438,800	29,300	78,000	546,100
	438,800	**29,300**	**78,000**	**546,100**
Remeasurements of the net defined benefit liability in Income Statement	**n/a**	**n/a**	**n/a**	**n/a**
Defined benefit cost/(income) reflected in Income Statement	**$560,100**	**$66,500**	**$230,900**	**$857,500**
Remeasurements of the net defined benefit liability in OCI:				
Return on plan assets excluding amounts included in interest income	0	0	n/a	0
Actuarial (gains)/losses from changes in experience	0	0	n/a	0
Actuarial (gains)/losses from changes in demographic assumptions	0	0	n/a	0
Actuarial (gains)/losses from changes in financial assumptions	0	0	n/a	0
Remeasurements of the net defined benefit liability reflected in OCI	**$0**	**$0**	**$0**	**$0**
Funded Status at End of Period				
Plan assets at end of period	0	0	0	0
Defined benefit obligation at end of period	9,573,700	649,000	1,663,800	11,886,500
Funded status at end of period	**($9,573,700)**	**($649,000)**	**($1,663,800)**	**($11,886,500)**
Reconciliation of Defined Benefit (Liability)/Asset				
Defined benefit (liability)/asset at start of period	(9,618,100)	(603,200)	(1,617,800)	(11,839,100)
Defined benefit (cost)/income reflected in Income Statement	(560,100)	(66,500)	(230,900)	(857,500)
Remeasurements of the net defined benefit liability reflected in OCI	0	0	n/a	0
Employer contributions	604,500	20,700	184,900	810,100
Defined benefit (liability)/asset at end of period	**($9,573,700)**	**($649,000)**	**($1,663,800)**	**($11,886,500)**
Reconciliation of amounts in OCI (Gain)/Loss				
Accumulated amounts in OCI at start of period	667,500	(245,700)	0	421,800
Remeasurements of the net defined benefit liability reflected in OCI	0	0	n/a	0
Accumulated amounts in OCI at end of period (Gain)/Loss	**$667,500**	**($245,700)**	**$0**	**$421,800**

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Section 6. FISCAL 2022 IAS 19 DISCLOSURE INFORMATION (COMPARATOR)

Fiscal 2022 Disclosure Information	Life Insurance	Retirement Grant	Nonvested Sick Leave	Total
	$	$	$	$
Reconciliation of Plan Assets				
Plan assets at start of period	0	0	0	0
Employer contributions	547,900	50,100	190,000	788,000
Benefit payments	(547,900)	(50,100)	(190,000)	(788,000)
Interest income	0	0	0	0
Return on plan assets excluding amounts included in interest income	0	0	0	0
Plan assets at end of period	**$0**	**$0**	**$0**	**$0**
Reconciliation of Defined Benefit Obligation				
Defined benefit obligation at start of period	11,632,800	731,900	2,011,500	14,376,200
Current service cost	194,600	44,700	167,500	406,800
Interest expense	346,400	22,100	62,500	431,000
Benefit payments	(547,900)	(50,100)	(190,000)	(788,000)
Past service cost/(credit)	0	0	0	0
Actuarial (gains)/losses from changes in experience	1,045,900	57,600	(238,200)	1,460,100
Actuarial (gains)/losses from changes in demographic assumptions	0	0	0	0
Actuarial (gains)/losses from changes in financial assumptions	(3,328,000)	(118,600)	(318,200)	(3,764,800)
Defined benefit obligation at end of period	**$9,343,800**	**$687,600**	**$1,495,100**	**$12,121,300**
Components Defined Benefit Cost/(Income)				
Service cost in the Income Statement:				
Current service cost	194,600	44,700	167,500	406,800
Past service cost	0	0	0	0
Curtailment & Settlement (gain)/loss	0	0	0	0
	194,600	**44,700**	**167,500**	**406,800**
Interest on the net defined benefit liability in Income Statement:				
Interest income	0	0	0	0
Interest expense	346,400	22,100	62,500	431,000
	346,400	**22,100**	**62,500**	**431,000**
Remeasurements of the net defined benefit liability in Income Statemer	**n/a**	**n/a**	**(556,400)**	**(556,400)**
Defined benefit cost/(income) reflected in Income Statement	**$541,000**	**$66,800**	**($326,400)**	**$281,400**
Remeasurements of the net defined benefit liability in OCI:				
Return on plan assets excluding amounts included in interest income	0	0	n/a	0
Actuarial (gains)/losses from changes in experience	1,045,900	57,600	n/a	1,103,500
Actuarial (gains)/losses from changes in demographic assumptions	0	0	n/a	0
Actuarial (gains)/losses from changes in financial assumptions	(3,328,000)	(118,600)	n/a	(3,446,600)
Remeasurements of the net defined benefit liability reflected in OCI	**($2,282,100)**	**($61,000)**	**$0**	**($2,343,100)**
Funded Status at End of Period				
Plan assets at end of period	0	0	0	0
Defined benefit obligation at end of period	9,343,800	687,600	1,495,100	11,526,500
Funded status at end of period	**($9,343,800)**	**($687,600)**	**($1,495,100)**	**($11,526,500)**
Reconciliation of Defined Benefit (Liability)/Asset				
Defined benefit (liability)/asset at start of period	(11,632,800)	(731,900)	(2,011,500)	(14,376,200)
Defined benefit (cost)/income reflected in Income Statement	(541,000)	(66,800)	326,400	(281,400)
Remeasurements of the net defined benefit liability reflected in OCI	2,282,100	61,000	n/a	2,343,100
Employer contributions	547,900	50,100	190,000	788,000
Defined benefit (liability)/asset at end of period	**($9,343,800)**	**($687,600)**	**($1,495,100)**	**($11,526,500)**
Reconciliation of amounts in OCI (Gain)/Loss				
Accumulated amounts in OCI at start of period	2,562,500	(111,400)	0	2,451,100
Remeasurements of the net defined benefit liability reflected in OCI	(2,282,100)	(61,000)	n/a	(2,343,100)
Accumulated amounts in OCI at end of period (Gain)/Loss	**$280,400**	**($172,400)**	**$0**	**$108,000**

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Appendix A. MEMBERSHIP DATA

Below is a summary of the membership data as of December 31, 2022 (data was as of October 31, 2022 but assumed to be as of December 31, 2022 for valuation purposes), used to determine the 2022 and 2023 year-end disclosures and projected 2024 and 2025 year-end disclosures.

We did not independently verify the accuracy and completeness of the data except to the extent required by generally accepted professional standards and practices. We did however review the data for internal consistency and reasonableness against the data used in the last valuations, and subjected it to a number of tests of reasonableness and consistency, including the following:

- the number of covered members is reasonable;
- a member's age is within a reasonable range;
- a member's years of membership is within a reasonable range given the age;
- a member's retirement age is within a reasonable range; and
- a member's gender has been provided and is reasonable for member and covered spouse if applicable.

Summary of Active Members as of December 31, 2022

Active Members	Life Insurance	Retirement Grant / NVSL
Number of employees		
Male	388	278
Female	171	93
Total	**559**	**371**
Number with family coverage	n/a	n/a
Average age	43.2	41.7
Average service	12.8	13.2
Average salary	$94,400	$89,000

Summary of Retired Members as of December 31, 2022

Retired Members	Life Insurance	Retirement Grant / NVSL
Number of employees		
Male	346	n/a
Female	92	n/a
Total	**438**	**n/a**
Number with family coverage	n/a	n/a
Average age	71.5	n/a
Average life insurance amount	$34,600	n/a

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Appendix B. ACTUARIAL ASSUMPTIONS AND METHODS

The following table summarizes the assumptions used as of December 31, 2022 and December 31, 2023:

Assumptions	December 31, 2022	December 31, 2023
Financial Assumptions		
Discount Rate	5.05% per annum	4.65% per annum
Salary Increase	2.00% per annum	
Expenses & Taxes Loads	Life Insurance 17.40% Retirement Grant Plan n/a Non-vesting Sick Leave n/a	
Demographic Assumptions		
Mortality	CPM 2014 Private Mortality Table with generational improvements using scale CPM-B	
Termination Rates (sample rates)	Age 20: 0.070; 25: 0.050; 30: 0.050; 35: 0.050; 40: 0.030; 45: 0.020; 50: 0.020; 55: 0.000	
Retirement Rates	Upon attainment of Rule of 90; or Completion of 30 years of service subject to a minimum of 55, and a maximum of 71	
Disability Rates	n/a	
Assumed average sick leave usage per year	Retirement Grant only All eligible active employees use over 6 days for sick leave per year.	
Net excess sick leave utilization rate / Probability of usage of excess sick leave days for unionized members	Non-vesting Sick Leave only Age: 25 - 29 (Average Excess Days Used 6.2, Probability of Usage 9.7%); 30 - 34 (10.6, 9.4%); 35 - 39 (13.8, 10.1%); 40 - 44 (15.7, 10.8%); 45 - 49 (16.4, 11.6%); 50 - 54 (15.9, 13.2%); 55 - 59 (14.1, 14.9%); 60 and over (11.1, 18.9%); Total (13.3, 12.0%)	

Discount Rate

Under IAS 19, the method of selecting the accounting discount rate should reference market interest rates on high-quality debt instruments at the measurement date with cash flows that match the timing and amount of expected benefit payments. We used the Canadian Institute of Actuaries (CIA) model based on the Fiera Capital curve to develop the appropriate discount rate for accounting purposes.

This discount rate results in the duration of the bonds approximating the duration of the plan liabilities. The duration is the average of time to payment of benefits weighted by the size of expected benefit payments discounted by the applicable spot rates, at each point in time. The Company's post-employment plan has a duration of approximately 12.2 years. The duration also measures the impact of a change in the discount rate. For example, a 1% change in discount rate results in an approximate 12.2% change in the liabilities in the opposite direction of the discount rate change. With the relatively high duration, the plan liabilities are very sensitive to changes in the discount rate.

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Salary Escalation Rate

This assumption reflects Hydro Ottawa' long-term expectations of future annual increases in salary.

Demographic Assumptions

Mortality assumptions are based on the 2014 Canadian Pensioners Mortality table (CPM 2014), applicable to private sector retirees. The improvement table applied to the mortality table to reflect future improvements in mortality is the Canadian Pensioners Mortality improvement scale (CPM Scale). This CPM Scale B table is a two-dimensional table of improvement rates by age that decreases in a linear fashion for years 2012–2030.

For termination incidence and retirement rates we have continued to use the tables developed by the prior actuaries.

Claims Cost Development

For the life insurance benefit, the per capita claim assumption is based on the projected benefit amount payable upon death.

Net Excess Sick Leave Utilization Rate

For each unionized individual included in the membership data as of October 31, 2022, we were provided the number of sick leave days earned, the number of sick leave days used, and the accumulated sick day balances in each fiscal year over the period 2019 to 2021.

To estimate the utilization of the accumulated sick leave benefits in the future, we developed the average "Net Excess Sick Leave Days" and the probability that an employee would actually use excess sick leave days in the future.

The "Net Excess Sick Leave Days" are defined as the average number of sick leave days individuals are expected to use in a year, from the accumulated unused sick leave days earned in periods prior to the year of usage. For example, if the individual earns 18 sick days in a year, and uses 21 days, then 3 days are the "excess sick days". It is the expected draw of these additional 3 days that determines the non-vesting sick leave liability. There is no liability determined or required for the 18 days earned and used in the year.

Sick leave days used in a particular year were split between days used from the current period's allotment of sick days (sick leave days earned in the year), and days used that were accumulated from prior periods. This was done for each individual and for each year by applying the principle that any days used over the sick leave days earned in a year were taken from unused sick leave accumulations from prior periods. The average of the net excess sick leave days was based on the experience of individuals who actually used excess days above days earned in a year.

The "Probability of Usage of Excess Days" is equal to the probability that an individual will use sick leave days accumulated from prior periods in a given year. The probabilities were developed from actual usage experience over the period 2014 to 2021 for employees by age, with 60% weighting given to the most recent three years of data from 2019 to 2021 and 40% weighting to 2014-2018 data.

In addition to the salaries of employees that the Company pays with respect to the non-vested accumulating sick days, the Company would also pay payroll taxes (CPP/QPP premiums, Employment Insurance (EI) premiums, employer health taxes, workers' compensation premiums, etc.), with the respect to the employees taking a sick day and receiving compensation. As a result, there can also be an obligation related to these "payroll taxes". We have not made a provision for payroll taxes in this analysis.

Actuarial Cost Method

With respect to the post-retirement benefits, the actuarial valuation determines the defined benefit obligation (the "DBO") and the current service cost as described under IAS 19.

- The DBO at a particular date for an employee can be defined as the total present value of all expected future benefit payments that is attributed to service earned to that date.
- The current service cost for an employee can be defined as the present value of all expected future benefit payments that is attributed to the current year.
- For retired employees (or employees already eligible to retire and receive benefits), the current service cost is equal to zero, if no further service adds significantly to the value of the benefits.
- The DBO and current service cost for the Plan at a particular date would be the sum of the individual DBOs and current service costs for all employees and retirees.

The DBO and current service costs were determined using the Projected Unit Credit Method. Under this method, the projected post-retirement benefit is deemed to be earned on a pro-rata basis over years of service.

Under IAS 19, the projected post-employment benefit is deemed to be earned on a pro-rata basis from the date at which service first contributes towards earning a benefit, to the date where future service does not lead to a material amount of further benefit from the Plan. The attribution period for the valuations of the life insurance and retirement grant plan is from date of hire to expected retirement age.

For the NVSL plan, the actuarial liability of the Plans was determined using the Projected Unit Credit Method. Under this method, the projected benefit is deemed to be earned on a pro-rata basis over the years of service to date of decrement. The actuarial liability for each member is equal to the present value of the projected benefits up to the valuation date. The annual current service cost for a member is equal to the value of the benefits expected to be earned in each of the years following the valuation date, up to the next valuation date. The total actuarial liability and the total current service cost are determined by summing these amounts for all individuals.

Accounting Policies

Under IAS 19 gains or losses for the life insurance, retirement grant and health and dental plans, that arise are recognized in other comprehensive income in the year. Prior service costs that arise due to plan changes or other significant events are recognized in the charge to income in the year they arise.

For the NVSL plan, gains or losses that arise are recognized in the defined benefit cost (income statement) in the year they arise. Prior service costs that arise due to plan changes or other significant events are also recognized in the charge to income in the year they arise.

The benefit expense is made up of the following main components, and will be re-determined each year end for the following year:

- Current Service cost – value of benefits expected to be earned in the year
- Past service cost – estimated increase/decrease in the DBO for any plan changes or significant events
- Interest cost – interest on the liability at the start of the year
- For the NVSL plan – gains or losses that arise in the year.

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Appendix C. SUMMARY OF PLAN PROVISIONS

Life Insurance Benefits

- The cost of benefits is 100% employer paid
- Coverage for retired employee only (no dependent coverage)
- Benefits payable during retirement

Plan Option	Eligibility	Life Insurance Benefit
A	With less than 10 years of service at retirement	Flat coverage of $2,000
B	With at least 10 years of service at retirement, and - Hired on or after May 1, 1967, and ○ Elected coverage under Options 2, 3 or 4 (Optional Life Insurance) at any time prior to retirement	50% of final annual earnings at retirement, reducing by 2.5% final earnings at the end of each year following retirement for 10 years, to a minimum of 25%
C	With at least 10 years of service at retirement, and - Hired on or after May 1, 1967, and ○ Elected coverage under Options 1 (Basic Coverage only) only prior to retirement	50% of final annual earnings at retirement
D	With at least 10 years of service at retirement, and - Hired before May 1, 1967	70% of the amount for which member was insured prior to retirement

Retirement Grant Benefits

Upon resignation or retirement, employees who have 25 or more years' continuous service may receive one of the following severance payments:

- Four week's pay; or A retirement grant.

The retirement grant is based on the employee's sick leave record and is equal to:

- The years of service (to a maximum of 35 days) multiplied by the sick leave factor. Allowance will be made to exclude one three-month illness (sixty-five working days)

Average Sick Leave Usage Per Year	Eligibility
4.0 Days	100%
4.5 Days	80%
5.0 Days	60%
5.5 Days	40%
6.0 Days	20%
Over 6.0 Days	0%

Sick Leave Days

Unionized employees are entitled to 18 sick leave days a year. Unused sick leave days earned in a particular year can be banked for use in a future year. There is no payout of the value of unused sick days at termination, retirement or death.

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Appendix D. EMPLOYER CERTIFICATION

With regards to this report for accounting purposes on the Company's employee future benefits as of December 31, 2023, I certify that, to the best of my knowledge and belief:

- The membership data provided to the actuary and summarized in Appendix A, includes a complete and accurate description of every person who is entitled to benefits under the terms of the plan for membership up to October 31, 2022, and is appropriate as of December 31, 2023;
- Management's best estimate assumptions for purposes of the valuations and disclosures are those described in Appendix B of this report;
- The summary of the plan provisions provided in Appendix C is a reasonable outline of the Plan provisions as of December 31, 2023 as provided to and confirmed with the actuary;
- Accounting policies adopted by the Company are those described in this report; and
- All events subsequent to December 31, 2023 that may have an impact on the valuation have been communicated to the actuary.

2024-12-16

Date

DocuSigned by:
Susan Taylor
D30DF2DA8FD4422...

Signature

Susan Taylor

Name

Manager, Employee Experience

Title

SHARED SERVICES AND CORPORATE COST ALLOCATION

1. INTRODUCTION

In accordance with section 2.4.3.2 of the *Chapter 2 Filing Requirements for Electricity Distribution Rate Applications - 2025 Edition for 2026 Rate Applications,* dated December 9, 2024 (Filing Requirements), this Schedule provides information about shared services and corporate cost allocation between Hydro Ottawa and affiliated entities. The governance structure is available in Schedule - 1-6-1 - Corporate Structure and Governance.

Hydro Ottawa provides shared services to its affiliated companies: Hydro Ottawa Holding Inc., Hydro Ottawa Energy Services Inc. and the other non-regulated entities within Hydro Ottawa Capital Corporation. This is done in order to realize economies of scale, manage costs, and maintain service levels. Hydro Ottawa supports these affiliates through the provision of shared corporate services such as Human Resources, Safety, Environment, Business Continuity, Facilities, Information Technology, Finance, Regulatory, Legal, Customer Service, Communications, Engineering, and Meter data reporting, and Mechanic Services to its affiliates.

In addition, Hydro Ottawa provides shared corporate services to Non-Regulated Activities, such as the Conservation First Framework (CFF) Wind Down, in the same manner as affiliated Service Level Agreements (SLAs). On March 21, 2019, the Government of Ontario announced the elimination of provincially-funded Conservation and Demand Management (CDM) programs and the centralization of select programs with the Independent Electricity System Operator (IESO). These reforms were effective April 1, 2019. Notwithstanding these developments, Hydro Ottawa and Hydro Ottawa Holding Inc. continued to allocate shared corporate services to CDM programs as part of the wind down for the provincial CDM framework and according to the fully-allocated costing methodology for non-rate-regulated activities described in the *Conservation and Demand Management Code for Electricity Distributors*.

Hydro Ottawa Holding Inc. provides shared corporate services to Hydro Ottawa in the form of strategic direction and oversight in areas such as Human Resources, Safety, Environment, and Business Continuity Management (collectively referred to as 'HR'), Information Management and Technology (IT), Finance, Treasury, Internal Audit, Risk Management, Legal, Corporate Administration, Customer Service, Corporate Communications, Distribution Leadership, and Management Services. Some Board of Directors-related costs are also included in the corporate cost allocation to Hydro Ottawa.

2. SHARED SERVICE AND CORPORATE COST ALLOCATION MODEL

In accordance with the *Affiliate Relationships Code for Electricity Distributors and Transmitters* (ARC), prices for shared corporate services are determined by fully-allocated cost-based pricing. Services that could be competitively sourced in the market are based upon the pricing methodology Hydro Ottawa applies to third parties. The pricing models and methodology were developed internally and the services are provided under the terms of SLAs.

Table 1 below describes the pricing methodology used for each functional service.

Table 1 – Pricing Methodology for Services Provided by Hydro Ottawa to Affiliates

Functional Service	Pricing Methodology
Human Resources, Safety, Environment, Business Continuity	Cost per employee
Information Technology	
Facilities	Market based rate for rent, proportionate share of cost for operations and maintenance, property taxes, property insurance, and furnishings
Finance	Mainly based on the number and / or value of transactions processed
Regulatory, Legal, Customer Services, Corporate Communications, Engineering	Proportionate share of cost factored by time spent
Meter Data Reporting	Market based, based on number of accounts
Mechanic Services	Internal labour rate factored by time spent

Hydro Ottawa Holding Inc. costs are allocated to its affiliates based on its budgeted costs and time to be spent supporting each affiliate for the fiscal year. This initial assessment is completed annually during budgeting to ensure an accurate allocation of costs. At year-end, the allocations are reviewed, with any significant differences between actuals and budget being adjusted through a true-up process to ensure costs are properly allocated to each affiliate.

Table 2 below identifies the functional services provided by the Hydro Ottawa Holding Inc. to Hydro Ottawa and describes the pricing methodology used for each functional service.

Table 2 – Pricing Methodology for Services Provided by Hydro Ottawa Holding Inc.

Management Service	Pricing Methodology
Legal	Proportionate share of cost factored by time spent
Corporate Administrative Services	
Finance	
Customer Service, Corporate Communications	
Distribution Leadership	
Information Management and Technology	
Management Services, Internal Audit, Risk Management, Corporate Planning & Performance	Proportionate share of cost factored by revenue, headcount and asset values
HR	Proportionate based on number of employees
Treasury Services	Proportionate share of cost based on value of total debt outstanding
Board of Directors	Proportionate share of cost

3. SHARED SERVICES PROVIDED BY HYDRO OTTAWA

Table 3 below provides a summary of the services provided by Hydro Ottawa to its affiliates and the Non-Regulated Activities (CFF Wind Down) in the Historical Years, Bridge Years and 2026 Test Year as reflected in Attachment 4-2-1(A) - OEB Appendix 2-N - Shared Services and Corporate

Cost Allocation. The subtotal of Shared Services to Hydro Ottawa Affiliates is also presented in Schedule - 6-3-5 - Other Income & Deductions.

Table 3 – Summary of Shared Services Provided by Hydro Ottawa 2021-2026 ($'000s)

Provided By	Provided To	OEB Approved	Historical Years			Bridge Years		Test Year
		2021	2021	2022	2023	2024	2025	2026
Hydro Ottawa	Hydro Ottawa Holding Inc.	$1,487	$1,161	$1,386	$1,335	$1,421	$1,480	$1,583
Hydro Ottawa	Hydro Ottawa Capital Corporation	$1,602	$1,352	$1,662	$2,021	$1,801	$1,740	$1,421
Hydro Ottawa	Hydro Ottawa Energy Services Inc.	$1,712	$1,261	$1,298	$1,528	$1,676	$1,709	$1,777
Subtotal of Shared Services to Hydro Ottawa Affiliates		**$4,800**	**$3,775**	**$4,346**	**$4,884**	**$4,898**	**$4,929**	**$4,780**
Hydro Ottawa	Conservation First Framework Wind Down	$35	$64	$6	$3	$0	$0	$0
Total		**$4,835**	**$3,839**	**$4,352**	**$4,887**	**$4,898**	**$4,929**	**$4,780**

3.1. SHARED SERVICES TO AFFILIATES - VARIANCE ANALYSIS

Shared services approved in 2021, totaling $4.8M, are in line with the 2026 test year of $4.8M. The 2023 actual shared services revenue of $4.9M is also materially in line with the 2026 test year of $4.8M.

3.1.1. Shared Services to Hydro Ottawa Holding Inc

Hydro Ottawa's projected service to Hydro Ottawa Holding Inc. is expected to increase immaterially by $0.1M between 2021 OEB Approved and 2026 Test Year. This increase is attributed to expected rising operational costs.

3.1.2. Shared Services to Hydro Ottawa Capital Corporation

A $0.2M reduction in the services provided by Hydro Ottawa to Hydro Ottawa Capital Corporation between 2021 OEB Approved and 2026 Test Year is projected. Over this timespan, a non-regulated entity within Hydro Ottawa Capital Corporation will reduce its reliance on Hydro Ottawa services, including no longer using Hydro Ottawa owned warehouse or office space, and reduce their reliance on certain technology systems. There is a reduction of $0.6M from 2023 Actual to 2026 Test Year which reflects the affiliate's reduction in service needs as mentioned above.

3.1.3. Shared Services to Hydro Ottawa Energy Services Inc.

Similar to Hydro Ottawa Holding Inc., Hydro Ottawa Energy Services Inc. is projected to see a $0.1M increase in services from Hydro Ottawa between 2021 OEB Approved and 2026 Test Year. This increase is driven by anticipated increased operational costs.

3.2. SHARED SERVICES TO NON-REGULATED ACTIVITIES (CFF WIND DOWN)

This reduction is due to phasing-out of the provincial CDM framework, as described in section 1 above.

4. CORPORATE COST ALLOCATION RECEIVED BY HYDRO OTTAWA

Table 4 below provides a summary of the services received by Hydro Ottawa from Hydro Ottawa Holding Inc. in the Historical Years, Bridge Years and 2026 Test year.

Table 4 – Summary of Shared Corporate Services Received by Hydro Ottawa 2021-2026 ($'000s)

Provided By	Provided To	OEB Approved[1]	Historical Years			Bridge Years		Test Year
		2021	2021	2022	2023	2024	2025	2026
Hydro Ottawa Holding Inc.	Hydro Ottawa	$3,816	$4,017	$5,018	$6,433	$6,893	$7,436	$7,712
Hydro Ottawa Holding Inc.	Conservation First Framework	$11	$14	$5	$7	$0	$0	$0
TOTAL		**$3,827**	**$4,031**	**$5,023**	**$6,439**	**$6,893**	**$7,436**	**$7,712**

4.1 HYDRO OTTAWA HOLDING INC. CORPORATE COST ALLOCATION TO HYDRO OTTAWA - VARIANCE ANALYSIS

Several factors are contributing to the projected increase in Hydro Ottawa Holding Inc.'s service costs to Hydro Ottawa, from the $3.8M OEB-approved amount in 2021 to $7.7M in 2026. This increase stems from several key factors including the demand for executive management time which has significantly increased. This can be seen in a few ways, including the more frequent severe weather events. Such events require additional leadership and increased communication with customers and city councillors. Additionally, Hydro Ottawa's capital plans, increased headcount and lessons learned from the 84-day strike in 2023 have increased the demand for executive management time. The growth of Hydro Ottawa's customer base, in conjunction with the changing regulatory landscape, energy security priorities, climate change implications and digital transformation of the industry, has necessitated an increase in other services such as Internal Audit support.

[1] Included in Hydro Ottawa Limited, 2021-2025 *Custom Incentive Rate Application*, EB-2019-0261 but does not take into account any settlement adjustments to the envelope

Another driver includes general inflation and rising operational costs. Notably, increased cyber security needs have driven up Information Technology costs.

The increase of $1.3M from 2023 Actual to 2026 Test Year reflects the rising operational expenses and Distribution Leadership service mentioned above.

4.2. HYDRO OTTAWA HOLDING INC. CORPORATE COST ALLOCATION TO CFF WIND DOWN

The corporate cost allocation to the CFF Wind Down program is reduced through 2023 due to phasing-out of the provincial CDM framework, as described in Section 1 above.

5. BOARD OF DIRECTORS COSTS

The Filing Requirements stipulate that distributors must identify any Board of Directors-related costs for affiliates that are included in the distributors' own costs. Hydro Ottawa confirms that there are no Board of Directors-related costs for affiliated entities included in its costs.

Attachment 4-2-1(A) - OEB Appendix 2-N - Shared Services and Corporate Cost Allocation

(Refer to the attachment in Excel format)

PURCHASES OF NON-AFFILIATE SERVICES

1. INTRODUCTION

In accordance with section 2.4.3.3 of the *Chapter 2 Filing Requirements for Electricity Distribution Rate Applications - 2025 Edition for 2026 Rate Applications*, dated December 9, 2024, this Schedule provides information on Hydro Ottawa's procurement policy and competitive tendering process. In addition, this Schedule provides confirmation that Hydro Ottawa's purchases of non-affiliate services comply with this policy and process.

2. PROCUREMENT POLICY

Hydro Ottawa's procurement policy is appended to this Application as Attachment 4-2-2(A) - Procurement Policy. The policy ensures consistency and accountability in major procurement contracts, and stipulates that all acquisitions shall be supported by purchase orders, with noted exceptions such as utilities and taxes (as defined by the policy).

The utility's procurement policy identifies the following objectives:

- Establish an efficient process for the purchase of quality goods and services;
- Ensure favourable prices are obtained to maximize the value of all purchases for Hydro Ottawa stakeholders;
- Ensure Hydro Ottawa procures all goods and services from reputable/ethical vendors;
- Support the protection of the environment;
- Ensure fair, open, transparent, and accountable competitive processes are followed in the acquisition of goods and services; and
- Ensure compliance with all applicable laws and regulations.

Spending authority is exercised pursuant to a defined corporate policy in Attachment 4-2-2(B) - Approval Authority for Procurements and Disbursements, and is controlled by electronic workflow embedded in the utility's enterprise resource planning (ERP) system.

2.1. PROCUREMENT METHODS

2.1.1. RFx - Competitive Vehicles for Awarding Business

Hydro Ottawa utilizes a variety of options for competitive procurement purposes, including but not limited to the following:

- RFP – Request for Proposals;
- RFSO – Request for Standing Offers;
- RFQ – Request for Quotations;
- RFSA – Request for Supply Arrangements; and
- RFPQ – Request for Pre-Qualification.

2.1.2. Strategic Alliances

Alliance suppliers manage inventory manufacturing, or ordering with manufacturers, positioning Hydro Ottawa to take delivery only when ready to proceed with the related projects. All residential transformers, poles and underground cable are managed in this manner. In addition, some commercial transformers as well as some pole-line hardware and connectors are procured through this method. Regular forecast sessions enable the supplier to work their supply channels to pipeline material to meet projected need dates with minimal commitment on Hydro Ottawa's part.

These suppliers have been selected due to their distribution source from various manufacturers. Hydro Ottawa's Standards department has identified preferred manufacturers, and material is purchased from distributors authorized to represent those manufacturers. While there are occasionally alternate manufacturer items that can be used for an application, and those items are potentially purchased from another distributor in the event of an emergency or material

shortage, Hydro Ottawa predominantly purchases from the distributor authorized to represent the manufacturer determined by Standards. These strategic alliances fall under either sole source or directed source procurements per policy depending on the item but are shown as alliances in the table below.

2.1.3. Sole Source/Directed Source

This method of sourcing involves instances in which the competitive procurement process is waived for compelling business reasons. Please refer to Attachment 4-2-2(A) - Procurement Policy for a detailed description of the circumstances under which these purchases are permissible and how they are authorized.

Hydro Ottawa defines a “Sole Source” procurement as one in which there is only one identifiable source for a given good or service. Examples include commercial monopolies, existing engagements, original equipment manufacturers, software renewals, and support for owned software. These procurements require advance approval from the utility’s Procurement group to ensure that applicable conditions are truly met.

“Directed Source” procurements are defined as procurements in which there is more than one identifiable source for a given good or service, but for which there are compelling business reasons why the selected vendor is not determined by a competitive process. The chief examples of Directed Source procurements are those in which the following conditions are met:

- The need is one of pressing urgency and must be addressed quickly to alleviate a threat to one or more of the following:
  - Health, safety, or welfare of Hydro Ottawa employees and/or the public;
  - Hydro Ottawa and/or public property; and/or
  - Essential services.
- The time, effort, and expense of a competitive procurement are not justified given the nature of the goods or services being acquired.

- The need is a follow-on to a previously acquired good or service, is price competitive, and is most appropriately provided by the original supplier.

As described in Hydro Ottawa's procurement and approval policies, these Directed Source procurements require an elevated level of approval by Procurement and the relevant business unit prior to the execution of any contract or Purchase Order.

3. MATERIAL STRATEGIC ALLIANCE, SOLE SOURCE AND DIRECTED SOURCE PURCHASES UNDER PROCUREMENT POLICY

Tables 1 through 3 below summarize the purchases of non-affiliate services for the 2021-2023 period for which Hydro Ottawa exercised the Strategic Alliance, Sole Source or Directed Source provisions in its procurement policy. The total costs are those costs paid to the suppliers in each year, excluding tax. Suppliers have been included in the list if the total purchases exceeded $1M per year. The Tables below outline the type of procurement method that was employed (Strategic Alliance, Sole Source or Directed Source) for each supplier for the 2021-2023 period.

Table 1 – Material Strategic Alliance, Sole Source and Directed Source Purchases (2021)

Procurement Method	Supplier	Service / Product	Cost
Strategic Alliance	Anixter Power Solutions	O/H & U/G Transformers and hardware, O/H cable	$ 13,155,155
Strategic Alliance	Prysmian Cables and Systems Canada Ltd.	U/G Cable	$ 8,007,596
Strategic Alliance	S&C Electric Canada Ltd.	Switchgear	$ 3,819,339
Strategic Alliance	Elster Solutions Canada Inc.	Smart Meters	$ 2,171,142
Strategic Alliance	Stella-Jones Inc.	Wood Poles	$ 1,481,123
Strategic Alliance	Rexel Utility	Hardware: Connectors, Elbows, Heat Shrink, Crossarms, etc.	$ 1,164,886
Directed Source	J.W. Leslie Utilities	Light Underground Electrical Services	$ 2,945,150
Sole Source	Elster Solutions Canada Inc	Connexo Netsense Software (AMI technology)	$ 1,698,572
Sole Source	Oracle Canada ULC	ERP Software Licence & Support	$ 1,397,566
Sole Source	City of Ottawa	Civil project - VIA rail crossing	$ 1,150,000

Table 2 – Material Strategic Alliance, Sole Source and Directed Source Purchases (2022)

Procurement Method	Supplier	Service / Product	Cost
Strategic Alliance	Anixter Power Solutions	O/H & U/G Transformers and hardware, O/H cable	$17,974,838
Strategic Alliance	Prysmian Cables and Systems Canada Ltd.	U/G Cable	$ 8,277,336
Strategic Alliance	S&C Electric Canada Ltd.	Switchgear	$ 3,217,749
Strategic Alliance	Elster Solutions Canada Inc.	Smart Meters	$ 3,144,219
Strategic Alliance	Stella-Jones Inc.	Wood Poles	$ 2,610,797
Strategic Alliance	Rexel Utility	Hardware: Connectors, Elbows, Heat Shrink, Crossarms, etc.	$ 1,269,254
Directed Source	J.W. Leslie Utilities	Light Underground Electrical Services	$ 3,461,455
Sole Source	Hydro One	Hawthorne TS & Cyrville MTS Forecast Load Final True Up	$ 2,508,600
Sole Source	Workday Limited	HR Software Licence & Support	$ 2,541,165
Sole Source	Oracle Canada ULC	ERP Software Licence & Support	$ 1,428,404
Sole Source	Cority Software	Health & Safety Software License/Support	$ 1,124,510

Table 3 – Material Strategic Alliance, Sole Source and Directed Source Purchases (2023)

Procurement Method	Supplier	Service / Product	Cost
Strategic Alliance	Anixter Power Solutions	O/H & U/G Transformers and hardware, O/H cable	$ 23,300,140
Strategic Alliance	Prysmian Cables and Systems Canada Ltd.	U/G Cable	$ 8,656,561
Strategic Alliance	S&C Electric Canada Ltd.	Switchgear	$ 4,781,914
Strategic Alliance	Elster Solutions Canada Inc.	Smart Meters	$ 1,917,374
Strategic Alliance	Stella-Jones Inc.	Wood Poles	$ 1,384,576
Strategic Alliance	Rexel Utility	Hardware: Connectors, Elbows, Heat Shrink, Crossarms, etc.	$ 1,651,991
Directed Source	Relevantz Technology	My Account Services	$ 1,784,945
Directed Source	Hexagon	Schematics Implementation	$ 1,699,107
Directed Source	J.W. Leslie Utilities	Light Underground Electrical Services	$ 2,695,218
Sole Source	Open Systems International	Outage Management System (OMS) Software Licences	$ 4,245,438
Sole Source	Oracle Canada ULC	ERP Software Licence & Support	$ 1,437,912

HYDRO OTTAWA CORPORATE POLICY

Subject: Procurement		
Category: Finance	**Policy Number**: POL-Fi-003.02	
Administrator: Director of Finance	**Owner:** Chief Financial Officer	**Approver:** President and CEO

1. PURPOSE

The purpose of this policy is to document the principles that govern the acquisition of goods and services by Hydro Ottawa.

The objectives of the Procurement Policy are to:

- Ensure fair, open, transparent and accountable competitive processes are followed in the acquisition of goods and services;
- Ensure compliance with all applicable laws and regulations;
- Establish an efficient process for the purchase of goods and services;
- Ensure favourable prices are obtained to maximize the value for Hydro Ottawa stakeholders;
- Ensure Hydro Ottawa procures all goods and services from reputable and ethical vendors;
- Advance the protection of the environment through sustainable procurement of goods and services, with a preference for local procurement; and
- Protect assets and data by ensuring that all applicable vendors undergo a risk assessment.

2. SCOPE

This policy applies to all employees of Hydro Ottawa.

3. DEFINITIONS

Approval Authority refers to the assignment of financial decision-making authority by the President and CEO to various positions within Hydro Ottawa.
Call-Ups are forms used to request the purchase of specific goods and services available for sale under applicable master service agreements.
Competitive Procurement is where multiple quotes/bids/proposals are received and evaluated before choosing a vendor.
Cybersecurity and Privacy Standards are a set of minimum standards that a vendor is required to meet as part of any acquisition of goods and/or services as defined by Hydro Ottawa's Cybersecurity Policy, Third Party Risk Assessment Procedures, and General Privacy Policy.
Directed Source Procurement is where there is more than one identifiable source of supply for a given good or service, but there are compelling reasons why the selected vendor is not determined by an open competition.
Emergency is defined as a sudden, urgent, unexpected occurrence or occasion requiring immediate action such as a mechanical breakdown where immediate repair or replacement is required, natural disaster, pandemic, unforeseen damage or an urgent health and safety matter.
Hydro Ottawa refers to Hydro Ottawa Holding Inc. and its wholly-owned subsidiaries.
Procurement is defined as the team of individuals responsible for purchase orders, agreements, any other purchasing or contracting requirements, and communication with vendors.
Related Party Listing refers to a vendor list that has been identified by General Counsel due to a declared relationship between a Hydro Ottawa employee or Board member and certain vendors.
Request for Proposal or other types of requests, ie Request for Information, Request for Pre-Qualification, etc are collectively referred to as ***RFx***. The result of an RFx process may be different contract types including, but not limited to: Standing Offers which include Work Request forms for predetermined price schedules, or Master Service Agreements which include Call-Ups.
Risk Assessment refers to the process to assess a new vendor on multiple factors, including business risk, financial health, cybersecurity and privacy risks before entering into an agreement with that vendor.
Sole Source Procurement is one where there is only one identifiable source for a given good or service. This includes the renewal of, or purchases of additional licenses for, existing software.
Sustainable Procurement ensures that the goods and services Hydro Ottawa buys are as sustainable as possible, with low environmental impact and positive social results.

Work Request are forms used to request the purchase of specific goods and services available for sale under applicable Standing Offer agreements

4. POLICY DIRECTIVES

4.1 GENERAL

a. Procurement is responsible for:
   i. Ensuring that goods and services are acquired using the appropriate procurement method (competitive process, directed source, sole source, etc.) and conformance to the policy directives; and
   ii. Ensuring fair, open, transparent and accountable competitive processes are followed in the acquisition of goods and services.
b. Approvals for the purchase of all goods and services and contract signing will be in accordance with Hydro Ottawa's Approval Authority Policy (POL-Fi-010).
c. Prior to selecting the procurement method and identifying the signing authority, the total anticipated contract value should be determined over the term of the contract including any contemplated contract extensions or renewals.
d. Existing contracts and vendors should be used for the required goods and services if applicable.
e. For all types of purchases in each of the categories described below:
   i. Procurement will determine if a contract is required, which will follow the Contract Procurement Procedure (PRO-Fi-013).
   ii. For all other purchases, a purchase order issued by Procurement, together with the standard Hydro Ottawa terms and conditions for goods or services as noted on our external website (Supply Chain | Hydro Ottawa) will apply.
   iii. Either a purchase order or a signed contract issued by Procurement is required prior to work commencing.

4.2 STOCK ITEMS

a. **Stock Items** are items that have a part number, are kept in stock and are purchased solely by Procurement as needed or on a recurring basis.
b. Major and non-major equipment, and controlled and non-controlled equipment are approved and procured per Hydro Ottawa Internal Technical Standards Equipment Approval Process ESS0008 and Ontario Regulation 22/04.
c. All material shall be competed through an RFx process at minimum every 10 years.

4.3 ONE-TIME AND/OR PRICE ONLY EVALUATION PURCHASES

a. Purchases of non-stock goods and/or services below $2,000 can be processed without a purchase order (PO), or by credit card, pursuant to the Credit Card Policy (POL-Fi-001). However, the following items cannot be purchased by a credit card regardless of dollar value:
   i. if work has to be performed in person on any site, a PO is required. On site services require, at minimum, evidence of insurance coverage, worker's compensation coverage, indemnification, etc., covered by a PO, along with a review for medium/high risk work.
   ii. any software or service that involves data, customer information or employee information must be reviewed by Procurement, Legal and Cybersecurity, including click through agreements.
b. For non-stock goods and/or services purchases with values greater than $2,000 to a maximum of $50,000, Procurement, or the Requisitioner, will obtain one written quotation.
c. For non-stock goods and/or services purchases with values greater than $50,000 to a maximum of $100,000, Procurement, or the Requisitioner, will obtain a minimum of two written competitive quotations.
d. For non-stock goods and/or services purchases with values greater than $100,000, Procurement, or the Requisitioner, will obtain a minimum of three written competitive quotations.

4.4 RECURRING AND/OR MULTIPLE EVALUATION CRITERIA PURCHASES

a. For non-stock goods and/or services that are evaluated on both technical (including timelines) and financial criteria, a formal RFx initiated by Procurement is the preferred method of acquisition, per the

Contract Procurement Procedure (PRO-Fi-013).

b. Generally the open and competitive RFx is issued to select vendors as determined jointly by Procurement and the Requisitioner. Formal requests through MERX may be used in certain situations such as Requests for Information.
c. Planning is essential for complex competitive RFx processes. Procurement will work closely with the Requistioner on the timeline, appointment of the evaluation committee members and preparation of the requirements and specifications of the RFx.
d. Negotiation of pricing, performed by Procurement and the Requisitioner, is permitted once the successful proponent is determined.
e. Contractual terms and conditions are not permitted to be negotiated after an RFx closes.

4.5 DIRECTED SOURCE PURCHASES

a. A Directed Source Form must be completed to justify all Directed Source acquisitions of goods or services in excess of $50,000 for the reasons set out in the Directed Source Form or where the Requisitioner is unable to obtain the minimum number of competitive quotations as outlined in 4.3(c) and (d) above.
b. For Directed Source Purchases, the purchase requisition can be initiated in the ERP system by the Requisitioner at the same time as the Directed Source Form is submitted to Procurement. The approved Directed Source Form must be attached to the requisition before a PO will be generated.
c. The cost of known follow-on support activity (to the maximum duration of the agreement) associated with a Directed Source procurement should be included in the initial total estimated value to avoid duplication in approval requests (e.g. annual hardware/software maintenance, ongoing software support, etc.).
d. Procurement approvals are not required when the non-competitive procurement has been authorized by Hydro Ottawa's Board of Directors and/or its committees. In such a case, a copy of the authorizing resolution from the applicable minutes must be provided to Procurement (prior to it proceeding to conclude a contract or issue a purchase order). A copy of the authorizing resolution from the applicable minutes shall not be provided without the approval of the Corporate Secretary.

4.6 SOLE SOURCE PURCHASES

a. Sole source purchases are used in circumstances such as: renewal of existing software license, customer directed vendor, original equipment manufacturer (OEM), only vendor/contractor able to provide a specific good or service, etc.
b. Approval must be received from the Supervisor, Procurement or the Manager, Supply Chain or their delegate, and the approval email must be attached to the requisition in the ERP system. The approval email will be copied to the next higher level of management when approved by Procurement.

4.7 EMERGENCY PURCHASES

a. Emergency-related purchases of goods and services do not require a Directed Source Form or a purchase order. Rather, an email [from the Requisitioner with a copy to their direct supervisor] must be sent to the Supervisor, Procurement, with a copy to the Manager, Supply Chain and to the Supervisor of Accounts Payable describing the emergency and the work that is underway with the vendor. If the vendor requests a purchase order, a requisition can be created and a purchase order will be generated. Reference to the email should be denoted on the invoice for payment processing.
b. If emergency work is determined to be medium or high risk work per PRO-MS-008 Contractor OHSE Management Program, every effort should be made to engage a contractor that is registered in ISNetworld with a scorecard grade acceptable to Hydro Ottawa. If this is not possible, at a minimum, evidence of the contractor's insurance coverage, and worker's compensation coverage needs to be provided prior to the emergency work commencing.

4.8 CALL-UP/WORK REQUEST PURCHASES

a. Work initiated via Call-Ups/Work Requests must be completed and signed by both parties before work can begin.
b. The signed Call-Up must be attached to the purchase requisition in the ERP system.

c. Work performed under a Work Request is entered on the work order and a purchase order is generated directly from the work order, without any additional approvals required.

4.9 COLLABORATIONS WITH OTHER ORGANIZATIONS

a. Purchases in collaboration with other organizations (i.e. City of Ottawa, other utilities, etc.) are permitted and will be considered a competitive procurement provided the other organization has conducted a competitive process and the pricing and terms are favourable to Hydro Ottawa. A contract between Hydro Ottawa and the applicable vendor will still be required.

4.10 EVALUATION CRITERIA FOR RFx PROCESSES

a. Vendor proposals for the provision of goods will be assessed using a minimum 50% weighting factor for price.
b. Vendor proposals for the provision of services, or a combination of goods and services, will be assessed using a minimum 30% weighting factor for price.
c. Financial evaluation (price) greater than these minimum levels will be determined jointly by Procurement and the Requisitoner.
d. Non-financial proposal evaluation criteria (technical, experience, local, green, sustainability and diversity, equity and inclusion, etc) will be jointly set by Procurement and the Requisitioner.

4.11 TERM

a. The maximum term of a vendor contract (excluding extensions) is limited to 5 years.
b. Optional contract extensions are limited to 2 additional years.
c. Optional contract extensions do not include auto-renewal provisions. If a vendor contract includes auto-renewal, it must also include a termination for convenience clause in favour of Hydro Ottawa.
d. Long-term contracts may exceed the term limit defined above (7 years) when there are significant start-up or changeover costs or whereby Hydro Ottawa deems it to be beneficial. In these cases, the joint approval of the sponsoring EMT member and Chief Financial Officer is required.
e. Software contracts and renewals approved through a sole source or other processes are limited to a 10 year term. Beyond a period of 10 years, an RFx process or a Directed Source Form will be required.

4.12 OTHER

a. Procurement will ensure that each new vendor undergoes a Risk Assessment including engaging with Cybersecurity, if it is first determined by Cybersecurity to be necessary based on the subject goods and/or services. Cybersecurity will rely on a set of tools to assess the vendor and determine if requirements have been met and provide approval. Procurement will include the appropriate cybersecurity and privacy clauses in all agreements where required.
b. Procurement will engage Human Resources (to the extent not already engaged) for any purchases where the services could result in the establishment of an employee/employer relationship.
c. The use of any non-standard terms and conditions (i.e., exceptions to the Procurement precedent contracts) requires prior approval by Legal.
d. Requests to amend previously executed contracts must go to Procurement. Procurement will determine if a contract amendment is required and will manage the contract amendment process with the vendor and Legal as required
e. Requests to amend, extend or increase funds for existing purchase orders require the following:
    i. Additional line(s) must be added to the original requisition, including background information, and approved in the ERP system.
    ii. Revisions requested for greater than 50% of the original purchase order/agreement value must be submitted to the Manager, Supply Chain for pre-approval.
    iii. Requests for material changes in scope as defined in the original purchase order/contract may require a new RFx process as determined by the Manager, Supply Chain.
f. Any use of a Related Party Listing vendor needs approval from General Counsel before Procurement can release the requisition and purchase order in the ERP system.
g. Employees must comply with the Ontario Energy Board's Affiliate Relationships Code for the procurement of services to or from Hydro Ottawa Limited and its affiliates.

h. Quotes, Statement of Work, Order forms or any other documentation received from vendors can only be signed once reviewed and approved by Procurement.
i. Purchase requests must include the full scope of any given engagement to maintain appropriate approval levels. The splitting of purchase requests into multiple purchase orders to reduce the approval level required is a serious violation of this policy.
j. With the exception of specific contractual terms and emergency purchases, purchase orders initiated after the provision of goods or services and/or the receipt of vendor invoices are a serious violation of this policy and will require the approval of the related Sponsoring EMT Member regardless of dollar value.

5. RELATED POLICIES, PROCEDURES and REFERENCE DOCUMENTS

Approval Authority Policy (POL-Fi-010)
Business Expense Reimbursement Policy(POL-Fi-005)
Contract Procurement Process (PRO-Fi-013)
Contractor Discipline Procedure (PRO-Fi-011)
Contractor OHSE Requirements (WI-MS-002)
Cybersecurity Policy (POL-IT-001)
Directed Source Form (HydroBuzz)
General Privacy Policy (POL-EN-008)
Hydro Ottawa Credit Card Policy POL-Fi-001)
Hydro Ottawa's Code of Business Conduct
Insurance Policy (POL-Fi-006)
OEB Affiliate Relationships Code (ARC)
Contractor OHSE Management Program (PRO-MS-008)
Regulation 22/04 Equipment Approval Process ESS0008
Third Party Risk Assessment Procedures (SEC-I-006)
Training and Development Policy (POL-Hr-004)
Travel Expense Reimbursement Policy (POL-Fi-002)

6. EXCLUSIONS

Schedules 3 and 4 of the Approval Authority Policy (POL-Fi-010) describe the types of expenses that do not require a purchase order. These include emergency purchases, legal services, conferences, training, easements and property taxes as examples. Refer to these schedules for the complete list.

7. ADDITIONAL POLICY ELEMENTS

Requisitioner's Responsibilities:

i. Provide sufficient lead time for the processing of procurement documentation;
ii. Ensure initial and all follow-on requirements, including duration, are identified to Procurement in determination of the total potential contract value;
iii. Develop the Statement of Work or detailed Specification as applicable;
iv. Initiate a Purchase Requisition in the ERP system and, through the embedded workflow, secure approval to purchase;
v. In conjunction with Procurement, evaluate vendors' proposals in accordance with the predetermined evaluation criteria/weighting; and
vi. Adhere to the Affiliate Relationships Code for transactions involving Hydro Ottawa Limited and its affiliates and seek guidance from the Regulatory Affairs group for any related compliance questions or issues.

Management's Responsibilities:

i. Communicate details of the Procurement Policy to employees;
ii. Ensure all procurements comply with this policy;
iii. Collaborate with Procurement in the aggregation of Hydro Ottawa common purchases and use of pre-approved vendors first; and
iv. Address minor policy non-compliance issues with the responsible employee and escalate serious policy violations to the Policy Owner.

Procurement's Responsibilities:

i. Ensure fair, open, transparent and accountable competitive processes are followed in the

acquisition of goods and services;

ii. Monitor conformance with the policy and procedures;
iii. Monitor risk assessment factors for new and existing vendors to ensure that proper reviews take place and to set up contracts when needed in order to protect assets and information;
iv. Escalate non-compliance issues;
v. Provide advice and guidance to internal customers and work collaboratively with them during the procurement process to maximize the value for Hydro Ottawa;
vi. Assess the complexity and risk of purchases to determine when agreements are required and interface with Legal, Cybersecurity, Human Resources and other divisions accordingly.

8. COMPLIANCE

Serious policy violations will be addressed in accordance with Hydro Ottawa's Code of Business Conduct and may result in disciplinary action up to and including termination of employment.

9. APPROVAL HISTORY

Revision	Release Date	Release Description	Policy Owner Sign- off:	Approved by:
.00	January 1, 2013	Initial release		
.01	April 1, 2017	Re-affirmation of policy, revisions to weighting criteria, quotation limits and contract length as well as minor updates and references.		
.02	February 2022	General updates and clarifications, incorporation of cybersecurity and privacy risk reviews, contract terms extended, increased authority limits and enhanced focus on sustainable procurement	DocuSigned by: Geoff Simpson 43DC885CF33E43F... Chief Financial Officer	DocuSigned by: Bryce Conrad 8EDB4595749C4E3... President and CEO

Scheduled Re-affirmation Date: February 2025	**Responsibility:** Chief Financial Officer

10. POLICY EXCEPTIONS

Exceptions to the above directives and/or changes to this policy must receive written pre-authorization from the Chief Financial Officer. For clarification on any aspect of this policy contact the Director of Finance.

HYDRO OTTAWA CORPORATE POLICY

Subject: Approval Authority		
Category: Enterprise	**Policy Number**: POL-Fi-010.02	
Administrator: Director Finance	**Owner:** Chief Financial Officer	**Approver:** President and CEO

1. PURPOSE

The purpose of this policy is to define the financial approval authority limits relating to the procure-to-pay process.

2. SCOPE

All employees of Hydro Ottawa.

3. DEFINITIONS

Approval Authority refers to the assignment of financial decision-making authority by the President and CEO to various positions within Hydro Ottawa.
Competitive Procurement is where multiple quotes / bids / proposals are received and evaluated before choosing a vendor.
Directed Source Procurement is where there is more than one identifiable source of supply for a given good or service, but there are compelling reasons why the selected vendor is not determined by an open competition.
Emergency is defined as a sudden, urgent, unexpected occurrence or occasion requiring immediate action such as a mechanical breakdown where immediate repair or replacement is required, natural disaster, pandemic, unforeseen damage or an urgent health and safety matter.
Hydro Ottawa refers to Hydro Ottawa Holding Inc. and its wholly-owned subsidiaries.
Related Party Listing refers to a vendor list that has been identified by Legal due to a declared relationship between a Hydro Ottawa employee or Board member and certain vendors.
Sole Source Procurement is one where there is only one identifiable source for a given good or service. This includes the renewal of, or purchases of additional licenses for, existing software.

4. POLICY DIRECTIVES

4.1 GENERAL

a. The President and CEO has been granted, by the Board of Directors of Hydro Ottawa, full decision-making authority on all Hydro Ottawa day-to-day financial matters.
b. This authority has been assigned by the President and CEO to various employees within Hydro Ottawa based on their position and business mandate.
c. Details on the approval authority are provided in **Annex 1** of this policy, which is structured as follows:

Schedule 1	Approval of Purchase Requisitions for Hydro Ottawa Limited, Portage Power and all other Entities
Schedule 2	Approval of Directed Source Procurements
Schedule 3	Approval of Payments That Do Not Require Purchase Orders but approval thresholds are the same as Schedule 1
Schedule 4	Approval of Payments That Do Not Require Purchase Orders but there are no approval thresholds
Schedule 5	Requisition Summary Form for Requisitions greater than $5,000,000

d. All purchases must comply with Hydro Ottawa's Procurement Policy (POL-Fi-003) and should be read in conjunction with this policy.
e. All values in Annex 1 are expressed in Canadian currency. For US subsidiaries, the limits will translate to USD without conversion (e.g. Schedule 1, a US denominated entity would allow for the Director level to approve purchase requisitions at $1 million USD).
f. Responsibility rests with the approver to ensure there is a current year budget to pay for goods and services procured through purchase orders and/or procurement contracts. Future estimates are based on projected requirements.
g. No approver may authorize a payment to or for the benefit of oneself.

4.2 INVOICE AND EXPENSE REPORT APPROVALS

a. Direct supervisors have the authority to approve out-of-pocket expense reports and credit card expense reports for their employees regardless of dollar value. Individuals cannot approve their own expenses. For group expenditures such as a meal, the most senior person at the event should expense the item.
b. For goods whereby a true receipt exists (goods received into the warehouse), no invoice approval is required.
c. For invoices without a purchase order, they must fall into the category of expense as noted on Schedule 3 and 4 in order to be processed for payment.
d. For invoices with a purchase order, only one invoice approval is required as follows:
    i. The person approving the invoice is decided by the Business Unit procuring the goods or services.
    ii. The person chosen must have knowledge of the goods or services being procured.
    iii. The person approving the invoice must ensure that the payment agrees with the pre-approved purchase order commitment and that the work or service has been completed to Hydro Ottawa’s satisfaction.

4.3 CONTRACT SIGNATURES

a. Contract signature authorities will follow Schedule 1 regardless of initial procurement type (Competitive, Directed or Sole Source).
b. Refer to the Contract Procurement Procedure (PRO-Fi-013) for details on the contract process.
c. Only Procurement is authorized to make vendor notifications of an award, contract or purchase order. No documentation (quote, statement of work, order form, etc) is permitted to be signed by the Business Unit unless approved in writing by Procurement.

4.4 EMERGENCY PURCHASES

a. Emergency-related purchases of goods and services do not require a Directed Source Form or a purchase order. Rather, an email [from the Requisitioner with a copy to their direct supervisor] must be sent to the Supervisor, Procurement, with a copy to the Manager, Supply Chain and to the Supervisor of Accounts Payable describing the emergency and the work that is underway with the vendor. If the vendor requests a purchase order, a requisition can be created and a purchase order will be generated. Reference to the email should be denoted on the invoice for payment processing.
b. If emergency work is determined to be medium or high risk work per PRO-MS-008 Contractor OHSE Management Program, every effort should be made to engage a contractor that is registered in ISNetworld with a scorecard grade acceptable to Hydro Ottawa. If this is not possible, at a minimum, evidence of the contractor’s insurance coverage, and worker’s compensation coverage needs to be provided prior to the emergency work commencing.

4.5 SPECIALIZED CATEGORY OF PURCHASES REQUIRING ADDITIONAL APPROVALS

a. The procurement of goods/services in the following specialized categories must have co-approval from the appropriate Hydro Ottawa "functional" division before action is taken:

Category	Division	Approver
IM & IT Products and Services	Information and Technology	Director, Planning and Program Management for IM&IT and Manager, Cybersecurity
Advertising and Branding	Communications and Public Affairs	Director, Communications and Public Affairs
Sponsorships/Donations	Communications and Public Affairs	Director, Communications and Public Affairs
Legal Services	Legal	General Counsel
Commercial Insurance	CFO (Treasury)	Treasurer
Leases (as lessee)	CFO (Treasury)	Treasurer
Recruitment Services	HR	Director, Human Resources Services

Note:

- General Counsel approval is not required when there is an established relationship between the legal services provider and Hydro Ottawa, and General Counsel initially approved the vendor.
- Commercial Insurance excludes HR employee benefit insurance programs such as life insurance, health and dental plans, the Workplace Safety and Insurance Board, etc.
- Cybersecurity approval may be required for any electronic asset or data as defined in the Cybersecurity Policy (POL-IT-001).

4.6 DELEGATION OF AUTHORITY

a. Individuals are responsible for delegating their approval authority before departing on planned absences by documenting the delegate's name and the duration of the authority reassignment in an email which, at a minimum, should be sent to:

To: Supply Chain Analyst
Supervisor, Accounts Payable
Copy: Supervisor, Procurement
Name of delegated signing authority
Manager of the individual delegating their signing authority
Supporting Executive/Administrative Assistant

Note: The above email can be sent by the appropriate Executive/Administrative Assistant copying the individual who is delegating their approval authority.

b. Approval authority can be delegated to a peer within the employee's division or to a subordinate no lower than the Supervisor.
c. Chiefs must delegate their approval authority to a direct report within their division (i.e. lateral assignments are not permitted).
d. In the case of absences where a delegate has not been named, approval authority reverts to the individual's direct manager who can either retain the signing authority responsibilities until the individual returns or initiate the assignment of temporary signing authority as described above.

4.7 OTHER

a. Non-disclosure agreements (NDAs) must be signed by the General Counsel and the supervisor/manager/director leading the activity.

b. Any use of a Related Party Listing vendor needs approval from General Counsel before Procurement can release the requisition and purchase order in the ERP system.

5. RELATED POLICIES, PROCEDURES and REFERENCE DOCUMENTS

Business Expense Reimbursement Policy(POL-Fi-005)
Contract Procurement Process (PRO-Fi-013)
Contractor Discipline Procedure (PRO-Fi-011)
Contractor OHSE Management Program (PRO-MS-008)
Cybersecurity Policy (POL-IT-001)
General Privacy Policy (POL-EN-008)
Hydro Ottawa Credit Card Policy (POL-Fi-001)
Hydro Ottawa's Code of Business Conduct
Insurance Policy (POL-Fi-006)
OEB Affiliate Relationships Code (ARC)
Procurement Policy (POL-Fi-003)
Request to Direct Source Goods and Services Form (HydroBuzz)
Training and Development Policy (POL-Hr-004)
Travel Expense Reimbursement Policy (POL-Fi-002)

6. EXCLUSIONS

There are no exclusions.

7. ADDITIONAL POLICY ELEMENTS

There are no additional policy elements.

8. COMPLIANCE

Serious policy violations will be addressed in accordance with Hydro Ottawa's Code of Business Conduct and may result in disciplinary action up to and including termination of employment.

9. APPROVAL HISTORY

Revision	Release Date	Release Description	Policy Owner Sign- off:	Approved by:
.00	January 1, 2013	Initial release		
.01	April 1, 2017	Changed numbering from POL-En-006 to POL-Fi-010 and increased approval limits for business efficiency		
.02	April 2022	General updates, removal of redundant schedules, differentiation of approval levels between entities and modification of certain thresholds	DocuSigned by: Geoff Simpson 43DC885CF33E43F... Chief Financial Officer	DocuSigned by: Bryce Conrad 8EDB4595749C4E3... President and CEO

Scheduled Re-affirmation Date:	Responsibility:
April 2025	Chief Financial Officer

10. POLICY EXCEPTIONS

Exceptions to the above directives and/or changes to this policy must receive written pre-authorization from the Chief Financial Officer. For clarification on any aspect of this policy contact the Director, Finance.

Approval Authority Policy (POL-Fi-010) ANNEX 1 – AUTHORITY LEVELS

Schedule 1

Table A: Approval of Purchase Requisitions for Hydro Ottawa Limited	
Approver	**Limit**
President & CEO	> $5,000,000
Chief	To $5,000,000
Director	To $1,000,000
Manager	To $200,000
Supervisor	To $25,000

Table B: Approval of Purchase Requisitions for Portage Power[1] entities	
Approver	**Limit**
President & CEO	> $5,000,000
Chief	To $5,000,000
Director	To $1,000,000
Manager, Supervisor, or Engineer[2]	To $200,000

Table C: Approval of Purchase Requisitions for all other Entities (including Envari[3] and Hydro Ottawa Holding Inc.)	
Approver	**Limit**
President & CEO	> $5,000,000
Chief	To $5,000,000
Director	To $1,000,000
Manager	To $200,000
Supervisor	To $100,000
Engineer[2]	To $50,000

NOTES:

1. The above authorization limits relate to purchase requisitions for both competitive and sole source procurements.
2. Directed source procurement approval requirements are provided in Schedule 2.
3. The above authorization limits also relate to master service agreement call-up arrangements, the Hydro Ottawa project manager can sign the call-up form but when the requisition is entered into the ERP system, the requisition approval authority will follow this schedule.
4. The above authorization limits are also effective for contract signatures regardless of the initial procurement vehicle (i.e. contracts arising from directed source approvals on Schedule 2 will still follow Schedule 1 signing authority for contract signatures).
5. To the extent there is a Service Level Agreement between Hydro Ottawa affiliates, an approver employed by one entity is authorized to provide approval for an affiliated entity provided the Approver is knowledgeable of the matter being approved. By way of example, a Director of IT for Hydro Ottawa Limited can sign and approve an IT contract for Envari.
6. Requisitions greater than $5,000,000 must have the Requisition Summary Form (Schedule 7) completed and attached to the requisition in the ERP system.
7. If a request is made for a value that is within the requestor's own approval authority, it must go one level higher. A requestor cannot approve their own purchase (i.e. a Director requesting $500,000 must go one level higher to their Chief).

[1] Portage Power refers to Energy Ottawa Inc. and all of its subsidiaries
[2] P.Eng
[3] Envari refers to Envari Holding Inc. and all of its subsidiaries

Approval Authority Policy (POL-Fi-010) ANNEX 1 – AUTHORITY LEVELS

Schedule 2

Approval of Directed Source Procurements	
Approver	**Limit**
Sponsoring EMT Member + CFO + President & CEO	> $500,000
Sponsoring EMT Member + Director, Finance	> $150,000 to $500,000
Sponsoring Director + Manager, Supply Chain	$75,000 to $150,000
Sponsoring Manager[4] + Supervisor, Procurement	<$75,000

NOTES:

1. A Directed Source Procurement is when there is more than one identifiable source for a given good or service, but there are compelling reasons why the selected vendor is not determined by an open competition. (Refer to Hydro Ottawa's Procurement Policy – POL-Fi-003 for additional details on Directed Source Procurements)
2. A Directed Source Form must be completed to justify all Directed Source acquisitions of goods or services in excess of $50,000 for the reasons set out in the Directed Source Form or where the Requisitioner is unable to obtain the minimum number of competitive quotations as outlined in Hydro Ottawa's Procurement Policy – POL-Fi-003, Sections 4.3(c) and (d).
3. Once the Directed Source Form has been signed by all parties, the Business Unit must attach the signed form to the requisition in the ERP system.
4. Requisitions greater than $5,000,000 must have the Requisition Summary Form (Schedule 7) completed and attached to the requisition in the ERP system.
5. Completion of a Directed Source Form after the goods or services have already been provided and/or an invoice has already been issued is considered a serious policy violation.
6. Hydro Ottawa management approvals are not required for Directed Source Procurements authorized by Hydro Ottawa's Board of Directors and/or its committees. In such a case, a copy of the authorizing resolution excerpts from the applicable meeting minutes must be attached to the requisition in the ERP system. Excerpts of minutes and copies of resolutions shall not be provided without the prior authorization of the Corporate Secretary.
7. A purchase order issued by Procurement or a signed contract is required prior to work commencing.
8. Procurement will determine if standard purchase order terms and conditions will apply or a contract, if a contract is required it will follow the Contract Procurement Procedure (PRO-Fi-013).

[4] For the Portage Power entities (Energy Ottawa Inc. and all its subsidiaries), the Sponsoring Manager level can also be used by a Sponsoring Supervisor or Sponsoring Engineer (P.Eng)

Approval Authority Policy (POL-Fi-010) ANNEX 1 – AUTHORITY LEVELS

Schedule 3

Approval of Payments that do not Require Purchase Orders (Invoices Without Reference)	
Approver limits must follow those in Schedule 1	
Expense Item	**Responsible Division**
Freight & forwarding	CFO (Note 3)
Courier	
Fuel	
Fleet purchases (excluding capital purchases)	
Commercial Insurance premiums	
Corporate income tax	
RFP Related Expenses (i.e. Honoraria)	
Licenses and registrations	
Legal Costs (Non HR-related) (Note 1)	Legal
Legal Costs (HR-related) (Note 1)	HR
Employee Events and Rewards and Recognition	
Planning permits, access fees, development fees, easements, traffic control	Distribution Engineering & Asset Management & Distribution Operations (Note 3)
Sponsorships, market promotions, donations	Communications & Public Affairs
Conferences and training (Note 2)	All
Subscriptions (excluding software), publications, corporate memberships	All
Emergency related purchases of goods and services (Note 4)	All
One-time purchases less than $2,000	All

Notes:

1) The term “Legal Costs” shall mean costs incurred for professional legal advice and does not include costs incurred with lawyers for non-legal consulting services.
2) Training whereby Hydro Ottawa hires an external contractor to provide group-based training will require a requisition and purchase order. However, where employees attend externally provided training or a conference, no requisition or purchase order is required. Refer to the Training and Development Policy (POL-Hr-004) for details on conference and training approvals.
3) Responsible division denotes the division that approves the majority of these payments for the organization, however there are instances where other divisions may incur these expense items such as courier, fuel, planning permits; in these scenarios the division incurring the expense has the authority to approve provided the limits follow those in Schedule 1 provided they are not expenses requiring additional approvals as noted in Section 4.5
4) As noted in Section 4.4. an email must be sent to the Supervisor, Procurement, with a copy to the Manager, Supply Chain and to the Supervisor of Accounts Payable describing the emergency and the work that is underway with the vendor and reference to the email should be denoted on the invoice for payment processing.

Approval Authority Policy (POL-Fi-010) ANNEX 1 – AUTHORITY LEVELS

Schedule 4

Specified Approval of Payments that do not Require Purchase Orders (Invoices Without Reference)	
Specified Approvers (Regardless of Dollar Value)	
Expense Item	**One of:**
Property taxes	Manager, Fleet and Facilities Director, Finance
Utilities	
Interest and financing charges	Manager, Accounting Manager, Taxation & Treasury Services Treasurer Director, Finance
Bank charges	
Sales and Income tax (HST, QST etc)	
Other taxes and duties (eg DRC)	
IESO[1] and HONI charges	Manager, Accounting Manager, Taxation & Treasury Services Treasurer Director, Finance
Embedded Generators (FIT, MicroFIT, HCI, RESOP)	
Payments to Retailers	
Payroll-related remittances and HR employee benefit insurance programs (life insurance, health and dental plans, Workplace Safety and Insurance Board, etc.)	Manager, Compensation, Technology and Analytics Manager, Human Resources Services Director, Human Resources Services
Telecommunication Services	Manager, Infrastructure Management Chief Information Officer

Notes:

1. There are no dollar limits associated with the expense items listed in this schedule.
2. Individuals identified as approvers in this schedule must determine supporting documentation requirements for invoice approval with concurrence from the Director, Finance.
3. Additions or changes to related authorizations in this schedule require the approval of the Chief Financial Officer.
4. Telephone-related costs as well as data lines are exempt from requiring approvals in advance of paying the invoices; however, a quarterly review by the Chief Information and Technology Officer Division is required to ensure the amounts are correct and in accordance with contracts.
5. For Portage Power and other affiliates that manage these items independently, the specified approver should be the relevant Accounting Supervisor or Manager, Director or Chief of that division.

[1] Including related data submission to IESO and Ontario Ministry of Finance

Approval Authority Policy (POL-Fi-010) ANNEX 1 – AUTHORITY LEVELS

Schedule 5

Requisition Summary[2]

Instructions: Complete all applicable fields and attach to the requisition in the ERP system:

Date:	YYYY-MM-DD
Division/Group:	
Vendor:	
Selection Process (RFP, Directed Source, etc)	
Requisition/Contract #:	
Project Name:	
Project Timing: **(Start and End Dates)**	
Description of Work:	
Amendment Reason(s) if applicable	
Type of work (demand, sustainment, general capital, generation, etc):	
Cost (Original + Amendments (if applicable)**):**	
Additional comments:	

[2] Requisitions greater than $5,000,000 must have this Requisition Summary Form attached to the requisition in the ERP system

REGULATORY ONE-TIME COSTS

Hydro Ottawa confirms that there are one-time costs being requested for recovery over the 2026-2030 Test Years related to this Application. Per the *Chapter 2 Filing Requirements for Electricity Distribution Rate Applications - 2025 Edition for 2026 Rate Applications*, dated December 9, 2024 one-time costs included in the Historical, Bridge, and Test Years are included in the first year, 2026, to be amortized over the 2026-2030 period.

The one-time costs include external studies on core areas or topics that were commissioned to support, and in some cases guide, Hydro Ottawa's Business Plan and requested revenue requirements.[1] Additionally, the one-time total cost estimate includes costs for OEB hearing costs, intervenor costs, staffing costs, and legal costs set to be incurred in the adjudication of this Application. Please refer to Table 1 below as well as Excel Attachment 4-2-3(A) - OEB Appendix 2-M - Regulatory Cost Schedule for further details on these one-time costs.

Table 1 - Regulatory One-Time Costs Related to Application

Regulatory Costs (One-Time)	Last Rebasing (2021 OEB Approved)	Last Rebasing (2021 Actual)	2026 Application Cost (Forecast)
Expert Witness costs			$ 300,000
Legal costs	$ 150,000	$ 136,068	$ 950,000
Consultants' costs	$ 1,736,990	$ 1,638,540	$ 2,697,459
Intervenor costs	$ 150,000	$ 363,976	$ 475,000
OEB Section 30 Costs (application-related)	$ 275,000	$ 262,577	$ 325,000
Compensation			$ 613,900
Travel and Miscellaneous		$ 22,427	$ 35,000
TOTAL	**$ 2,311,990**	**$ 2,423,588**	**$ 5,396,359**
1/5 amortized over IRM period 2021-2025	$ 462,398	$ 462,398	
1/5 amortized over IRM period 2026-2030			$ 1,079,272

[1] The external studies commissioned in support of this Application are listed in Schedule 1-1-1 - Table of Contents.

The costs provided in Table 1 indicate an increase in one-time costs in comparison to Hydro Ottawa's previous rebasing application. The 2021-2025 Rate Application resulted in a near full Settlement, with the single remaining issue heard through a written hearing. In addition, only one Hydro Ottawa external expert witness was engaged during the process, and Hydro Ottawa did not request incremental internal staff costs. Hydro Ottawa's estimate in Table 1 reflects a full oral hearing, the potential for additional expanded expert witness involvement and incremental internal staff costs in the preparation of this Application. Hydro Ottawa's costs related to special studies and legal support reflect the change in the level of complexity being introduced into rate applications. This is a result of the increased complexity of the distribution grid, supporting customer needs and required evidence to support utility costs when managing a unique service territory and diverse set of customers. Hydro Ottawa may have underestimated the cost of Intervenors and OEB staff depending on the process set-out in review of the evidence filed in this Application.

Hydro Ottawa confirms that it serves more than 30,000 customers, and as a result differential filing requirements do not apply when completing a rate application.

Similar to the 2021-2025 rate application, Hydro Ottawa proposes to use a 1508 Uniform System of Accounts Sub-Account to fully amortize one-time costs included in the Historical, Bridge and Test Years over the 2026-2030 period.

Attachment 4-2-3(A) - OEB Appendix 2-M - Regulatory Cost Schedule

(Refer to the attachment in Excel format)

REGULATORY COSTS

1. INTRODUCTION

This schedule details Hydro Ottawa's regulatory affairs business unit functions and the Historical, Bridge and Test year on-going regulatory costs. Regulatory affairs enables the utility to fulfill its obligations under the various rules, regulations and codes of the OEB, Independent Electricity System Operator (IESO) and Ministry of Energy. The program has two distinct areas to manage, rates & revenue, and regulatory policy, compliance & reporting. Core functions of this program include: overseeing the implementation of OEB-approved distribution rates and charges and ongoing review and analysis; preparation of distribution rate applications; revenue load forecasting; cost allocation; rate design; deferral and variance accounts (DVA); regulatory compliance review and support; regulatory reporting, policy research and analysis; and public policy engagement, advocacy and implementation.

Included in Regulatory Costs are compensation and benefits costs related to employees overseeing these core functions. OEB annual cost assessments and license fees are also included, as are intervenor and other cost awards, professional services (legal and consulting), and other regulatory memberships (Electrical Safety Authority). Regulatory costs for Hydro Ottawa are included in the Uniform System of Accounts (USofA) 5655 - Regulatory Expenses, USofA 5630 - Outside Services Employed,[1] USofA 5610 - Management Salaries & Expenses, USofA 5615 - General Administrative Salaries & Expenses, and USofA 5620 - Office Supplies & Expenses.

2. ONE-TIME AND ON-GOING COSTS

Regulatory costs are split between one-time and on-going costs. One-time costs are incremental costs pertaining to this rate rebasing Application. They are presented separately in Schedule 4-2-3 - Regulatory One-Time Costs and in Attachment 4-2-3 (A) - Appendix 2M -

[1] Prior to 2019, OEB Section 30 Costs were included in UsofA 5620, Office Supplies and Expense.

Regulatory Cost Schedule, with the full amount of those costs proposed to be recovered on an amortized basis from 2026-2030.

As part of the 2024 update to the Chapter 2 Filing Requirements, on-going Regulatory costs are no longer to be provided as part of Appendix 2M - Regulatory Costs Schedule.[2] Table 1 presents the on-going regulatory costs for the 2021-2025 Historical and Bridge years and the 2026 Test year.

Table 1 - On-going Regulatory Costs 2021-2026 ($000s)[3]

Regulatory Costs	Historical			Bridge		Test
	2021	2022	2023	2024	2025	2026
Compensation and Other	$ 977	$ 1,131	$ 1,047	$ 1,216	$ 1,318	$ 1,349
OEB Annual Assessment	$ 1,354	$ 1,558	$ 1,724	$ 1,930	$ 2,162	$ 2,164
Other Regulatory Memberships	$ 157	$ 156	$ 162	$ 168	$ 173	$ 175
Section 30 Costs	$ 63	$ 82	$ 79	$ 100	$ 90	$ 75
Total	**$ 2,551**	**$ 2,928**	**$ 3,011**	**$ 3,414**	**$ 3,743**	**$ 3,762**

3. OEB COST ASSESSMENTS

In 2016, the OEB revised its cost assessment model.[4] As part of this change, the OEB established a DVA, Account 1508 Other Regulatory Assets, Sub-Account OEB Cost Assessment Variance, to capture the difference between the costs incurred as a result of the new methodology and the costs which had already been built into a utility's rates. The variance account was to be utilized until a utility's rates were next rebased.[5]

[2] Ontario Energy Board, *Chapter 2 Filing Requirements for Electricity Distribution Rate Applications - 2025 Edition for 2026 Rate Applications* (December 9, 2024), page 34.
[3] Totals may not sum due to rounding.
[4] Ontario Energy Board, Letter re: *Revisions to the OEB Cost Assessment Model* (February 9, 2016).
[5] *Ibid*, page 2.

These revisions to the OEB's cost assessment model substantially increased Hydro Ottawa's allocation of the OEB's costs, which can be seen in Table 2 below. For additional information on the OEB Cost Assessment Variance Account, please refer to Schedule 9-1-3 - Group 2 Accounts. Please see Table 2 below for a comparison of the OEB annual cost assessments for its fiscal years ending in 2015 through 2024, which helped to inform the future forecast.

Table 2 - OEB Annual Assessment 2015-2024 ($000s)

OEB Fiscal Year (April-March)	Annual Assessment	Year over Year $ Change	Year over Year % Change
2015-2016	$ 967	-	-
2016-2017	$ 1,439	$ 472	48.8%
2017-2018	$ 1,586	$ 146	10.2%
2018-2019	$ 1,348	$ (237)	(15.0%)
2019-2020	$ 1,426	$ 78	5.8%
2020-2021	$ 1,397	$ (30)	(2.1%)
2021-2022	$ 1,347	$ (49)	(3.5%)
2022-2023	$ 1,583	$ 235	17.5%
2023-2024	$ 1,767	$ 185	11.7%

As a result of the cost methodology change, OEB annual assessment costs represent more than 50% of Hydro Ottawa's total on-going Regulatory costs. As the industry has experienced an increase in policy consultations and working groups, a higher than inflationary impact through the 2022-2024 period was experienced and it is estimated to continue into the 2026 Test Year.

4. EMPLOYEE APPLICATION COSTS

The costs associated with the time spent by Hydro Ottawa's regulatory employees in preparing this Application have not been included in USofA 5655 - Regulatory Expenses. These costs are contained within the general operations, maintenance and administration budgets. The costs

associated with the time spent in preparing this Application by personnel from other business units within the utility (such as finance, distribution asset management, treasury, human resources, customer service, information technology, etc.) are likewise not included in USofA 5655. Instead, these costs are contained within the respective budgets of those business units. For the cost of incremental staff and estimated overtime of permanent employees used to support the preparation of this Application please see Schedule 4-2-3 - Regulatory One-Time Costs.

For further discussion on regulatory costs please also see Schedule 4-1-1 - Operations, Maintenance, and Administration Summary.

LOW-INCOME ENERGY ASSISTANCE PROGRAM

1. INTRODUCTION

The Low-Income Energy Assistance Program (LEAP) provides emergency financial assistance to eligible low-income customers and is funded by the local distributor.

As set out in the OEB report on the LEAP issued in 2010,[1] and in accordance with section 2.4.3.5 of the *Chapter 2 Filing Requirements for Electricity Distribution Rate Applications- 2025 Edition for 2026 Rate Applications*, dated December 9, 2024, Hydro Ottawa has annually allocated 0.12% of its OEB-approved distribution service revenue requirement towards the LEAP Emergency Financial Assistance (EFA) program. Hydro Ottawa will continue to support the LEAP and any new assistance programs that may be prescribed during the rate period of 2026-2030.

2. HISTORICAL AND FORECASTED LEAP CONTRIBUTION

Table 1 below shows Hydro Ottawa's annual LEAP contributions from 2021-2026 and the total number of customers assisted between 2021-2024. The annual contribution amounts of $315K in 2025 and $324K in the 2026 Test Year are based on estimates of Hydro Ottawa's distribution service revenue requirement. Hydro Ottawa confirms that funding for the LEAP program is recovered from all rate classes.

[1] Ontario Energy Board, *Report of the Board - Low-Income Energy Assistance Program*, EB-2008-0150 (March 10, 2009), page 10.

Table 1 – LEAP Contributions ($'000s)[2] and Number of Customers Assisted

	Historical Years			Bridge Years		Test Years
	2021	2022	2023	2024	2025	2026
Annual Contribution	$ 249	$ 263	$ 276	$ 294	$ 315	$ 324
Carryover from Prior Years	$ 498	$ 722	$ 813	$ 891	$ 869	n/a
Other: Cost Assessment Offset[4]	$ 33	-	-	-	-	-
Sub-Total Funds Available	**$ 780**	**$ 985**	**$ 1,089**	**$ 1,185**	**$ 1,184**	**n/a**
Less: Admin Fees	$ 37	$ 39	$ 41	$ 44	n/a	n/a
Less: Grants Disbursed	$ 21	$ 132	$ 157	$ 272	n/a	n/a
Total Funds Unused	**$ 722**	**$ 813**	**$ 891**	**$ 869**	**n/a**	**n/a**
Total Number of Applicants	77	289	411	547	n/a	n/a
Number of Applicants Assisted	57	243	383	533	n/a	n/a

Demand for the LEAP program, introduced in January 2011, has steadily declined in Hydro Ottawa's service territory since 2015. This decline, reflected in both the number of applicants and the dollar amount of grants disbursed to customers, has resulted in an increased accumulation of unused funds annually. Several factors have contributed to this trend.

Firstly, the Ontario Electricity Support Program (OESP), introduced in January 2016, provides monthly credits directly to qualifying low-income households, reducing their electricity costs. Secondly, the 2017 Ontario Fair Hydro Plan lowered electricity bills for all Ontario residential consumers by 25%. These programs have collectively eased the financial burden on eligible low-income customers, lessening their reliance on LEAP.

Furthermore, the introduction of the Winter Disconnection Moratorium (Moratorium) in 2017, which prohibits distributors from disconnecting residential customers for non-payment annually

[2] Totals may not sum due to rounding.

between November 15 and April 30, has removed a significant driver for LEAP applications during the winter months.

It is also important to consider the unique circumstances of the 2020-2021 period. The COVID-19 pandemic significantly impacted LEAP program volumes. Moratorium extensions, the availability of additional financial assistance through the COVID-19 Energy Assistance Program (CEAP), and reduced access to intake centers for application processing due to restrictions on in-person visits all contributed to the decline. Furthermore, Hydro Ottawa's flexible Arrears Payment Agreements provided additional support to customers. The availability of pandemic-related government funding and deferrals (e.g. the Canada Emergency Response Benefit, child care subsidies, rent relief, etc.) likely helped customers manage their overall expenses, lessening their reliance on energy assistance. Lower electricity costs and potentially reduced discretionary spending during the pandemic may have also eased the financial burden on some households.

Additionally, the rollover of unused LEAP funds from 2016 to 2024 has further supplemented the OEB-prescribed distributor contribution and resulted in excess funding availability for the program each year.

While the demand for LEAP has been in a steady decline over the years, in 2022 Hydro Ottawa has observed that demand began to increase in 2022. This upswing was driven by a confluence of factors, including a challenging economic climate characterized by rising inflation and cost of living increases, which impacted affordability for many households. At the same time, temporary increases in grant amounts and relaxed eligibility criteria[3] made LEAP more accessible. The reopening of resource centers and the cessation of the CEAP program in 2021 likely shifted some applicants back to LEAP. Hydro Ottawa's proactive promotional activities and efforts to

[3] For example, customers no longer needed to be facing imminent disconnection in order to be eligible for a grant.

streamline program access further resulted in increased awareness and encouraged greater program utilization.

While 2023 saw an increase in the number of applicants, LEAP disbursements were moderated by the reinstatement of the original grant maximums (reducing the amount of assistance available) and the continued use of income eligibility thresholds, unchanged since 2015, which no longer accurately reflected current low-income realities and the rising cost of living. Thus the pool of eligible applicants was limited. However, continued outreach initiatives, including targeted communication to customers, in-take agencies, and community groups, supported the increased program awareness and application intake.

Hydro Ottawa actively participated in the Ontario Energy Board's (OEB) Financial Assistance Working Group (FAWG) to review and recommend changes to the existing LEAP guidelines in 2023. On March 1, 2024, the OEB implemented changes making the program more accessible through increased income thresholds and grant amounts. These changes, coupled with Hydro Ottawa's continued focus on increasing awareness of the program through various initiatives, have enabled greater disbursements and provided crucial support to more customers in need.

CHARITABLE AND POLITICAL DONATIONS

Hydro Ottawa follows the OEB's Accounting Procedures Handbook (APH) with respect to charitable and political donations. In accordance with the APH, donations are tracked in the Uniform System of Accounts (USofA) 6205 - Donations, and are not included in the revenue requirement for the Test Years as required.

Only donations specifically for the Low-Income Energy Assistance Program (LEAP), as per section 2.4.3.6 of the *Chapter 2 Filing Requirements for Electricity Distribution Rate Applications - 2025 Edition for 2026 Rate Applications*, dated December 9, 2024, are tracked in USofA Account 6205 - Donations, Sub-account LEAP Funding, and are included in the revenue requirement for the Test Years. The OEB has prescribed the LEAP program to provide one-time assistance to eligible low-income consumers towards paying their electricity bills. Please refer to Schedule 4-2-5 - Low-Income Energy Assistance Program for further details on the program.

Table 1 below summarizes charitable donations from the 2021-2026 period that are either recoverable or non-recoverable for revenue requirement purposes.

Hydro Ottawa's non-rate recoverable charitable contributions consist of various donations and sponsorships supporting community not-for-profits, community and industry associations, and strategically aligned events. Examples of supported causes include:

- Not-for-profit organizations (e.g. United Way, which works to improve lives and strengthen communities by addressing poverty, education, and access to essential services);
- Industry associations (e.g. Electricity Distributors Association, which advocates for the safe, reliable, and sustainable delivery of electricity through local distributors); and

- Community initiatives and events (e.g. Supporting projects and events that align with Hydro Ottawa's Community Investment Program, such as those promoting sustainability or community development).

Table 1 – Charitable Donations Summary ($'000s)

Category	Historical Years			Bridge Years		Test Year
	2021	2022	2023	2024	2025	2026
Rate Recoverable	$ 249	$ 263	$ 276	$ 294	$ 315	$ 324
Non-Rate Recoverable	$ 286	$ 169	$ 192	$ 469	$ 469	$ 479
TOTAL	**$ 535**	**$ 432**	**$ 468**	**$ 764**	**$ 784**	**$ 804**

Hydro Ottawa will adhere to any requirements, as prescribed by the OEB, for the recording of charitable and political donations for any new OEB-approved programs to assist low-income customers or otherwise.

Hydro Ottawa confirms that no political contributions have been included.