

EB-2024-0115 HYDRO OTTAWA LIMITED

ORAL HEARING

OEB STAFF COMPENDIUM

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Exhibit 1, Tab 2, Schedule 5, page 36



1 **5. IMPACTS ON HYDRO OTTAWA 2026-2030 BUDGET**

2 **5.1. OVERVIEW**

3 The general inflationary price trends in the cost of labour, commodities, industrial products, and
4 electrical components, as identified in Sections 3.2 to 3.4 and Hydro Ottawa's own specific
5 experiences noted in Sections 4.1 and 4.2, have impacted the cost of labour and specific
6 products that Hydro Ottawa purchases in support of its OM&A programs and capital projects.

7
8 Labour costs represent 54% and non-labour costs represent 46% of Hydro Ottawa's average
9 OM&A budget for 2026-2030. Internal labour costs represent 11% of Hydro Ottawa's average
10 capital expenditures for 2026-2030. Materials and supplies are 38% of the Test Years budget.
11 Hydro Ottawa expects that 45% of its capital budget will go towards projects undertaken by
12 contractors. The remaining proposed Capital spending includes overhead, fleet, and other
13 expenditures.

14
15 For the 2026-2030 period, Hydro Ottawa's proposed OM&A and capital expenditures
16 incorporate annual labour increases based on the currently-negotiated collective agreement and
17 bank and government forecasts.

18
19 Given that some of these inflationary trends noted in the previous Sections are expected to
20 continue for the 2026-2030 period, Hydro Ottawa has assumed an average annual increase
21 range of 2.1% to 5.0% with respect to the future cost of equipment and materials. This range is
22 based on an analysis of the historical cost of equipment and materials commonly used by Hydro
23 Ottawa. It is noted that there has been a range of inflationary impacts across all equipment and
24 materials and the overall average increase in equipment and materials costs has outpaced the
25 average OEB rate of inflation. The use of a higher-than-average economy-wide inflation rate is
26 based on anticipated increases in raw materials, such as copper and steel required for
27 transformers and lumber for poles.

28
29 As described in the sections above, drivers of the price increases include increased frequency
30 of forest fires caused by climate change, supply chain uncertainty, growth and electrification and

Exhibit 2, Tab 5, Schedule 7, pages 36, 70, 108

Program Investments	Alternative 1: Cost Containment	Alternative 2: Short Term Risk Mitigation	Alternative 3: Long Term Risk Mitigation
Stations and Building Infrastructure Renewal, E2-T5-S7 p. 36			
Table 5 - Summary of Program Investments of Alternatives Considered			
Station Transformers (replacement)	1 (0.2/year)	1 (0.2/year)	1 (0.2/year)
Station Transformers (removed during EOL Voltage Conversion)	5 (1/year)	10 (2/year)	13 (2.6/year)
Station Breakers (replacement)	10 (2/year)	45 (9/year)	90 (18/year)
Station Breakers (removed during EOL Voltage Conversion)	26 (5.2/year)	38 (7.6/year)	59 (11.8/year)
Relays (replacement)	58 (12/year)	145 (29/year)	300 (60/year)
Relays (removed during EOL Voltage Conversion)	77 (15.4/year)	107 (21.4/year)	173 (34.6/year)
Station Batteries (replacement)	5 (1/year)	10 (2/year)	20 (4/year)
Station Batteries (removed during EOL Voltage Conversion)	2 (0.4/year)	3 (0.6/year)	5 (1/year)
RTUs (replacement)	3 (0.6/year)	3 (0.6/year)	8 (1.6/year)
RTUs (removed during EOL Voltage Conversion)	2 (0.4/year)	3 (0.6/year)	5 (1/year)
Transfer Trip	0	2 (0.4/year)	2 (0.4/year)
Minor Station Assets	None	Medium	Highest
Minor Building Assets	None	Medium	Highest
System Observability Investments	Minor	Medium	Highest
TOTAL PROGRAM COST	\$55M	\$108M	\$220M
Overhead Distribution Asset Renewal, E2-T5-S7 p.70			
Table 11 - Summary of Program Investments of Alternatives Considered			
Poles	1100 (220/year)	1475 (295/year)	1975 (395/year)
OH Transformers	225 (45/year)	300 (60/year)	400 (80/year)
3-Phase OH Switches/Reclosers	110 (22/year)	220 (44/year)	340 (68/year)
Incremental Resilience Investments	No	No	Yes (\$1.6M/year)
System Observability Investments	Minor (2/year)	Medium (4/year)	Highest (8/year)
TOTAL PROGRAM COST	\$35M	\$50M	\$68M
Underground Distribution Assets Renewal, E2-T5-S7 p. 108			
Table 17 - Summary of Program Investments of Alternatives Considered			
UG Cables	15km (7km/year)	61km (12km/year)	100km (20km/year)
UG Transformers	215 (43/year)	400 (80/year)	650 (130/year)
Vault Transformers	45 (9/year)	90 (18/year)	120 (24/year)
Vault Switchgear	None	30 (6/year)	45 (9/year)
UG Switchgear	15 (3/year)	30 (6/year)	65 (13/year)
Civil Rebuild	15 (3/year)	30 (6/year)	60 (12/year)
System Observability Investments	None	10 (2/ year)	20 (4/ year)
TOTAL PROGRAM COST	\$47M	\$103M	\$150M

Exhibit 4, Tab 1, Schedule 1, page 16



1 **Table 10 – 2024-2026 - Reconciliation of Positions to FTEs in Appendix 2K¹⁰**

	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

2
 3 The actual vacancy in 2022 and 2023 peaked at 12% due to an increase in attrition, with
 4 anticipated retirements and unanticipated resignations. A hiring freeze that was instituted for the
 5 duration of the COVID-19 pandemic, with only key/critical positions being filled, contributed to
 6 higher vacancy during this time. The post pandemic environment has changed the way
 7 employees and potential employees view employment. Issues such as working from home,
 8 hybrid work arrangements and the mobility of the workforce exacerbated the issue resulting in a
 9 tight labour market for employers and has led to an increase in the attrition rate. In addition, the
 10 labour disruption in 2023 and the subsequent return to work of this segment of employees
 11 caused delays in filling vacant positions.

12
 13 However, recent hiring efforts have been successful and the vacancy assumption is forecasted
 14 to continue to reduce as seen in Table 9. Full details regarding attrition, and retention/attraction
 15 programs instituted to address this can be found in Attachment 4-1-3(B) - Workforce Planning
 16 Strategy. As shown in Table 11 below, this vacancy allowance of 8% results in a reduction of
 17 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.

Exhibit 4, Tab 1, Schedule 1, page 17



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

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

13
14 This increased staffing is driven by several key factors:

- 15
16 • **Significant Capital Program Growth:** The near doubling of capital investment
17 necessitates more skilled trades and technical staff for growth, electrification,
18 infrastructure renewal, grid modernization, and resilience projects.
- 19 • **Increased Project Complexity:** The rising complexity of grid modernization and DER
20 integration projects requires specialized engineering and technical expertise.
- 21 • **Infrastructure Maintenance:** Renewing deteriorating infrastructure and enhancing
22 maintenance programs demand additional skilled trades and technical positions.
- 23 • **Enhanced Oversight:** Growth in project volume and workforce size requires
24 strengthening support functions like system operations, contractor management, and
25 leadership.
- 26 • **Technological Advancement:** The increasing complexity of IT and OT systems, cyber
27 security needs, and digital customer experience enhancements drive the demand for
28 specialized IT expertise.

Exhibit 4, Tab 1, Schedule 1, Attachment A, pages 6-9



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

5

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

10

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

18

19 **2.1.3. Speed, Agility, and Business Continuity**

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

24

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

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

3
4 When the COVID-19 pandemic forced an immediate shift to remote work, Hydro Ottawa's
5 business continuity hinged on rapid adaptation. Recognizing the critical need to maintain
6 communication, the planned Google Workspace implementation was accelerated and deployed
7 overnight. This cloud-based SaaS solution proved vital, preserving employee communication
8 while traditional channels faltered under the unprecedented traffic surge. The intuitive design of
9 Google Workspace enabled swift adoption, even among employees unfamiliar with chat and
10 video conferencing. This rapid, seamless transition, powered by cloud technology, ensured
11 Hydro Ottawa could continue its essential mandate of supplying electricity to the nation's capital,
12 minimizing on-site staff and reducing contagion risks.

14 3. ENTERPRISE ASSET MANAGEMENT (EAM)

15 3.1. SUMMARY

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

24
25 The EAM system will replace disparate systems with a unified platform, facilitating real-time
26 data collection and Condition Based Monitoring, thereby extending asset longevity and reducing
27 downtime. It will also streamline operations, improve service reliability, and enhance customer
28 satisfaction by minimizing manual tasks and optimizing resource allocation. The program,
29 structured in three phases - Roadmap, Solution Selection, and Implementation - aims to

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

6 7 **3.2. CURRENT CHALLENGES**

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

19
20 Specifically, as detailed in Table 1, there are opportunities to improve areas such as data entry
21 across key systems, refine financial decision-making, enhance system integrations, and
22 automate calculations for Asset Health Index (HI) and Asset Management Plans (AMPs). Work
23 dispatch and scheduling can also be optimized through the integration of real-time asset
24 condition information. Addressing these areas will streamline data transformation, creation,
25 synchronization, estimation, forecasting, and project management, leading to greater efficiency
26 across the organization.

1

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.

2

3 **3.3. BENEFITS OF EAM SYSTEM**

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

Exhibit 4, Tab 1, Schedule 1, Attachment A, Table 4, page 3

EAM Project Expenditures (\$'000 000s)

	Test Years				
	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	-	-
Total	3.0	2.9	2.0	0.5	0.5

Exhibit 4, Tab 1, Schedule 1, Attachment A, Table 7, page 20

CRM Project Expenditures (\$'000 000s)

	Test Years				
	2026	2027	2028	2029	2030
Project Expenditures	0.7	1.2	1.1	0.6	0.6

Produced by OEB staff based on the tables above.

Total EAM and CRM Project Expenditures (\$'000 000s) (Produced by OEB Staff)

	Test Years					Total	Annual Average	Variance 2026 vs Annual Average
	2026	2027	2028	2029	2030			
Total Project Expenditures	3.7	4.1	3.1	1.1	1.1	13.1	2.6	1.1

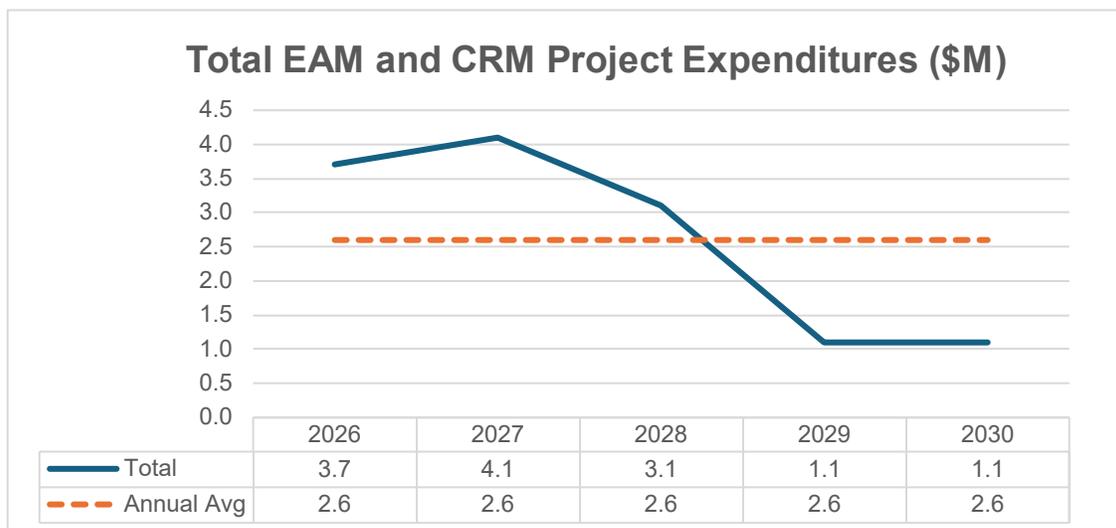


Exhibit 4, Tab 1, Schedule 1, Attachment A, Table 4, page 3

EAM Project Expenditures (\$'000 000s)

	Test Years				
	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	-	-
Total	3.0	2.9	2.0	0.5	0.5

Exhibit 4, Tab 1, Schedule 1, Attachment A, Table 7, page 20

CRM Project Expenditures (\$'000 000s)

	Test Years				
	2026	2027	2028	2029	2030
Project Expenditures	0.7	1.2	1.1	0.6	0.6

Produced by OEB staff based on the tables above:

Total EAM and CRM Project Expenditures (\$'000 000s) (Produced by OEB Staff)

	Test Years					Total	Annual Average	Variance 2026 vs Annual Average
	2026	2027	2028	2029	2030			
Total Project Expenditures	3.7	4.1	3.1	1.1	1.1	13.1	2.6	1.1

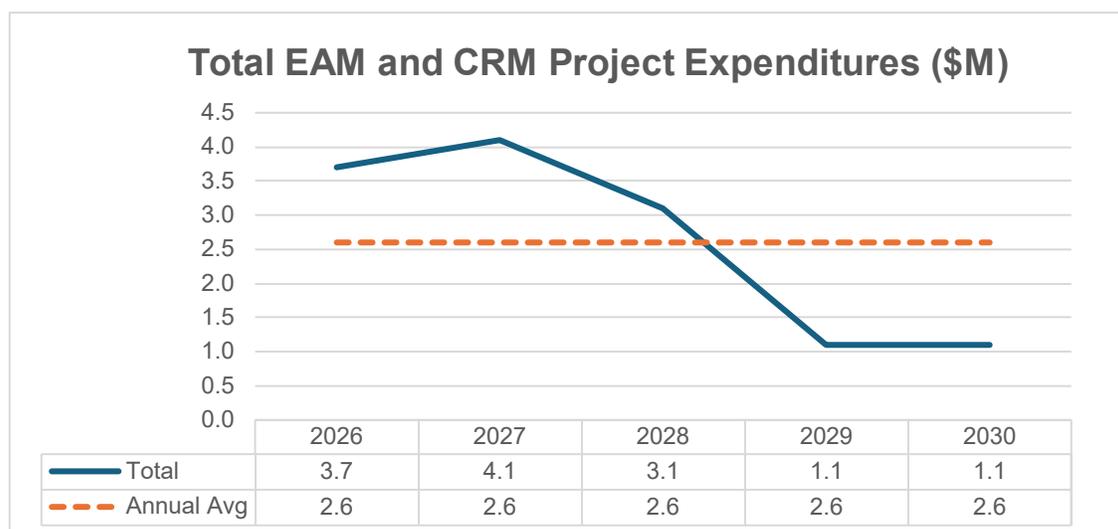


Exhibit 4, Tab 1, Schedule 1, Attachment A, pages 16-17



2026-2030 Custom IR
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Exhibit 4
Tab 1
Schedule 1
Attachment A
ORIGINAL
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1 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.

2

3 4. CUSTOMER RELATIONSHIP MANAGEMENT (CRM)

4 4.1. SUMMARY

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

12

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

Operating Expenses Overview

OM&A Summary

16

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

8

9 Objectives of the program will center on the following:

10

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

17

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

24

25 **4.2. CURRENT CHALLENGES**

26 Some of the current challenges and opportunities are identified below:

27

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

Exhibit 4, Tab 1, Schedule 3, page 5



1 **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

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

6
 7 **3.1. DISTRIBUTION OPERATIONS, ENGINEERING & DESIGN, AND METERING**

- 8 ● Given their collective responsibility for the execution of operations-based programs,
 9 workforce planning for these three programs was undertaken as a unified effort.
- 10 ● 42 new positions were added in 2024, primarily due to four discrete drivers, each demanding
 11 a particular set of skills and competencies:
 - 12 ○ **Customer Connection and Capacity Program Growth:** Hydro Ottawa experienced an
 13 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.



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

3

4 **4.3. 2024 AND 2025 BRIDGE YEARS, 2026 TEST YEAR**

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

10

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

15

16 **5. VACANCY ALLOWANCE**

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

22

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

26

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

Exhibit 4, Tab 1, Schedule 3, Attachment B, pages 15-17



1 large campuses; or the installation of electric vehicle chargers and heat pumps by a growing
2 number of residential and commercial customers are just a few of the changes that are affecting
3 Hydro Ottawa's distribution planning. Further, there is also the sustained rise in the popularity of
4 Distributed Energy Resources (DERs) across the customer base as access to electricity
5 generation and storage technology becomes more available.¹³
6

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

11

12 2.2.3. Demand Growth

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

19

20 2.2.4. Competitive Landscape For Talent

21 Recruiting and retaining talent is an ongoing challenge for the industry and for Hydro Ottawa.
22 Electricity Human Resources Canada's Labour Market Insights Report (LMI Report) found that
23 "Finding skilled talent has been identified as the most pressing constraint for the sector over the
24 next five years"¹⁴. Between 2023 and 2028, the LMI Report also predicts labour supply gaps in
25 the following occupational groups: *engineers, technicians & technologists* (1,600 gap), *trades*
26 *(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.

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

3

4 The LMI Report also shows a decline in new apprenticeship registrations since the COVID-19
5 pandemic¹⁶. Hydro Ottawa has managed to maintain a pipeline of new apprentices for some
6 trades roles through strategic partnerships with educational institutions, and in particular through
7 its partnership with Algonquin College for the past 13 years, delivering the 2-year Powerline
8 Technician Diploma Program (Program). Through in-class and hands-on learning, this Program
9 helps students develop the skills to design, plan, construct, and maintain electrical distribution
10 lines. Algonquin College provides classroom instruction, while Hydro Ottawa is responsible for
11 the design, development, and onsite delivery and assessment of the practical training of the
12 curriculum. As of 2023, Hydro Ottawa had hired 61 graduates of the Program into trades and
13 technical roles.

14

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

19

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

¹⁶ Ibid, page 80.

¹⁷ Ibid, page 20.

1 **2.2.5. Hybrid Work**

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

9
10 At the onset of the pandemic, work arrangements for office-based employees pivoted to work
11 from home and then variations of hybrid work arrangements. To enable continued productivity,
12 connectedness, and employee engagement, Hydro Ottawa accelerated the deployment of
13 digital collaboration tools and systems. These tools continued to be invaluable beyond the
14 pandemic as Hydro Ottawa embraced hybrid work arrangements, first through a one year pilot
15 and then as a structured program, as a means of providing flexibility to employees and to
16 remain competitive in the tightening labour market. The pandemic changed the way work gets
17 done both at Hydro Ottawa and globally with increased adoption of technology and employees
18 making different decisions on where they work and where they live, resulting in greater
19 employee movement and increased attrition. At the same time, the nature of Hydro Ottawa's
20 work requires that its employees are located in or near Ottawa, which can limit the size of the
21 talent pool for some skill sets.

22
23 **3. IDENTIFYING WORKFORCE NEEDS**

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

- 27
28 1. Increasing positions and skill sets
29 2. Leveraging contracted services and temporary employment arrangements

1-Staff-1(A) Chapter 2 Appendix, Tab 2-K

Appendix 2-K Employee Costs

	Last Rebasing Year 2021 - OEB Approved	Last Rebasing Year (2021 Actuals)	2022 Actuals	2023 Actuals	2024 Actuals	2025 Bridge Year	2026 Test Year
Number of Employees (FTEs including Part-Time)							
Management (including executive)	122	122	137	138	147	135	141
Non-Management (union and non-union)	494	463	458	356	477	506	575
Total	616	585	595	494	624	641	716
Total Salary and Wages including overtime and incentive pay							
Management (including executive)	\$14,687,744	\$14,930,179	\$16,844,266	\$20,425,539	\$19,122,328	\$17,473,424	\$18,790,759
Non-Management (union and non-union)	\$46,496,513	\$42,697,382	\$44,586,571	\$36,450,884	\$48,155,820	\$53,710,666	\$62,713,881
Total	\$61,184,257	\$57,627,561	\$61,430,837	\$56,876,423	\$67,278,148	\$71,184,090	\$81,504,640
Total Benefits (Current + Accrued)							
Management (including executive)	\$3,935,256	\$3,673,904	\$4,171,077	\$4,655,577	\$4,808,407	\$4,809,576	\$5,319,158
Non-Management (union and non-union)	\$12,453,947	\$10,742,500	\$10,939,837	\$9,533,754	\$11,770,126	\$14,812,321	\$17,609,328
Total	\$16,389,203	\$14,416,404	\$15,110,914	\$14,189,331	\$16,578,533	\$19,621,897	\$22,928,486
Total Compensation (Salary, Wages, & Benefits)							
Management (including executive)	\$18,623,000	\$18,604,083	\$21,015,343	\$25,081,116	\$23,930,735	\$22,283,000	\$24,109,917
Non-Management (union and non-union)	\$58,950,460	\$53,439,882	\$55,526,408	\$45,984,638	\$59,925,946	\$68,522,987	\$80,323,209
Total	\$77,573,460	\$72,043,965	\$76,541,751	\$71,065,754	\$83,856,682	\$90,805,987	\$104,433,126
Total Compensation Breakdown (Capital, OM&A)							
OM&A	\$55,112,372	\$51,913,728	\$58,228,528	\$56,171,648	\$62,750,768	\$69,611,442	\$78,735,234
Capital	\$22,461,088	\$20,130,237	\$18,313,223	\$14,894,106	\$21,105,914	\$21,194,545	\$25,697,892
Total	\$77,573,460	\$72,043,965	\$76,541,751	\$71,065,754	\$83,856,682	\$90,805,987	\$104,433,126

1-SEC-25, Table A, pages 2-3

Labour and Supply Chain Optimization Initiatives (Quantifiable)¹ (\$'000s) 2021-2025

Initiative	Description			Productivity Benefits					
				2021	2022	2023	2024	2025	2021-2025
3.1.1 Distribution Capital Program Delivery Optimization	Implemented operational changes, including team realignment, dedicated construction technicians, and seasonal shift adjustments, to enhance collaboration, efficiency, and productivity	Regular Time	Capital Expense	\$2,467	\$2,366	\$1,899	\$2,972	\$2,916	\$12,620
			Capital Depreciation	\$82	\$79	\$63	\$99	\$97	\$421
		Overtime	Capital Expense	\$935	\$868	\$753	\$687	\$639	\$3,883
			Capital Depreciation	\$31	\$29	\$25	\$23	\$21	\$129
3.1.2 Fleet Pooling	Fleet pooling pilot program, allowing for more effective and extensive sharing of corporate vehicles by field crews, supervisors and administrative employees	Capital Expense	n/a	n/a	n/a	n/a	n/a	n/a	
		Capital Depreciation	n/a	n/a	n/a	n/a	n/a	n/a	
		OM&A	n/a	n/a	n/a	n/a	n/a	n/a	
3.1.3 Cable Locates Efficiency	Used Salesforce analytics and targeted training to improve service layout efficiency and reduce backlogs.	OM&A	\$0	\$341	\$702	\$536	\$847	\$2,425	
3.1.4 Service Layout Process Improvements	Used Salesforce analytics and targeted training to improve service layout efficiency and reduce backlogs.	Capital Expense	\$0	\$0	\$0	\$193	\$279	\$472	
		Capital Depreciation	n/a	n/a	n/a	\$6	\$9	\$16	
		Third Party Services	\$0	\$0	\$0	\$129	\$186	\$315	
3.1.5 Major Projects Consulting Procurement	Consolidated civil and electrical engineering services under a single consultant to streamline project coordination and reduce costs.	Capital Expense	n/a	n/a	\$290	\$480	n/a	\$770	
		Capital Depreciation	\$0	\$0	\$10	\$26	\$26	\$61	
3.1.6 Vendor and Supplier	Fostered strong relationships with vendors and suppliers,	Capital Expense	\$524	\$524	\$524	\$524	\$524	\$2,618	

Initiative	Description		Productivity Benefits					2021-2025
			2021	2022	2023	2024	2025	
Engagement	resulting in favourable pricing for critical equipment relative to industry averages	Capital Depreciation	\$17	\$17	\$17	\$17	\$17	\$87
Total Capital Expense			\$3,925	\$3,759	\$3,466	\$4,856	\$4,357	\$20,362
Total Capital Depreciation			\$131	\$125	\$116	\$172	\$171	\$714
Total OM&A			\$0	\$341	\$702	\$536	\$847	\$2,425
Total Third Party Services			\$0	\$0	\$0	\$129	\$186	\$315

1-SEC-25, Table B, pages 3-4

Labour and Supply Chain Optimization Initiatives (Quantifiable)² (\$'000s) 2026-2030

Initiative	Description			Productivity Benefits					
				2026	2027	2028	2029	2030	2026-2030
3.1.1 Distribution Capital Program Delivery Optimization	Implemented operational changes, including team realignment, dedicated construction technicians, and seasonal shift adjustments, to enhance collaboration, efficiency, and productivity	Regular Time	Capital Expense	\$2,638	\$4,334	\$4,662	\$3,670	\$4,016	\$19,321
			Capital Depreciation	\$88	\$144	\$155	\$122	\$134	\$644
		Overtime	Capital Expense	\$711	\$814	\$847	\$840	\$811	\$4,023
			Capital Depreciation	\$24	\$27	\$28	\$28	\$27	\$134
3.1.2 Fleet Pooling	Fleet pooling pilot program, allowing for more effective and extensive sharing of corporate vehicles by field crews, supervisors and administrative employees		Capital Expense	\$1,037	n/a	\$2,864	n/a	n/a	\$3,901
			Capital Depreciation	\$104	\$104	\$316	\$316	\$316	\$1,155
			OM&A	\$122	\$130	\$182	\$204	\$232	\$870
3.1.3 Cable Locates Efficiency	Used Salesforce analytics and targeted training to improve service layout efficiency and reduce backlogs.		OM&A	\$662	\$698	\$737	\$777	\$820	\$3,694
3.1.4 Service Layout Process Improvements	Used Salesforce analytics and targeted training to improve service layout efficiency and reduce backlogs.		Capital Expense	\$288	\$297	\$307	\$316	\$326	\$1,534
			Capital Depreciation	\$10	\$10	\$10	\$11	\$11	\$51
			Third Party Services	\$192	\$198	\$205	\$211	\$217	\$1,023
3.1.5 Major Projects Consulting Procurement	Consolidated civil and electrical engineering services under a single consultant to streamline project coordination and reduce costs.		Capital Expense	n/a	\$500	\$500	\$500	n/a	\$1,500
			Capital Depreciation	\$26	\$42	\$59	\$76	\$76	\$278
3.1.6 Vendor and Supplier Engagement	Fostered strong relationships with vendors and suppliers, resulting in favourable pricing for critical equipment relative to industry averages		Capital Expense	n/a	n/a	n/a	n/a	n/a	n/a
			Capital Depreciation	\$0	\$0	\$0	\$0	\$0	\$07
Total Capital Expense				\$4,674	\$5,946	\$9,180	\$5,326	\$5,152	\$30,278
Total Capital Depreciation				\$251	\$328	\$569	\$552	\$563	\$2,2796
Total OM&A				\$784	\$828	\$919	\$981	\$1,052	\$4,564
Total Third Party Services				\$192	\$198	\$205	\$211	\$217	\$1,023

1-SEC-27, Table A, pages 2-3

Innovation and Digital Transformation Initiatives (Quantifiable)¹ (\$'000s) 2021-2025

Initiative	Description		Productivity Benefits					Total 2021-2025
			2021	2022	2023	2024	2025	
3.2.1 Net Metering Automation	Streamlined net metering billing processes, saving significant labor hours per month.	OM&A						n/a
3.2.2 Online Billing Enhancements	Expanded online billing, reducing mailing and printing costs (with ancillary savings related to Account Overdue Notices)	OM&A	\$232	\$765	\$972	\$1,546	\$2,880	\$6,394
3.2.3 Remote Disconnection Technology	Expanded use of remote disconnect meters, reducing labor costs for service terminations and reconnections.	OM&A	\$282	\$376	\$520	\$826	\$865	\$2,869
3.2.4 Customer Relationship Management (CRM) Platform Implementation	Replacement of legacy service desk with a comprehensive CRM system to automate workflows and improve efficiency	<i>Capital Expense</i>	\$132	\$177	\$175	\$170	\$179	\$834
		Capital Depreciation	\$4	\$6	\$6	\$6	\$6	\$28
		Services to Third Parties	\$88	\$118	\$117	\$113	\$120	\$556
3.2.5 Disconnection Notification Automation	Replacement of manual delivery of disconnection notices with automated notifications	OM&A	\$346	\$355	\$369	\$383	\$396	\$1,849
3.2.6 Satellite Imaging for Vegetation Management	Used satellite data to identify high-risk vegetation areas and optimize trimming schedules.	OM&A						n/a

Initiative	Description		Productivity Benefits					Total 2021-2025
			2021	2022	2023	2024	2025	
3.2.7 Blue Beam for Plant Inspectors	Digitalized project documentation and plant inspections, reducing paper use and improving workflow efficiency.	Capital Expense	\$205	\$208	\$211	\$231	\$239	\$1,095
		Capital Depreciation	\$7	\$7	\$7	\$8	\$8	\$36
3.2.8 Move-In Move-Out Automation	Automated customer move-in/move-out requests to reduce manual processing and errors.	OM&A	-	\$38	\$134	\$159	\$171	\$502
3.2.9 Salesforce Field Service for Reliability Operations	Centralized work requests and scheduling, reducing reliance on manual communication and increasing productivity.	OM&A					\$141	\$141
3.2.10 Damage to Plant Process Automation	Implemented a Google Form-based system for faster and more efficient reporting of infrastructure damage.	Capital Expense	\$4	\$4	\$4	\$4	\$5	\$21
		Capital Depreciation	-	-	-	-	-	-
3.2.11 Customer Information System Reduced Fees	Reduced managed service costs	OM&A	\$264	\$216				\$480
Total Capital Expense			\$341	\$389	\$390	\$406	\$423	\$1,950
Total Capital Depreciation			\$11	\$13	\$13	\$13	\$14	\$64
Total OM&A			\$1,124	\$1,750	\$1,995	\$2,914	\$4,453	\$12,236
Total Third Party Services			\$88	\$118	\$117	\$113	\$120	\$556

1-SEC-27, Table B, pages 4-5

Innovation and Digital Transformation Initiatives (Quantifiable)² (\$'000s) 2026-2030

Initiative	Description		Productivity Benefits					Total 2026-2030
			2026	2027	2028	2029	2030	
3.2.1 Net Metering Automation	Streamlined net metering billing processes, saving significant labor hours per month.	OM&A	\$241	\$554	\$1,403	\$1,934	\$2,620	\$6,751
3.2.2 Online Billing Enhancements	Expanded online billing, reducing mailing and printing costs (with ancillary savings related to Account Overdue Notices)	OM&A	\$ 524	\$ 804	\$ 1,092	\$ 1,386	\$ 1,689	\$5,495
3.2.3 Remote Disconnection Technology	Expanded use of remote disconnect meters, reducing labor costs for service terminations and reconnections.	OM&A	\$904	\$945	\$987	\$1,030	\$1,074	\$4,941
3.2.4 Customer Relationship Management (CRM) Platform Implementation	Replacement of legacy service desk with a comprehensive CRM system to automate workflows and improve efficiency	Capital Expense	\$200	\$222	\$247	\$274	\$305	\$1,248
		Capital Depreciation	\$7	\$7	\$8	\$9	\$10	\$42
		Services to Third Parties	\$133	\$148	\$165	\$183	\$203	\$832
3.2.5 Disconnection Notification Automation	Replacement of manual delivery of disconnection notices with automated notifications	OM&A	\$410	\$425	\$440	\$455	\$472	\$2,202
3.2.6 Satellite Imaging for Vegetation Management	Used satellite data to identify high-risk vegetation areas and optimize trimming schedules.	OM&A	\$178	\$358	\$363	\$367	\$372	\$1,637

Initiative	Description		Productivity Benefits					
			2026	2027	2028	2029	2030	Total 2026-2030
3.2.7 Blue Beam for Plant Inspectors	Digitalized project documentation and plant	Capital Expense	\$247	\$255	\$263	\$270	\$278	\$1,313
	inspections, reducing paper use and improving workflow efficiency.	Capital Depreciation	\$8	\$8	\$9	\$9	\$9	\$44
3.2.8 Move-In Move-Out Automation	Automated customer move-in/move-out requests to reduce manual processing and errors.	OM&A	\$173	\$173	\$192	\$192	\$192	\$923
3.2.9 Salesforce Field Service for Reliability Operations	Centralized work requests and scheduling, reducing reliance on manual communication and increasing productivity.	OM&A	\$146	\$150	\$154	\$158	\$162	\$769
3.2.10 Damage to Plant Process Automation	Implemented a Google Form-based system for faster and more efficient reporting of infrastructure damage.	Capital Expense	\$5	\$5	\$5	\$5	\$5	\$25
		Capital Depreciation	\$0	\$0	\$0	\$0	\$0	\$1
3.2.11 Customer Information System Reduced Fees	Reduced managed service costs	OM&A						n/a
Total Capital Expense			\$452	\$482	\$515	\$550	\$588	\$2,586
Total Capital Depreciation			\$15	\$16	\$17	\$18	\$20	\$86
Total OM&A			\$2,577	\$3,409	\$4,629	\$5,523	\$6,580	\$22,717
Total Third Party Services			\$133	\$148	\$165	\$183	\$203	\$832

4-CCC-52 d)

- 28 d) Table A shows the requested data, reconciling the number of budgeted positions to actual FTEs.
 29 Please note that for 2021-2024 actuals, the difference between the number of budgeted
 30 positions and FTEs is not solely explained by positions vacancies, but will include a variety of
 31 factors including the impact of an 84 day labour strike, short-term sick leaves, short-term acting



- 1 assignments, position overlaps to support knowledge transfer for succession, etc., these are
 2 collectively referred to FTE adjustment in the table below for the actual historical years below.
 3

4 **Table A - Reconciliation of Positions to FTEs in Appendix 2-K**

	OEB Approved	Historical Years				Bridge Year	Test Year
	2021	2021	2022	2023	2024	2025	2026
Number of Full-Time Permanent Positions	611	617	617	617	667	667	748
Vacancy Rate	4%	10%	12%	12%	11%	8%	8%
Vacancy Assumption translated into FTEs	(24)	(62)	(74)	(74)	(73)	(56)	(60)
Temps and Part Time	28	25	28	26	36	30	28
Other FTE Adjustment		5	24	(75)	(6)		
Number of FTEs (Appendix 2K)	616	585	595	494	624	641	716

Exhibit 4, Tab 1, Schedule 3, Attachment A, page 16



1 **Table 10 – 2024-2026 - Reconciliation of Positions to FTEs in Appendix 2K¹⁰**

	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

2
 3 The actual vacancy in 2022 and 2023 peaked at 12% due to an increase in attrition, with
 4 anticipated retirements and unanticipated resignations. A hiring freeze that was instituted for the
 5 duration of the COVID-19 pandemic, with only key/critical positions being filled, contributed to
 6 higher vacancy during this time. The post pandemic environment has changed the way
 7 employees and potential employees view employment. Issues such as working from home,
 8 hybrid work arrangements and the mobility of the workforce exacerbated the issue resulting in a
 9 tight labour market for employers and has led to an increase in the attrition rate. In addition, the
 10 labour disruption in 2023 and the subsequent return to work of this segment of employees
 11 caused delays in filling vacant positions.

12
 13 However, recent hiring efforts have been successful and the vacancy assumption is forecasted
 14 to continue to reduce as seen in Table 9. Full details regarding attrition, and retention/attribution
 15 programs instituted to address this can be found in Attachment 4-1-3(B) - Workforce Planning
 16 Strategy. As shown in Table 11 below, this vacancy allowance of 8% results in a reduction of
 17 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.

4-SEC-73 d) and e)



1 **Table A - Full Time Positions and Temporary Employees as of December 31, 2024**

Position Type	Count
Full Time Permanent Positions	667
Temporary Full Time Employees	20
Temporary Part Time Employees	28

2

3 c) The actual vacancy rate for 2024 was 11%.

4

5 d) Year to date the number of full-time permanent positions filled in 2025 is 28. The vacancy rate
6 at June 30, 2025 is 9%.

7

8 e) Hydro Ottawa believes the vacancy rate in 2026 will be lower than 2024 for a variety of reasons.
9 First, with an 84-day labour strike in 2023, recruitment efforts were significantly impacted which
10 put added pressure on vacancy rates in 2024. As stated in Section 4.1 of Schedule 4-1-3(B) -
11 Workforce Planning Strategy, Hydro Ottawa has implemented a number of programs and
12 initiatives to enhance external recruitment efforts and to increase awareness of career
13 opportunities at the utility. Please see response to 4-Staff-168 for details of the effectiveness of
14 recent recruitment activities.

15

16 Further, through reduced anticipated retirements in the coming years and changes to the
17 external labour market brought on by economic uncertainty, Hydro Ottawa is seeing attrition
18 rates trending downwards and this is expected to continue for the coming years.

19

20 In addition, in 2024, an additional HR Advisor was added to support internal recruitment and
21 hiring processes and reduce overall time to fill positions.

22

23 Finally, as noted above, the vacancy rate has dropped from 11% in 2024 to 9% as of June 30,
24 2025.

4-Staff-133 d)

25 d) While the EAM project is expected to generate future cost savings through efficiency gains,
26 these savings have not yet been quantified and incorporated into this application. The primary
27 purpose of the EAM project is not to achieve short-term cost savings, but rather to address
28 critical operational gaps and ensure the long-term reliability and efficiency of Hydro Ottawa's
29 infrastructure.



1 As noted in the evidence, Hydro Ottawa's asset portfolio is projected to grow significantly by
2 2030, and a 2022 assessment identified that the current manual processes, fragmented data,
3 and technology limitations impede efficient management and compliance. The EAM project is a
4 strategic response to these challenges.
5 The project is currently in the initial phase, with a roadmap being developed in 2025. This
6 roadmap will include a comprehensive evaluation of potential EAM technologies, with a key
7 focus on cost-effectiveness. Until a specific EAM system is chosen and the roadmap is
8 complete, it is difficult to quantify the precise cost savings. However, the anticipated benefits,
9 such as optimized asset performance, reduced operational and maintenance costs, and
10 improved regulatory compliance, are the core drivers of this project and are expected to deliver
11 significant long-term value.

4-Staff-145 c)



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RESPONSE(S):

a) Please see Table A for the actual/forecast costs of 2021 to 2026 by cost driver. Note that the “Other” line item reflects cost recoveries for labour and fleet.

Table A - Distribution Support Costs by Driver, 2021-2026 (\$'000s)

Cost Driver	Historical Years			Bridge Years		Test Years
	2021	2022	2023	2024	2025	2026
Compensation	\$ 32,612	\$ 35,010	\$ 30,693	\$ 37,621	\$ 40,220	\$ 46,312
Fleet	\$ 3,293	\$ 4,040	\$ 3,496	\$ 4,294	\$ 4,367	\$ 4,255
Non-capital tools	\$ 512	\$ 600	\$ 595	\$ 663	\$ 663	\$ 797
Safety gear	\$ 311	\$ 288	\$ 289	\$ 389	\$ 389	\$ 438
Other	\$ 205	\$ 485	\$ 652	\$ 651	\$ 698	\$ 1,114
Allocation	\$ (35,754)	\$ (37,390)	\$ (31,292)	\$ (36,664)	\$ (40,995)	\$ (47,473)
TOTAL	\$ 1,179	\$ 3,032	\$ 4,433	\$ 6,954	\$ 5,342	\$ 5,443

b) Hydro Ottawa Fleet uses third-party contractors for specialized services and overflow work. Aerial boom inspections and dielectric certifications are conducted semi-annually and annually by factory-trained technicians on-site, with any defects repaired by internal fleet staff. External contractors are also engaged for heavy-duty tire work, major transmission repairs, specialized welding, vehicle pressure washing, and to handle workload surges to reduce downtime.

c) There are no quantifiable OM&A cost savings as a result of the efficiency gains through use of the Salesforce CRM platform. The teams leveraging the CRM platform are primarily engaged in capital and Services to Third Parties work as shown in Table 4 of Section 3.2 of Schedule 1-3-4 - Facilitating Innovation and Continuous Improvement, therefore the cost savings are seen in those programs and the impact to OM&A is minimal.

4-Staff-168



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INTERROGATORY RESPONSES TO ONTARIO ENERGY BOARD STAFF

4-Staff-168

EVIDENCE REFERENCE:

Acquiring Talent, Demand Growth and Competitive Landscape for Talent

Ref. 1: Exhibit 4 / Tab 1 / Schedule 3 / Attachment B / pp. 28-32 (pdf pp. 173-176)

Ref. 2: Exhibit 4 / Tab 1 / Schedule 3 / Attachment B / pp. 15-16 (pdf pp. 160-161)

Ref. 3: Exhibit 4 / Tab 1 / Schedule 3 / Attachment B / pp. 28-32 (pdf pp. 173-176)

QUESTION(S):

- a) Given Hydro Ottawa's effort in sustaining the trades (reference 1), please explain why there are ongoing challenges to recruit apprentices for trades roles such as System Operator and Station Electrician (reference 2). Is this due to the movement of employees to larger utilities for increased compensation, different career opportunities, or for similar roles with reduced workload (as stated in lines 24-26 of reference 1) or other reasons? Please explain.
- b) Reference 2 states that the population in Ottawa has shown the highest growth rate and its population is expected to increase by 15% from 2021 to 2031. This statement appears to contradict another statement in reference 1 which states that an additional challenge for Hydro Ottawa is the limited talent pool to draw from. Please explain why the talent pool is still limited.
- c) Has Hydro Ottawa implemented any measures to determine the effectiveness of its recruitment efforts stated in reference 3? If so, please explain or provide the resulting measures (if available).

RESPONSE(S):

- a) Unlike the Powerline Technician and Powercable Technician apprentice roles, where Hydro Ottawa recruits candidates who have graduated from the Algonquin Powerline Technician

1 Diploma Program, there is not a defined program for Station Electricians and System Operators.
2 As such, Hydro Ottawa recruits from the broader marketplace and can be challenged to find
3 candidates with the education, skills and utility experience required in these roles. In the Ottawa
4 area, we do compete with a larger utility for these resources where salaries and numbers of
5 opportunities can be higher.
6

7 b) While the population of the Ottawa area is growing significantly, this does not directly translate
8 into a larger talent pool for highly specialized roles. The core issue is a skills mismatch and
9 intense competition. The population increase may be driven by various factors, such as families
10 seeking affordability or professionals from sectors with lower demand. However, the growth rate
11 of individuals with specific technical, engineering, and information technology skills—such as
12 cybersecurity analysts, electrical engineers, or AI specialists—is not keeping pace with the rapid
13 demand from employers. The talent pool is limited not in its total size, but in the availability of
14 candidates with the precise, sought-after expertise required to fill critical roles. Furthermore, the
15 intense competition for these specific skill sets among the region’s employers means that even
16 a modest increase in the qualified population is quickly absorbed, leaving the talent pool feeling
17 consistently constrained.
18

19 c) The results of two recent recruitment related campaigns are described below:
20

21 An eight week social media campaign, created to promote Hydro Ottawa as a diverse and
22 sustainability-focused company where there are numerous career opportunities was relaunched
23 in early 2025. The goal of the campaign was to promote clicks to the careers portal and
24 applications for the open positions. This digital campaign targeted Ottawa and its surrounding
25 area within a 60 km radius.
26

27 The campaign resulted in 1.6 million impressions or total number of times the ads were
28 displayed on users’ screens. This type of high level advertising creates general awareness of
29 Hydro Ottawa as an employer of choice and inherently drives an increase in applicants to our
30 organization. In addition, the campaign results indicated 27,724 total clicks to Hydro Ottawa’s
31 career pages.

1 Further, Hydro Ottawa has refreshed its Employer Brand Strategy which includes aligned
2 messaging and visuals that accurately portray and promote the employee value proposition
3 (EVP) and entices potential candidates to consider a career at Hydro Ottawa.

4
5 Since early 2025 we have increased our presence on social media, targeting LinkedIn as it
6 aligns with messaging we seek to put out to potential employees. Messaging includes posts that
7 tell a compelling story focusing on showcasing our EVP and sharing informative and engaging
8 content. To date, efforts have resulted in over 78k impressions and close to 5,200 clicks, with an
9 average engagement rate of 7.46%. The engagement rate is a metric that reflects how well
10 content resonates with the intended audience by measuring the percentage of people who
11 interact with posts (like, share, etc) after seeing them. Hydro Ottawa also gained over 810 new
12 followers to the company's page, which demonstrates our efforts of creating engaging content is
13 increasing our brand awareness.

4-Staff-171 c), Table A

1

Table A - 2024-2030 Reconciliation of Positions to FTEs in Appendix-2K¹

Programs	Bridge		Test				
	2024	2025	2026	2027	2028	2029	2030
177 Positions added	50		81	37	6	1	2
Number of Full-Time Permanent Positions	667	667	748	785	791	792	794
Vacancy Assumption	10%	8%	8%	6%	6%	6%	6%
Vacancy Assumption translated into FTEs	(69)	(56)	(60)	(47)	(47)	(48)	(48)
Number of FTEs Sub total	598	611	688	738	744	744	746
Temps and Part Time	30	30	28	28	37	25	25
Number of FTEs (Appendix 2K)	628	641	716	766	780	769	771
2021 OEB Approved FTE			616				
FTE Growth from 2021			100				

2

Technical Conference Undertaking JT 1.6(A)

Table B - 2030 Overhead Asset Condition Count and Percentage												
Alternative	Asset Class	Asset Condition Count						Asset Condition Percentage				
		Very Poor	Poor	Fair	Good	Very Good	Grand Total	Very Poor	Poor	Fair	Good	Very Good
Cost Containment	CC - OH Distribution Transformer	1122	2290	5174	3487	3145	15,218	7%	15%	34%	23%	21%
	CC - OH Switch	0	0	35	2568	980	3,583	0%	0%	1%	72%	27%
	CC - Pole	721	3916	10573	15049	16377	46,636	2%	8%	23%	32%	35%
	Total	1,843	6,206	15,782	21,104	20,502	65,437	3%	9%	24%	32%	31%
Short Term Risk Mitigation	OH Distribution Transformer	1047	2290	5174	3487	3220	15,218	7%	15%	34%	23%	21%
	OH Switch	0	0	0	2493	1090	3,583	0%	0%	0%	70%	30%
	Pole	346	3916	10573	15049	16752	46,636	1%	8%	23%	32%	36%
	Total	1,393	6,206	15,747	21,029	21,062	65,437	2%	9%	24%	32%	32%
Long Term Risk Mitigation	LTR - OH Distribution Transformer	947	2,290	5,174	3,487	3,320	15,218	6%	15%	34%	23%	22%
	LTR - OH Switch	0	0	0	2,373	1210	3,583	0%	0%	0%	66%	34%
	LTR - Pole	0	3,762	10,573	15,049	17,252	46,636	0%	8%	23%	32%	37%
	Total	947	6,052	15,747	20,909	21,782	65,437	1%	9%	24%	32%	33%

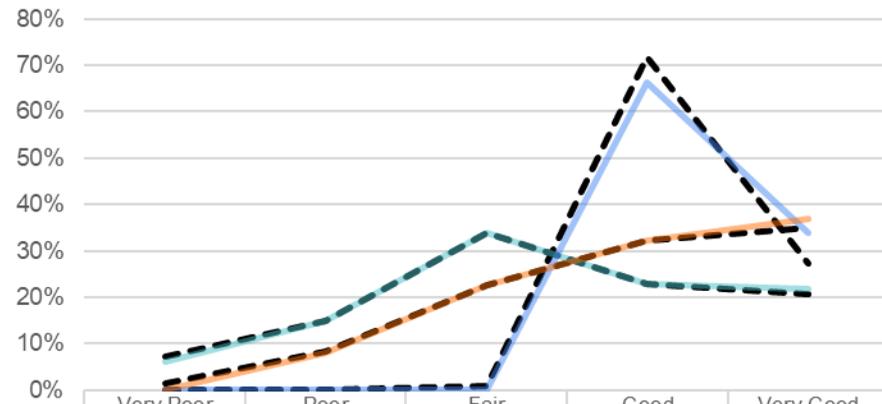
Table C - 2030 Underground Asset Condition Count and Percentage												
Alternative	Asset Class	Asset Condition Count						Asset Condition Percentage				
		Very Poor	Poor	Fair	Good	Very Good	Grand Total	Very Poor	Poor	Fair	Good	Very Good
Cost Containment	CC - Cable Chamber	0	99	874	1459	1472	3,904	0%	3%	22%	37%	38%
	CC - UG Distribution Transformer	0	73	9721	8075	1006	18,875	0%	0%	52%	43%	5%
	CC - UG Switchgear	0	13	39	209	300	561	0%	2%	7%	37%	53%
	CC- Underground Cable (XLPE)	0	3,664	30,885	16,142	5,724	56,415	0%	6%	55%	29%	10%
	CC - Underground Cable (PILC)	0	32	3,299	3,220	868	7,419	0%	0%	44%	43%	12%
	CC - Underground Cable (EPR)	0	0	26	63	2,597	2,686	0%	0%	1%	2%	97%
	CC - Vault Distribution Transformer	1183	744	1058	1058	468	4,511	26%	16%	23%	23%	10%
	CC - Underground Switchgear Primary Pedestal	1	0	2	3	12	18	6%	0%	11%	17%	67%
	CC - Vault Switchgear	9	0	23	133	6	171	5%	0%	13%	78%	4%
	Total	1,193	4,625	45,927	30,362	12,453	94,560	1%	5%	49%	32%	13%
Short Term Risk Mitigation	STR - Cable Chamber	0	84	874	1,459	1,487	3,904	0%	2%	22%	37%	38%
	STR - UG Distribution Transformer	0	0	9,609	8,075	1191	18,875	0%	0%	51%	43%	6%
	STR - UG Switchgear	0	0	37	209	315	561	0%	0%	7%	37%	56%
	STR - Underground Cable (XLPE)	0	3,499	30,749	16,013	6,154	56,415	0%	6%	55%	28%	11%
	STR - Underground Cable (PILC)	0	32	3,299	3,220	868	7,419	0%	0%	44%	43%	12%
	STR - Underground Cable (EPR)	0	0	26	63	2,597	2,686	0%	0%	1%	2%	97%
	STR - Underground Switchgear Primary Pedestal	1	0	2	3	12	18	6%	0%	11%	17%	67%
	STR - Vault Distribution Transformer	1,138	744	1,058	1,058	513	4,511	25%	16%	23%	23%	11%
	STR - Vault Switchgear	0	0	23	133	15	171	0%	0%	13%	78%	9%
	Total	1,139	4,359	45,677	30,233	13,152	94,560	1%	5%	48%	32%	14%
Long Term Risk Mitigation	Cable Chamber	0	54	874	1459	1517	3,904	0%	1%	22%	37%	39%
	UG Distribution Transformer	0	0	9359	8075	1441	18,875	0%	0%	50%	43%	8%
	UG Switchgear	0	0	2	209	350	561	0%	0%	0%	37%	62%
	Underground Cable (XLPE)	0	3,275	30,518	15,881	6,741	56,415	0%	6%	54%	28%	12%
	Underground Cable (PILC)	0	32	3,299	3,220	868	7,419	0%	0%	44%	43%	12%
	Underground Cable (EPR)	0	0	26	63	2,597	2,686	0%	0%	1%	2%	97%
	Vault Distribution Transformer	1108	744	1058	1058	543	4,511	25%	16%	23%	23%	12%
	Underground Switchgear Primary Pedestal	1	0	2	3	12	18	6%	0%	11%	17%	67%
	Vault Switchgear	0	0	23	133	15	171	0%	0%	13%	78%	9%
	Total	1,109	4,105	45,161	30,101	14,084	94,560	1%	4%	48%	32%	15%

Table D - 2030 Station Asset Condition Count and Percentage

Alternative	Asset Class	Asset Condition Count							Asset Condition Percentage					
		Very Poor	Poor	Fair	Good	Very Good	Decom-missioned	Grand Total	Very Poor	Poor	Fair	Good	Very Good	Decom-missioned
Cost Containment	CC - Station Battery	18	28	16	1	5	2	70	26%	40%	23%	1%	7%	3%
	CC - Station Switchgear	15	157	298	319	242	26	1,057	1%	15%	28%	30%	23%	2%
	CC - Station Transformer	0	12	90	55	8	5	170	0%	7%	53%	32%	5%	3%
	Total	33	197	404	375	255	33	1,297	3%	15%	31%	29%	20%	3%
Short Term Risk Mitigation	STR - Station Battery	13	27	16	1	10	3	70	19%	39%	23%	1%	14%	4%
	STR - Station Switchgear	15	130	289	316	269	38	1,057	1%	12%	27%	30%	25%	4%
	STR - Station Transformer	0	11	87	54	8	10	170	0%	6%	51%	32%	5%	6%
	Total	28	168	392	371	287	51	1,297	2%	13%	30%	29%	22%	4%
Long Term Risk Mitigation	Station Battery	3	26	16	1	19	5	70	4%	37%	23%	1%	27%	7%
	Station Switchgear	15	96	270	304	313	59	1,057	1%	9%	26%	29%	30%	6%
	Station Transformer	0	8	87	54	8	13	170	0%	5%	51%	32%	5%	8%
	Total	18	130	373	359	340	77	1,297	1%	10%	29%	28%	26%	6%

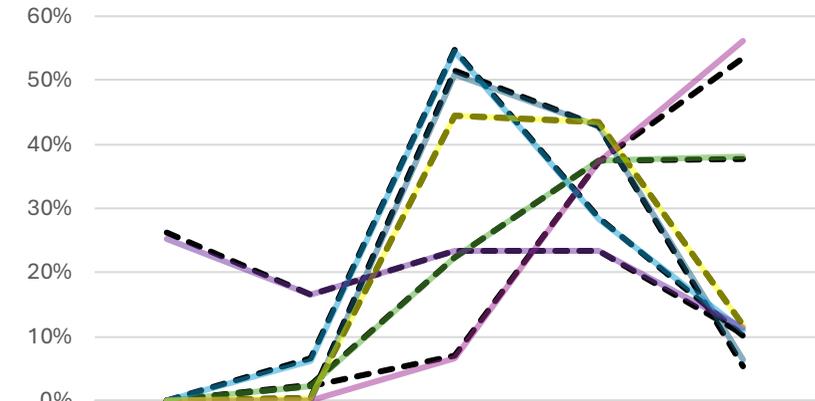
Graphs from data in JT1.6A Table B and C

Overhead Asset Condition - 2030
Cost Containment vs. Long Term Risk Mitigation



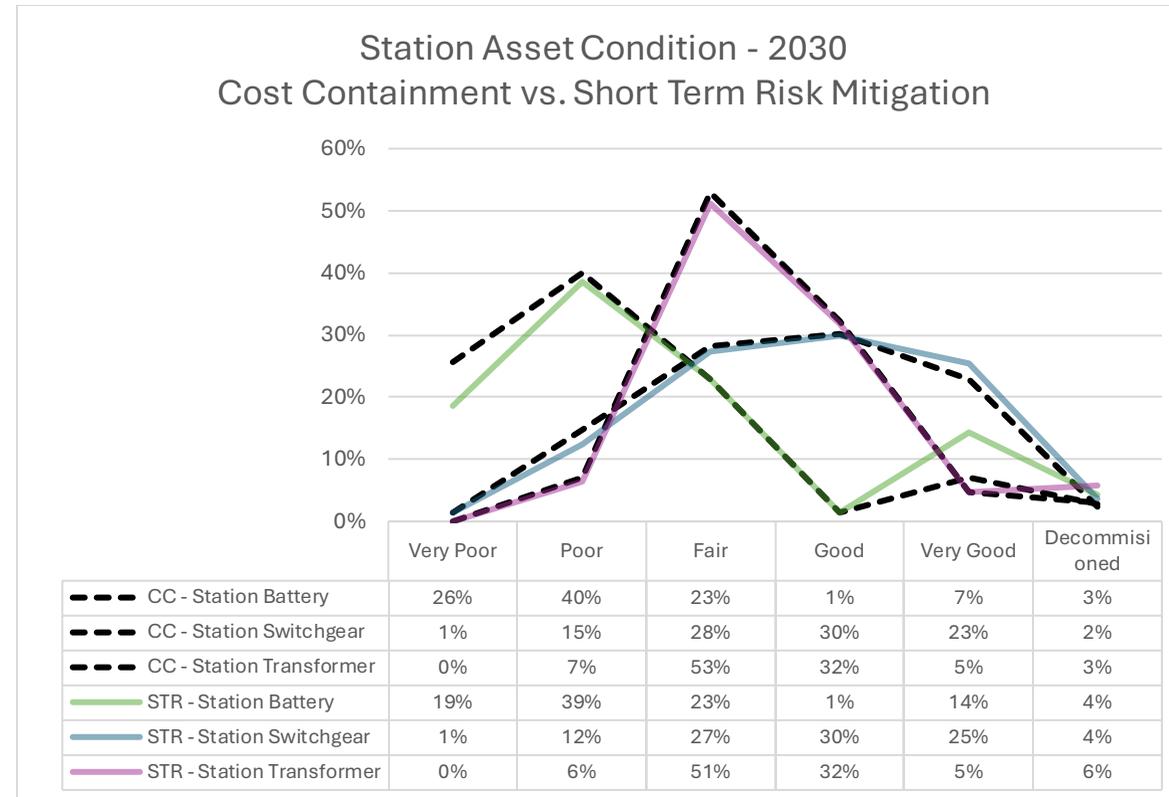
	Very Poor	Poor	Fair	Good	Very Good
CC - OH Distribution Transformer	7%	15%	34%	23%	21%
CC - OH Switch	0%	0%	1%	72%	27%
CC - Pole	2%	8%	23%	32%	35%
LTR - OH Distribution Transformer	6%	15%	34%	23%	22%
LTR - OH Switch	0%	0%	0%	66%	34%
LTR - Pole	0%	8%	23%	32%	37%

Underground Asset Condition - 2030
Cost Containment vs. Short Term Risk Mitigation



	Very Poor	Poor	Fair	Good	Very Good
CC - Cable Chamber	0%	3%	22%	37%	38%
CC - UG Distribution Transformer	0%	0%	52%	43%	5%
CC - UG Switchgear	0%	2%	7%	37%	53%
CC - Underground Cable (XLPE)	0%	6%	55%	29%	10%
CC - Underground Cable (PILC)	0%	0%	44%	43%	12%
CC - Vault Distribution Transformer	26%	16%	23%	23%	10%
STR - Cable Chamber	0%	2%	22%	37%	38%
STR - UG Distribution Transformer	0%	0%	51%	43%	6%
STR - UG Switchgear	0%	0%	7%	37%	56%
STR - Underground Cable (XLPE)	0%	6%	55%	28%	11%
STR - Underground Cable (PILC)	0%	0%	44%	43%	12%
STR - Vault Distribution Transformer	25%	16%	23%	23%	11%

Graph from data in JT1.6A Table D



Technical Conference Undertaking JT2-10 Table A

Appendix 2-JC OM&A Program FROM 4-Staff-159	Job Title	Year						Total
		2024	2026	2027	2028	2029	2030	
Metering	Direct Labour	3	3	2				58
	<i>Apprentice - Meter Technician</i>	3						3
Design and Engineering	Engineering							
	<i>Distribution Engineer</i>	3	5	6				14
	<i>Grid Modernization Engineer</i>	3	2					5
	<i>Quality Assurance Engineer</i>			1				1
	<i>Smart Grid Engineer</i>	4						4
	<i>Standards Engineer</i>	1						1
	<i>Telecommunications Engineer</i>	2						2
	Project Execution Planning							
	<i>Distribution Design Layout Agent</i>				2			2
	<i>Engineering Technologist</i>		1	3				4
	<i>Project Administrator</i>		2		1			3
	<i>Project Coordinator</i>		1	2			1	4
	<i>Work Planner</i>		3				1	4
	<i>Work Scheduler</i>		3					3
	<i>Resource Scheduling Agent</i>		1					1
	Leadership							
	<i>Supervisor, Distribution Design Service Layout</i>				1			1
	<i>Supervisor, Distribution System Integration</i>	1						1
	<i>Supervisor, Engineering Technologists</i>			1				1
	<i>Supervisor, P&C</i>		1					1
	<i>Vice President</i>	2						2
	<i>Director, Program Management</i>	1						1
	<i>Supervisor, Distributed Energy Resources</i>		1					1

Appendix 2-JC OM&A Program FROM 4-Staff-159	Job Title	Year						Total	
		2024	2026	2027	2028	2029	2030		
	<i>Supervisor, Major Projects</i>		1					1	
	<i>Supervisor, Program Oversight</i>		1					1	
Distribution Operations	Direct Labour	22	27	19				68	
	<i>Apprentice - Power Line Technician</i>	7						7	
	<i>Power Line Technician</i>	5						5	
	<i>Apprentice - Power Cable Technician</i>	5						5	
	<i>Power Cable Technician</i>	1						1	
	<i>Apprentice - Station Electrician</i>	3						3	
	<i>Fleet Asset Administrator</i>	1						1	
	System Operations								
	<i>Vault Tech Specialist</i>		1						1
	<i>System Operations Planners</i>		2						2
	Contractor Management & Oversight								
	<i>Plant Inspector</i>		4						4
	<i>QA Inspector</i>		2						2
	<i>Utility Forestry Inspector</i>		1						1
	Leadership								
	<i>Supervisor, Contractor Management</i>		1						1
	<i>Supervisor Control Room</i>		2						2
	<i>Supervisor, Stations</i>		1						1
	Engineering								
	<i>Project Engineer</i>		1	2					3
	<i>Data Engineer</i>		1						1
Customer Billing	<i>Programmer/ Analyst</i>		1					1	
Customer & Community Relations	<i>Programmer/ Analyst</i>		1					1	
Information Management & Technology	<i>Cloud Engineer</i>		1					1	
	<i>Cybersecurity Engineer</i>	1	1					2	
	<i>Manager, IT Program Management</i>	1						1	

Appendix 2-JC OM&A Program FROM 4-Staff-159	Job Title	Year						Total
		2024	2026	2027	2028	2029	2030	
	<i>Manager, Systems Programs</i>		1					1
	<i>Supervisor, OT Cybersecurity</i>		1					1
	<i>System Engineer</i>		1					1
Safety, Environment & Business Continuity	<i>Business Continuity Specialist</i>	1	1					2
	<i>Instructional Designer</i>		1					1
	<i>Manager, Business Continuity</i>	1						1
	<i>Manager, Sustainability</i>				1			1
	<i>Sustainability Specialist</i>		2					2
Human Resources	<i>HR Advisor</i>	1	1					2
	<i>HR Technology Specialist</i>		1					1
Finance	<i>Accountant</i>	1		1	1	1		4
Regulatory Affairs	<i>Advisor, Regulatory Compliance and Projects</i>	1						1
	<i>Supervisor, Regulatory Compliance and Projects</i>	1						1
TOTAL		50	81	37	6	1	2	177

Settlement Proposal, page 23

4.2.1. Capital Expenditure Plan

Table 7 - Five Year Net Capital Expenditures by Investment Category (\$'000s)

Investment Category	2026-2030 Test Years		Change (\$)	Change (%)
	Proposed	Settled		
System Access	\$ 179,845	\$ 148,133	\$ (31,712)	(18)%
System Renewal	\$ 431,704	\$ 355,582	\$ (76,122)	(18)%
System Service	\$ 462,981	\$ 381,344	\$ (81,637)	(18)%
General Plant ⁷	\$ 158,900	\$ 133,942	\$ (24,958)	(16)%
Net Capital Expenditures	\$ 1,233,429	\$ 1,019,000	\$ (214,429)	(17)%