

**RESPONSES TO ASSOCIATION OF MAJOR POWER CONSUMERS IN ONTARIO
INTERROGATORIES**

INTERROGATORY 1-AMPCO-2

Ref: Ex 1-3-1 p.22

As a result of customer engagement Phase 2, Alectra's response was a net reduction of \$106MM of capital expenditure over the 2027-2031 period.

Please provide a breakdown of the capital reductions by Capital program/segment and by year.

RESPONSE:

Alectra Utilities provides the breakdown of the capital plan change as a result of customer engagement Phase 2 by program and by year below.

Table 1 – Change in Capital Plan by Year for Customer Engagement Phase 2 (\$MM)

Project Group	Change by Year					Total Change
	2027	2028	2029	2030	2031	
SYSTEM ACCESS	25.0	26.7	8.9	(7.8)	(14.9)	37.9
Network Metering	(3.1)	(2.9)	(3.2)	(7.7)	(10.4)	(27.4)
Customer Connections	24.7	31.3	14.6	2.5	(1.9)	71.1
Road Authority & Transit Projects	(1.5)	(1.7)	(2.4)	(2.6)	(2.6)	(10.8)
Transmitter Related Upgrades	5.0	0.0	0.0	0.0	0.0	5.0
SYSTEM RENEWAL	17.4	19.7	2.9	(8.9)	(22.1)	9.0
Overhead Asset Renewal	16.8	9.6	9.9	(0.1)	2.8	39.0
Reactive Capital	(2.2)	(2.2)	(2.5)	(2.5)	(2.5)	(11.9)

Project Group	Change by Year					Total Change
	2027	2028	2029	2030	2031	
Rear Lot Conversion	0.0	0.0	0.5	(0.4)	0.6	0.7
Substation Renewal	(0.5)	(0.4)	(0.8)	(0.7)	(1.5)	(3.9)
Transformer Renewal	0.4	(0.4)	(2.7)	(3.8)	(3.9)	(10.4)
Underground Asset Renewal	2.9	13.1	(1.6)	(1.3)	(17.6)	(4.5)
SYSTEM SERVICE	3.2	(23.8)	(18.9)	(27.3)	(64.8)	(131.6)
SCADA & Automation	(0.4)	(0.7)	(1.8)	(1.7)	(0.6)	(5.3)
Capacity (Lines)	(0.1)	(16.3)	(13.6)	(14.7)	(58.4)	(103.1)
Capacity (Stations)	4.4	(5.9)	(2.0)	(8.6)	(3.6)	(15.7)
System Control, Communications & Performance	(0.4)	(0.6)	(1.4)	(2.2)	(2.1)	(6.7)
Safety & Security	0.0	0.0	0.0	0.0	(0.1)	(0.1)
Distributed Energy Resources (DER) Integration	(0.3)	(0.3)	0.0	0.0	0.0	(0.6)
GENERAL PLANT	2.3	2.3	2.9	(30.0)	1.5	(21.0)
Facilities Management	1.3	1.2	1.0	0.3	0.2	4.0
Information Technology	1.0	1.2	1.9	(0.3)	1.2	5.0
Fleet Renewal	0.0	0.0	0.0	0.0	0.0	0.0
Connection and Cost Recovery Agreements	0.0	0.0	0.0	(30.0)	0.0	(30.0)
Tools, Shop and garage Equipment	0.0	0.0	0.0	0.0	0.0	0.0
Total Net Expenditures	47.9	24.9	(4.2)	(74.0)	(100.3)	(105.7)

*Note: Immaterial Variances due to rounding may exist

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INTERROGATORY 1-AMPCO-3

Ref: Ex 1-3-2 p. 4

Please add a column to Table 1-3-9 to reflect the 2020-2024 DSP Plan amounts.

RESPONSE:

In Table 1-3-9 as-filed, the column header should have read “Total 2020–2024 DSP Plan” rather than “Total 2020–2024 Actual”. The data provided in that column was the 2020-2024 DSP Plan amounts as intended.

The revised table below that includes Total 2020–2024 DSP Plan, Total 2020–2024 Actual, and Total 2027–2031 Forecast, together with the variance between plans.

Table 1 – Capital Expenditures by Category (\$MM)

Category	Total 2020-2024 DSP Plan	Total 2020-2024 Actual	Total 2027-2031 Forecast	Variance \$ (Prior DSP vs Current Forecast)	Variance %
System Access	333.9	347.0	780.1	446.2	134%
System Renewal	768.3	743.2	1,368.5	600.2	78%
System Service	190.5	120.8	585.0	394.5	207%
General Plant	163.8	245.4	400.6	236.8	145%
Total	1,456.5	1,456.4	3,134.2	1,677.7	115%

- 1 Operational achievements are measured by system reliability outcomes, specifically the
2 average actual performance relative to target across three metrics:
- 3 1. Average Number of Hours that Power to a Customer is Interrupted (SAIDI excluding
4 Major Events),
 - 5 2. Average Number of Times that Power to a Customer is Interrupted (SAIFI excluding
6 Major Events), and
 - 7 3. Customer Hours of Interruption – Defective Equipment.
- 8
- 9 Financial and operational achievements are weighted equally.

DSP Implementation Progress (%)

$$= \left(\left(\frac{\text{Planned Capital Actual}}{\text{Planned Capital Target}} \right) + \left(\left(\frac{\text{SAIDI Actual}}{\text{SAIDI Target}} + \frac{\text{SAIFI Actual}}{\text{SAIFI Target}} + \frac{\text{DE CHI Actual}}{\text{DE CHI Target}} \right) / 3 \right) \right) / 2$$

10

1 **Table 1 - Scorecard Performance: Total Cost per Customer**

	2019	2020	2021	2022	2023	2024	Avg
Alectra Utilities	\$ 716	\$ 686	\$ 691	\$ 753	\$ 871	\$ 906	\$771
Industry Average	\$ 695	\$ 691	\$ 700	\$ 761	\$ 858	\$ 899	\$767

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1 **Table 1 - Scorecard Performance: Total Cost per Kilometer of Line**

	2019	2020	2021	2022	2023	2024	Avg
Alectra Utilities	\$15,212	\$14,730	\$14,252	\$15,952	\$18,459	\$19,247	\$16,309
Industry Average	\$24,991	\$25,180	\$24,906	\$25,492	\$28,719	\$29,549	\$26,473

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**RESPONSES TO ASSOCIATION OF MAJOR POWER CONSUMERS IN ONTARIO
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INTERROGATORY 1-AMPCO-12

Ref: Ex 1-9-1 p.2

Alectra indicates that in the next rate term the sustained savings are embedded in the 2027-2031 forecasted budgets and are benefiting residential customers by reducing the average bill impact on the distribution portion of the bill by \$0.44.

Please provide the calculation and include all assumptions.

RESPONSE:

To calculate the impact of the sustained savings embedded in the 2027-2031 forecasted budget on a typical residential customer's average bill, Alectra Utilities performed the following calculations:

1. Calculated the Revenue Requirement by excluding the sustained savings from 2027-2031 capital and OM&A. Please refer to 1-AMPCO-13 for calculation details.
2. Calculated the 2027 Residential Monthly Fixed Charge. Please refer to Table 1 below.

Table 1 – Calculation of the 2027 Residential Monthly Fixed Charge

	2027 Revenue Requirement (\$MM)	Residential Revenue Allocation (\$MM)	2027 Number of Res Customers	2027 Res MFC
		A	B	C = A / B / 12
Application (as Filed)	\$810.3	\$460.3	995,999	\$38.51
Excluding Synergies	\$850.1	\$483.0	995,999	\$40.41

1 3. Calculated the resulting bill impact by utilizing the Bill Impact model (provided as
 2 Attachment 8-5 to the Application). Table 2 below compares the resulting distribution bill
 3 impacts to the distribution bill impacts that were filed in Exhibit 8, Tab 5, Schedule 1,
 4 Table 8-5-2.

5

6 **Table 2 – Dx Bill Impact Calculations**

RESIDENTIAL Dx Bill	2027					2027	2028	2029	2030	2031	2027-2031 Avg
	BRZ	ERZ	GRZ	HRZ	PRZ	ALECTRA					
Application (as Filed, Table 8-5-2)	\$11.55	\$3.41	\$0.07	(\$2.71)	\$1.99	\$2.86	\$4.89	\$1.79	\$2.38	\$2.49	\$2.88
Excluding Synergies	\$13.45	\$5.31	\$1.97	(\$0.81)	\$3.89	\$4.76	\$4.97	\$1.85	\$2.45	\$2.56	\$3.32
								Average Total Bill Impact			(\$0.44)

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1 **Table 1 – Rate Base Calculations**

	2027	2028	2029	2030	2031
Gross Fixed Assets (Opening)	\$5,544.6	\$5,994.8	\$6,462.8	\$7,034.2	\$7,657.6
Gross Fixed Assets (Closing)	\$5,988.3	\$6,456.3	\$7,027.7	\$7,651.1	\$8,273.3
<i>ADD: Capital Synergies</i>	\$6.5	\$6.5	\$6.5	\$6.5	\$6.5
Gross Fixed Assets (Closing)	\$5,994.8	\$6,462.8	\$7,034.2	\$7,657.6	\$8,279.8
Average Fixed Assets	\$5,769.7	\$6,228.8	\$6,748.5	\$7,345.9	\$7,968.7
Accumulated Depreciation (Opening)	(\$1,539.6)	(\$1,734.1)	(\$1,934.8)	(\$2,150.3)	(\$2,382.0)
Accumulated Depreciation (Closing)	(\$1,732.6)	(\$1,933.0)	(\$2,148.0)	(\$2,379.1)	(\$2,624.2)
<i>ADD: Capital Synergies</i>	(\$1.6)	(\$1.8)	(\$2.3)	(\$2.9)	(\$3.7)
Accumulated Depreciation (Closing)	(\$1,734.1)	(\$1,934.8)	(\$2,150.3)	(\$2,382.0)	(\$2,627.8)
Average Accumulated Depreciation	(\$1,636.9)	(\$1,834.5)	(\$2,042.5)	(\$2,266.1)	(\$2,504.9)
Net Fixed Assets (Opening)	\$4,005.0	\$4,260.7	\$4,528.0	\$4,883.9	\$5,275.7
Net Fixed Assets (Closing)	\$4,260.7	\$4,528.0	\$4,883.9	\$5,275.7	\$5,652.0
Average Net Fixed Assets	\$4,132.8	\$4,394.3	\$4,706.0	\$5,079.8	\$5,463.8
ADD: Working Capital Allowance	\$308.4	\$323.1	\$334.8	\$349.6	\$364.7
RATE BASE	\$4,441.2	\$4,717.4	\$5,040.8	\$5,429.4	\$5,828.5

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4 **Table 2 – Revenue Requirement Calculations**

	2027	2028	2029	2030	2031
Rate Base	\$4,441.2	\$4,717.4	\$5,040.8	\$5,429.4	\$5,828.5
x Cost of Capital	6.10%	6.19%	6.20%	6.21%	6.28%
Return on Ratebase	\$271.0	\$292.0	\$312.5	\$336.9	\$366.3
OM&A	\$352.4	\$369.7	\$386.5	\$400.8	\$411.8
<i>ADD: OM&A Synergies</i>	\$37.8	\$37.8	\$37.8	\$37.8	\$37.8
OM&A (incl. Synergies)	\$390.2	\$407.4	\$424.2	\$438.6	\$449.5
Depreciation Expense	\$195.6	\$199.4	\$214.1	\$230.8	\$242.2
<i>ADD: Impact of Synergies</i>	\$1.6	\$1.8	\$2.3	\$2.9	\$3.7
Depreciation Expense	\$197.2	\$201.2	\$216.3	\$233.7	\$245.9
Payment in Lieu of Taxes	\$22.5	\$37.7	\$29.1	\$31.9	\$37.1
Service Revenue Requirement	\$880.9	\$938.3	\$982.2	\$1,041.1	\$1,098.8
LESS: Revenue Offsets	(\$30.8)	(\$31.3)	(\$27.9)	(\$28.7)	(\$29.5)
Base Revenue Requirement	\$850.1	\$907.0	\$954.2	\$1,012.4	\$1,069.3

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1 **Table 3 – Average Annual Reduction in Revenue Requirement**

	2027	2028	2029	2030	2031	Average Annual (2027-2031)
Revenue Requirement (Illustrative)	\$810.3	\$866.8	\$913.6	\$971.2	\$1,027.4	
Revenue Requirement (excluding Synergies)	\$850.1	\$907.0	\$954.2	\$1,012.4	\$1,069.3	
2 Annual Reduction	(\$39.7)	(\$40.2)	(\$40.6)	(\$41.2)	(\$42.0)	(\$40.7)

1-AMPCO-14

**Attachment 1
Baseline Costs**

Please see live Excel

1 **Table 1 – Capital Investments Aligned with Climate Risk and Vulnerability Assessment**
2 **(2027-2031)**

Category	2027	2028	2029	2030	2031	Total 2027-2031
System Renewal	4.5	1.0	23.9	42.6	51.9	124.0
System Service	0.18	0.25	0.25	0.23	0.24	1.1
Total	4.6	1.3	24.2	42.9	52.2	125.1

3
4 No specific incremental changes to OM&A programs were implemented in response to the
5 Climate Risk and Vulnerability Assessment Study.

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INTERROGATORY 2-AMPCO-16

Ref: 2A-1-1

Please provide summaries of all Third-Party reviews, assessments or audits undertaken over the past 5 years related to specific asset categories in the invest plan. Examples include:

- Asset Failure Rates
- Current state of specific assets
- Performance and/or reliability reviews of specific assets
- Capacity and utilization reviews

RESPONSE:

Please see listing of third-party reviews, assessments or audits in Table 1 below:

Table 1 - Third-party reviews, assessments or audits

Title	Third-Party Provider	Summary
Health Index (HI) Methodology Review	Kinectrics	Provided in response to 1-SEC-4
Material Performance Reviews	Manufacturer/ Consultant	Provided in response to 2-AMPCO-43-part (c)
Load Forecast Study Review Report	Hatch	Provided in response to 1-SEC-4
Determination of Asset Utilization	Quanta	Provided in response to 1-SEC-4
Building Condition Assessment	Pinchin Ltd	Provided in response to 1-SEC-4
Building Electrical Assessment	S&S Electric	Provided in response to 1-SEC-4
ARI Healthy Vehicle Report	Holman (Formerly ARI)	Provided in response to 1-SEC-4
Hardware Asset Management Review (HAM)	Deloitte	Provided in response to 1-SEC-4

Asset Management Process Step	Renewing & Replacing Infrastructure \$M	Meeting Growing Electricity Demand \$M	Enabling Resilience and Modernization \$M	Total \$	Total # of BC Prepared	Total # BC Approved in C55	Total # BC Optimized in C55
Portfolio Optimization Draft Plan							
Capital Investment Portfolio Optimization Draft Plan Post Customer Engagement Phase #2							
2027-2031 DSP	1,800	1,000	300	3,100			

1 **RESPONSE:**

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3 **Table 1 – Business Cases**

Asset Management Process Step	Renewing & Replacing Infrastructure \$M	Meeting Growing Electricity Demand \$M	Enabling Resilience and Modernization \$M	Total \$	Total # of BC Prepared	Total # BC Approved in C55	Total # BC Optimized in C55
Investment Needs (Post Customer Engagement Phase #1 & Including Internal/External Drivers)	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Business Case Development	2,528	1,503	436	4,468	763	763	N/A
Capital Investment Portfolio Optimization Draft Plan	1,852	1,078	310	3,240	763	763	690
Capital Investment Portfolio Optimization Draft Plan Post Customer Engagement Phase #2	1,769	1,067	298	3,135	763	763	698
2027-2031 DSP	1,769	1,067	298	3,135	763	763	698

4

5 No business cases were developed until “Business Case Development” step.

1 **Table 1 – Regional Planning Projects Mapping**

Region or Sub-Region	Near Term Actions Identified	Project Reference	\$MM (2027-2031)	Investment Category ¹
York	Build Markham MTS#5	101488	10	General Plant
	Build Vaughan Station (VTS#6)	152484	1.3	System Service
	Build MTS#5 for VMC	152762	14.9	System Service
	Build Richmond Hill TS3	152758	56.5	System Service
	Build Markham TS#6	152846	2.8	System Service
GTA West	Reconductoring Pleasant H29/H30 circuits	152723	5	General Plant
	230kV UG Transmission Line for Heritage TS	152883	53.3	General Plant
	New Goreway TS	152845	50.1	System Service
	New Heritage TS	152847	13.3	System Service
	Lakeview TS	152889	50.1	System Service
	Gateway TS	152888	2.8	System Service
Hamilton Sub Region	New -Station Hamilton South West	152850	19.8	System Service
	Newton TS (Capacity)	152493	25.5	General Plant
KWCG	Campbell TS Metal Clad Expansion	151147	25.5	General Plant

¹Alectra will be making CCRA payments to Hydro One for these assets. These payments are considered intangible assets and are categorized as General Plant

1 f) System Reliability: Please provide the Average of the last 5 years (2020-2024) for SAIDI
 2 excluding MEDs and Loss of Supply.

3

4 g) System Reliability: Please confirm the Failed Equipment - CHI target of 354,481 excludes
 5 MEDs.

6

7 **RESPONSE:**

8

9 a) The response can be found in Exhibit 2, Tab 1, Schedule 1, Appendix P – 2019
 10 Performance Measures, page 3, Table P – 2.

11

12 b) Alectra Utilities did not set asset replacement targets in the previous DSP (EB-2019—
 13 08). Please see Table 1 which contains the actuals completed under the pole,
 14 transformer, switches and switchgear renewal programs, and underground cable
 15 replacement from 2020-2024.

16

17 **Table 1 - Actual Asset Replacements from 2020-2024**

	2020	2021	2022	2023	2024
Poles	682	772	836	942	709
Transformers	318	423	364	340	446
Switches	13	25	27	30	36
Switchgear	50	58	52	58	73
Cable Replacement	67	47	37	62	64

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19 c) Refer to Table 2 below for the number of automated devices installed during 2020-2024
 20 under the distributed automation program only.

21

22 **Table 2 - Number of Automated Devices installed 2020-2024**

	2020	2021	2022	2023	2024
Number of Automated Devices Installed	44	90	91	93	99

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1 d) The 685MVA of added capacity is derived based on details in Exhibit 2A, Tab 1, Schedule
 2 1, Appendix B13, by summing up the LTR of the stations that will come in service during
 3 the rate period. Refer to Table 3 below for the derivation of the proposed 685 MVA of
 4 additional station capacity by 2031.

5

6 **Table 3 - Added Capacity by Station**

Station Name	Capacity (MVA)
Markham TS#5	170
Vaughan TS#6	170
Richmond Hill TS3	170
Campbell TS Metal Clad Expansion	60
Newton TS (Capacity)	68
Webb MS (New Substation)	33
Melbourne MS322	14
Total	685

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8 e)

9 i. Please see AMPCO 46 response to question a).

10

11 ii. The vehicle availability is the inverse of vehicle downtime. Please see response
 12 to AMPCO 46 question c).

13

14 f) Based on the data provided in Exhibit 2A, Tab 1, Schedule 1, Appendix L – Historical
 15 Reliability Data, Page 2, Table L – 1. The Average SAIDI, excluding MEDs and LOS
 16 events from 2020-2024 is 0.88 hours.

17

18 g) Alectra Utilities confirms the CHI Failed Equipment target of 354,481 excludes MEDs.

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1 1. Review Work and Project Deliverable

2

3 Alectra Utilities conducts regular meetings to review the execution of the DA work.
4 During the meetings, Alectra Utilities reviewed the plan for the year, overall progress,
5 and any unplanned changes.

6

7 2. Reporting Performance Measures

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9 For DA, performance measures include (i) progress against plan (schedule) and (ii)
10 progress against planned capital expenditure. Alectra Utilities analyzes schedule and
11 spending continually. On a quarterly basis, those measures are tracked and updated.

12

13 3. Develop Continuous Improvement Action

14

15 Based on observed schedule and cost performance in 2025, Alectra Utilities noted
16 that cost savings were achieved by utilizing an Alectra-owned Radial Boom Derrick
17 (RBD) truck in the installation, as opposed to work orders where a third-party owned
18 crane was used. Use of a RBD resulted in faster execution of the work and cost
19 savings. This lesson learned was shared among personnel working on DA as an
20 action plan.

21

22 4. Update Value Framework / Performance Target, Process & Procedure

23

24 Based on the lessons learned and continuous improvement action plans, Alectra
25 Utilities now prioritizes using a RBD in lieu of cranes where possible for the DA
26 program.

27

28 Alectra Utilities Asset Management Process incorporates the outcomes of the
29 lessons learned and the actions in future plans in multiple ways. Examples include:
30 faster execution against the plan; optimization of available resources; cost savings;
31 and more precise future work estimates informed by actuals.

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INTERROGATORY 2-AMPCO-21

Ref: 2A-1-1 pp.97-110

a) Page 97: Please confirm the Copperleaf AIPM software was used to develop the Optimized (Draft Plan), Accelerated and Reduced Capital Plan projects/amounts that were presented to customers in the Phase 2 Customer Engagement. If not, please explain.

b) Page 103: Did AMCL review the Risk Value Measures against Alectra’s Enterprise Risk Management (ERM) Policy?

c) Page 105: Please provide the constraints used to develop the Draft Capital Plan:

Copperleaf Constraints	2027	2028	2029	2030	2031
Capex					
Opex					
Labour					

d) Page 106: Alectra management reviewed each iteration of the Copperleaf optimized capital investment portfolio, evaluating the implications of deferring certain projects beyond the 2031 planning period and accepting alternative scheduling simulated by the Copperleaf optimization process. Please provide the number of iterations of Copperleaf undertaken through Alectra’s Asset Management Process to arrive at the Draft Capital Plan shared with customers in Phase 2.

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- 1 e) Page 109: Please confirm that Copperleaf optimization was not used to optimize the final
2 capital investment portfolio that incorporated customer feedback from Phase 2 and
3 resulted in a net reduction of \$106MM over the 2027-2031 period.
4
- 5 f) Please provide the total number of capital projects in the 2027-2031 DSP compared to
6 the 2020-2024 DSP.
7
- 8 g) Please provide Alectra's forecast of asset condition for All Assets, Poles, Transformers,
9 Switchgear, O/H Switches, and UG Cable at the end of 2031 against each level of
10 forecast DSP investment spending: Accelerated, Moderate and Reduced. In the
11 response explain the methodology and assumptions.
12

13 **RESPONSE:**
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- 15 a) Partially confirmed. Copperleaf AIPM software was used to develop the Optimized (Draft)
16 plan presented to customers in Phase 2. Accelerated and Reduced Capital Plans were
17 developed by Alectra Utilities' subject matter experts using consistent program
18 assumptions and adjusted investment levels for the purposes of presenting trade-offs in
19 the Phase 2 Customer Engagement. (Ref: 2A-1-1 pp.106-109)
20
- 21 b) Confirmed. As part of the Copperleaf Framework Assurance Review, AMCL reviewed the
22 Risk Value Measures (Alectra Utilities' Value Measure Definition Document (Ref: 2A -
23 Appendix C)) against Alectra Utilities' Enterprise Risk Management Risk Scale.
24
- 25 c) Please see Table 1 below, which summarizes the constraints used to develop the Draft
26 Capital Plan.

1 **Table 1 - Draft Capital Plan Constraints**

Copperleaf Constraints	2027	2028	2029	2030	2031
CAPEX (\$MM)	406.9	530.1	658.3	787.1	857.8
OPEX (Non-Labour, \$MM)	16.8	22.3	24.3	25.7	31.9
Labour (Hours)	195,600	195,600	195,600	195,600	195,600

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- d) Alectra Utilities completed six optimization iterations to arrive at the Draft Capital Plan shared with customers as part of Phase 2 customer engagement.

- e) Confirmed. Copperleaf optimization was used to develop the Draft Plan presented to customers in Phase 2. After Phase 2 customer feedback was received, Alectra Utilities adjusted the portfolio across the six customer-presented spend option areas (e.g., AMI, Overhead & Transformer, Underground Renewal, Fleet & Facilities & IT, Meeting Growing Electricity Demand, Enabling resiliency and modernization) and did not rerun the optimization. Phase 2 customer feedback demonstrated a high degree of alignment with the Draft Plan. Accordingly, the net reduction of \$106 million over 2027-2031 period was incorporated through portfolio adjustment, not through a full portfolio re-optimization.

- f) There are 698 capital projects in the 2027 - 2031 DSP. There were 884 capital projects in the 2020 - 2024 DSP.

- g) Please refer to Table 2 below for the forecasted deteriorated population of underground cables for 2031 under each investment scenario Accelerated, Moderate (Selected), and Reduced.

1 **Table 2 - DSP Cable Renewal Costs and 2031 Deterioration Forecasts**

Option	Cable Renewal Plan Cost of DSP 2027-2031 (\$MM)	Very Poor & Poor Population Forecasted - End of 2031	
		Total KM of VP & P	Proportion of Population (%)
Option 1: Accelerated pace	526.5	6,964	29.4%
Option2: Moderate pace (Selected)	437.5	7,027	29.7%
Option 3: Reduced pace	319.4	7,073	29.9%

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3 For all other asset classes, please refer to the response to 2-Staff-69-b.

- 1 • Project estimate and actual spend to date – project life-to-date estimate and
2 expenditures are reviewed to identify potential pending requests for change or needs
3 to alter scope for projects of substantial size (over \$500,000 in estimated cost).
- 4 • Project scheduled start and end dates – project schedules are reviewed, expected
5 completion dates are discussed and deviations from schedule are discussed for
6 potential mitigation as needed for projects of substantial size (over \$500,000 in
7 estimated cost).
- 8 • Crew availability – projects expected to start within the next three months and factors
9 affecting crew or contractor availability are discussed.
- 10 • Risks – risks to material or resource availability, schedule attainment and project cost
11 are discussed. Most smaller risks are dealt with through the conversation or day-to-
12 day collaboration between stakeholders, while salient risks are tracked for ongoing
13 mitigation efforts.
- 14 • Variance analysis – Completed projects that meet the thresholds noted in Exhibit 2A,
15 Schedule 1, Tab 1, D.1 (pg. 112) are reviewed for variance between actual and
16 estimated cost. Primary drivers of variance are assessed and trends are identified for
17 lessons learned.

1 b) The following table, Table 2 – Asset Replacement Rates (%), 2020–2025, presents
 2 the actual replacement quantities as a percentage of total population for poles,
 3 transformers, distribution switchgear, and overhead switches over the 2020 to 2025
 4 period.

5

6 **Table 2 – Asset Replacement Rates (%), 2020–2025**

Year	Poles	Transformers	Distribution Switchgear	Overhead Switches
	Replacement Rate %	Replacement Rate %	Replacement Rate %	Replacement Rate %
2020	0.5%	0.3%	1.4%	0.4%
2021	0.6%	0.4%	1.8%	0.7%
2022	0.6%	0.3%	1.4%	0.8%
2023	0.7%	0.3%	1.7%	0.9%
2024	0.5%	0.3%	2.1%	1.1%
2025	0.6%	0.5%	1.8%	0.9%

**RESPONSES TO ASSOCIATION OF MAJOR POWER CONSUMERS IN ONTARIO
INTERROGATORIES**

INTERROGATORY 2-AMPCO-25

Ref: 2A-1-1

a) Page 120: Please complete the following table:

Capital \$	2020	2021	2022	2023	2024	2025
Planned Work						
Unplanned Work						

b) Page 121: Please explain Alectra's red-lining process.

RESPONSE:

a) Please see the table below with the Planned & Unplanned figures. For the purposes of the cost control performance metric in 2A-1-1 as referenced, Planned and Unplanned work is related to Distribution System related execution (System Access, System Renewal & System Service). Planned work is categorized as "Controllable Work" which is System Renewal + System Service excluding Reactive related expenditures. Unplanned work is categorized as System Access and Reactive. General Plant has been included separately in this table to present overall General Plant capital expenditures and is not categorized as Planned or Unplanned.

1 **Table 1 – Planned, Unplanned, and General Plant Expenditures (2020-2025)**

Capital \$	2020	2021	2022	2023	2024	2025
Planned Work/Controllable Capital - Distribution System	139.9	138.1	124.1	148.8	156.4	171.6
Unplanned Work - Distribution System	85.6	94.2	81.7	101.5	140.7	164.2
General Plant	33.5	37.8	59.8	78.2	36.1	33.6
Total	258.9	270.1	265.6	328.5	333.3	369.4

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b) Red-lining process

During the construction process, lead-hands and inspectors review and update drawings continuously to capture major changes to design. This can be by pen and highlighter or by tablet.

Significant changes require consultation with the design group to verify the anticipated changes prior to completing the construction. These include changes to pole heights, class and significant changes to location, changes to anchoring and framing, adding or removing major equipment from the plans and any deviation from standards. The changes are marked on the prints and where they result in a need to alter project materials, scope or budget, a request for change is also completed. Where the change is significant and affects project scope, new drawings will be prepared by design and reissued to all stakeholders to capture the change rather than completing red-lines.

Once the project is completed, a final walkthrough inspection of the project is conducted and red-lines are verified, then construction verification documents are signed off in accordance with Alectra’s Construction Verification Program. Completed construction drawings are scanned and uploaded for file retention and reviewed for completion by the Records department.

1 **Table 1 – Appendix 2-AA at Segment Level**

Project Group	2026	2027	2028	2029	2030	2031
Total SYSTEM ACCESS Gross	257.2	305.8	313.1	299.4	272.7	295.5
Internal %	57%	53%	52%	51%	53%	53%
External %	43%	47%	48%	49%	47%	48%
Total SYSTEM ACCESS Contributions	-156.3	-148.1	-132.7	-135.2	-133.6	-156.8
Total SYSTEM ACCESS Net	100.9	157.7	180.4	164.2	139.1	138.7
SYSTEM RENEWAL						
Total SYSTEM RENEWAL Gross	158.0	193.1	209.4	257.3	346.1	362.6
Internal %	56%	57%	55%	51%	45%	44%
External %	44%	43%	45%	49%	55%	56%
Total SYSTEM RENEWAL Contributions	0.0	0.0	0.0	0.0	0.0	0.0
Total SYSTEM RENEWAL Net	158.0	193.1	209.4	257.3	346.1	362.6
SYSTEM SERVICE						
Total SYSTEM SERVICE Gross	62.1	39.3	80.3	151.8	133.9	192.7
Internal %	55%	58%	56%	51%	54%	49%
External %	45%	43%	44%	49%	46%	51%
Total SYSTEM SERVICE Contributions	-15.1	-0.1	-0.7	-1.8	-1.9	-8.5
Total SYSTEM SERVICE Net	47.0	39.2	79.6	150.0	132.0	184.2
GENERAL PLANT						
Total GENERAL PLANT Gross	36.9	64.8	85.5	82.6	95.9	71.8
Internal %	68%	69%	55%	52%	39%	45%
External %	32%	31%	45%	48%	62%	55%
Total GENERAL PLANT Contributions	0.0	0.0	0.0	0.0	0.0	0.0
Total GENERAL PLANT Net	36.9	64.8	85.5	82.6	95.9	71.8
Total Net	342.8	454.8	554.9	654.1	713.1	757.3

2

3 Minor rounding differences may exist

2-AMPCO-26

Attachment 1 Program by segment Resource Split

Please see live Excel

Table 1 – Resources FTEs

Resources FTEs	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Lines	408.2	404.6	392.8	374.2	365.7	411.3	411.3	436.3	451.3	463.3	465.3	466.3
Stations	64.5	68.3	64.3	65.9	64.7	85.3	85.0	87.0	88.0	89.0	89.0	89.0
System control	65.5	63.3	69.2	74.2	74.8	92.3	92.3	102.3	106.3	106.3	106.3	106.3
Distribution Design	114.8	122.1	124.7	129.9	133.5	153.5	158.5	178.0	196.0	206.0	211.0	212.0

1 Tier 3: A project with a combination of characteristics such as lower costs and/or benefits,
2 has a lower business impact (ex. does not require major changes to critical systems),
3 has a lower number of divisions involved and interdependencies, and low complexity
4 (lower resource effort).

5 Oversight requirements: Project Steering Committee required if there are 3 or more
6 impacted/dependent divisions. Project Sponsor required with less than 3 divisions
7 impacted/dependent. Executive sponsor not required. Providing oversight and decision
8 making as per authorization limits.

9

10 Tier 4: A departmental initiative, usually non-cross functional or a cross-functional request
11 limited to a small operational effort. These initiatives require minimal work effort to
12 complete with minimal changes to existing services. They are also usually funded through
13 the division's operational budget and include initiatives that will not significantly impact
14 other division's operations.

15 Oversight requirements: Project lead from the department. Resource allocations
16 oversight by PMO with no steering committee or executive sponsor required.

17

18 b) The defined thresholds and approval pathways for the Project Change Request (PCR)
19 are as follows:

1 **Table 1 – Defined Thresholds and Approval Pathways**

OM&A Project Change Impacts	
<\$0.1MM	Project changes (increase or decrease) of <\$0.1MM (cumulative with prior changes) can be approved by a project Sponsor and do not require a PCR.
≥\$0.1MM to <\$0.25MM	OM&A Project changes of ≥ \$0.1MM to < \$0.25MM (cumulative with prior changes) require a PCR and must be approved by the Transformation Management Office (TMO) and Project Steering Committee. The TMO will have an overall OM&A Portfolio Change Threshold of 10% of the OM&A project budget per year. TMO will require EC approval for any portfolio project changes beyond the Portfolio Change Threshold.
≥ \$0.25MM	OM&A Project changes of >\$0.25MM (cumulative with prior changes) require a PCR and must be approved by EC with a recommendation from the TMO and Project Steering committee.
Capital Project Change Impacts	
< \$0.3MM	Capital Project changes (increase or decrease) of <\$0.3 MM (cumulative with prior changes) can be approved by a project Sponsor and do not require a PCR.
≥ \$0.3MM < \$1.0MM	Capital Project changes of ≥ \$0.3MM to < \$1.00MM (cumulative with prior changes) require a PCR and must be approved by the TMO and Project Steering Committee. The TMO will have an overall Capital Portfolio Change Threshold of 10% of the Capital project budget per year. TMO will require EC approval for any portfolio project changes beyond the Portfolio Change Threshold.
≥ \$1MM	Capital Project changes of >\$1.0MM (cumulative with prior changes) require a PCR and must be approved by EC with a recommendation from the TMO and Project Steering committee.

1 c) The performance of the portfolio of projects is tracked through a dashboard which
2 provides a summary of the projects by project health status and overall budget, actuals,
3 forecast and variance. Portfolio insights provide a summary of active projects by tier, the
4 overall health status of active projects and active projects by gate. The insights also
5 summarize portfolio risks from a schedule, financial and resource perspective and
6 identifies active project change request.

1 **Table 1 – Number of Assets Replaced - Planned Replacements (2020-2025)**

Asset Class	Total # of Asset Replaced 2020-2025	% of Asset Replaced in Very Poor or Poor Condition 2020-2025	% of Assets at End of Life 2020-2025	% of Asset Replaced in Very Poor or Poor Condition & at End of Life 2020-2025
Transformers	2,481	95%	70%	70%
Switchgear	357	83%	68%	57%
Poles	4,687	72%	84%	61%
OH Switches	162	64%	52%	44%
UG Cables (km)	353	74%	79%	72%

2

3 b) See AMPCO-38 for the total number of assets planned for replacement under renewal
 4 investments. Alectra Utilities requires asset inspections, testing and maintenance
 5 information to complete asset condition assessments. As such, Alectra Utilities is unable
 6 to forecast future Asset Condition Assessments for 2027 to 2031. Alectra Utilities has
 7 provided a percentage of assets forecast to reach End of Life by 2031 in Table 2 below.

1 **Table 2 – Forecast Number of Assets - Planned Replacements (2027-2031)**

Asset Class	Total # of Asset Replaced 2027-2031	% of Assets at End of Life as of 2031
Transformers	4,771	99%
Switchgear	344	77%
Poles	5,256	84%
OH Switches	255	83%
UG Cables (km)	382	95%

**RESPONSES TO ASSOCIATION OF MAJOR POWER CONSUMERS IN ONTARIO
INTERROGATORIES**

INTERROGATORY 2-AMPCO-33

Ref: 2A-1-1 p. 260

Copperleaf's Predictive 5 Analytics (PA) tool generates renewal plans on the aggregate of optimal replacement timing of individual assets. These renewal quantities are further modified according to Alectra Utilities' pacing strategies; Accelerated, Moderate, and Reduced.

Please complete the following Table:

# Assets Replaced (Renewal Quantities)	Accelerated Pacing	Moderate Pacing	Reduced Pacing
Total Assets			
Transformers			
Poles			
Switchgear			
O/H Switches			
U/G Cable			

RESPONSE:

Alectra Utilities notes that, as stated in Exhibit 2A, Tab 1, Schedule 1, pages 259 (Line 15) – 260 (Line 1), the Copperleaf Predictive Analytics tool was applied on Transformers, Poles, Switchgear and Overhead Switches (O/H Switches) only.

1 Alectra Utilities understands that the requested 'Total Assets' row to represent the sum of
 2 Transformers, Poles, Switchgear, O/H Switches and Underground (U/G) Cable (including
 3 both injection and replacement). Alectra Utilities has completed the table on that basis.
 4 However, since U/G cable is a linear asset and the other assets are discrete, Alectra Utilities
 5 has treated 1km of U/G cable as one unit for the purpose of calculating the requested total.

6

7 **Table 1 – Asset Replacement Pacing Quantities**

# Assets Replaced (Renewal Quantities)	Accelerated Pacing	Moderate Pacing	Reduced Pacing
Total Assets	13,404	11,353	10,069
Transformers	5,442	4,771	4,222
Poles	6,265	5,256	4,832
Switchgear	550	405	344
O/H Switches	340	255	175
U/G Cable	807	666	496

- 1 c) From the list of asset classes included in the ACA, age carries a significant weight in the
- 2 HI calculation for Overhead Conductors and Underground Cables.

2-AMPCO-35

Attachment 1

Please see live Excel

2-AMPCO-36

Attachment 1 Capital Contributions

Please see live Excel

1 Framework Overview, C.1. Portfolio Level Project Scheduling for details pertaining to Alectra
2 Utilities' comprehensive and adaptive work scheduling and work execution planning.

3

4 Alectra Utilities utilized the most up-to-date and relevant information during the development
5 of the 2027-2031 plan and did not identify, during planning, any dependencies with known
6 customer-driven work. Alectra Utilities' Asset Management Process has a well-established,
7 mature set of coordination approaches and practices to manage interdependencies across
8 the project/program lifecycle (e.g., planning, work execution), including, but not limited to,
9 inspections, testing, coordination with road authorities, and coordination with other
10 utilities/stakeholders. These organizational approaches enable Alectra Utilities to be agile,
11 flexible, and responsive, delivering DSP outcomes as new information becomes available or
12 as new information about change beyond Alectra Utilities emerges. Alectra Utilities
13 leverages this best utility practice in its long-term plans for dynamic electrical distribution
14 systems.

15

16 In this context, Alectra Utilities considered the response to this question in terms of project
17 management dependencies to mean that one project must be fully executed and completed
18 before the dependent project can start on projects within Alectra Utilities' control. Alectra
19 Utilities has identified the projects in Table 1 as projects within Alectra Utilities' control that
20 have project management dependencies.

1 **Table 1 - Project Dependencies**

Dependent Projects		Dependencies		
Project ID	Description	Project ID	Description	Investment Type
152762	Build Vaughan MTS#5 for VMC	152862	Purchase Land for Future Vaughan MTS#5	Land Acquisition
152846	Build Markham TS #6	152860	Markham MTS#6 Land Purchase and Class EA	Land Acquisition
101542	New Barrie 20 MVA Substation	152870	Land Purchase - New Barrie 20MVA Substation - Bryne Dr.	Land Acquisition
152909	New Alliston 2x20 MVA MS	152934	Land Purchase - New Alliston 2x20MVA MS	Land Acquisition
152847	New Heritage TS - Brampton	152859	Land Purchase - Brampton - New Heritage TS	Land Acquisition
152847	New Heritage TS - Brampton	152883	230kV UG Transmission Line for TS Heritage 2 - Brampton	CCRA
152889	TS Station - 230kV/27.6kV Lakeview TS - South Mississauga	152857	Land Purchase - 230kV/27.6kV Lakeview TS - South Mississauga	Land Acquisition
152973	TS Station - 230kV/27.6kV GTAA TS	152972	Land Purchase - 230kV/27.6kV - GTAA TS	Land Acquisition
152888	TS Station - 230kV/27.6kV Gateway TS - North Mississauga	152844	Land Purchase - 230kV/27.6kV Gateway TS	Land Acquisition
152845	New Goreway TS 2 - Brampton	152861	Land Purchase - Brampton - New Goreway 2 TS	Land Acquisition
152850	New Station - Hamilton South-West (Station)	152866	New Station - Hamilton South-West (Land)	Land Acquisition

2-AMPCO-38

Attachment 1

Please see live Excel

1 determined through the Asset Management Process, as discussed in Exhibit 2A, Tab 1,
2 Schedule 1, 5.3.1 – Asset Management Framework.

3

4 Therefore, it is not feasible for Alectra Utilities to comment on the timelines and future
5 budget of the Voltage Conversion program outside of this DSP, since it is dependent on
6 future optimization results.

- 1 the 2027-2031 forecast period (see Exhibit 2A, Tab 1, Schedule 1, Appendix B01, Section
- 2 4.5, Page 51, Lines 19 – 24).

**RESPONSES TO ASSOCIATION OF MAJOR POWER CONSUMERS IN ONTARIO
 INTERROGATORIES**

INTERROGATORY 2-AMPCO-41

Ref: 2A-1-1 Appendix B-02 p. 64

a) With respect to the asset categories in Figure B02-1, please provide the number of outages by year for the years 2020 to 2025.

b) Please provide the assets included in the category OH Line Hardware.

RESPONSE:

a) Table 1 below provides the number of outages by year for the years 2020 to 2025.

Table 1 – Number of Outages by Asset Type (2020-2025)

Number of Outages (without MEDs)	2020	2021	2022	2023	2024	2025
Cables & Accessories (XLPE)	472	427	427	388	434	492
Transformers	392	333	328	348	321	306
O/H Line Hardware	290	192	227	142	145	158
Switches	59	57	47	65	63	71
Switchgear	36	50	49	24	35	28
Cables & Accessories (PILC)	32	15	13	8	4	19

1 b) The assets in the O/H Line Hardware category are:

- 2 • Poles
- 3 • Conductor
- 4 • Insulators
- 5 • Jumpers/Leads/Connectors/Splices (O/H)
- 6 • Brackets/Crossarms
- 7 • Bolts
- 8 • Guys
- 9 • Lightning Arresters

1 safety risk to the public. Detailed engineering assessment during the design stage will
2 determine the full extent of the remediation.

3

4 d) Forecasted vault and manhole cover replacement volumes are informed by inspection
5 results and assessments. Alectra Utilities forecasts the replacement quantities over the
6 2026-2031 period in Table 1 below.

7

8 **Table 1 – Estimated Vault/Manhole Cover Replacement Quantities between 2026-**
9 **2031**

Estimated Quantities	2026	2027	2028	2029	2030	2031
Vault/ Manhole Covers Replaced	19	19	21	43	91	118

1 information (see Ex. 2A-1-1 Appendix B14, Section IV – Grid Modernization). The EAM
 2 will improve data integration, reduce manual data processing, and enhance the ability to
 3 classify, track, and report deficiencies. Advancements in the collection of more detailed
 4 condition factors enabled the identification of asset deficiencies arising from inspection
 5 and maintenance activities.

6

7 b) Refer to the response in Part a) above.

8

9 c) Refer to Table 1 for a summary of the studies and analyses undertaken over the period
 10 2020-2025. A total of six material studies were completed which impacted material
 11 standards and construction practices. A short summary of each Material Study and
 12 associated manufacture/consultant who conducted the study is provided below:

13

14 **Table 1 – Studies and Analysis**

Item	Manufacturer/ Consultant	Summary of Study
1	ABB	Due to a protection miss-operation, a solid dielectric switchgear was returned to the manufacturer. The manufacturer discovered corrosion on the contacts that could affect the tripping operation. Similar problems were reported in other operating areas, and investigations by the manufacturers consistently identified the same issue: the switch controller lacks a conformal coating, which allows contacts to corrode. This is recognized as a common problem in first-generation solid dielectric switchgear.
2	G&W	Failed solid dielectric switchgear was returned to the manufacturer due to premature failure of the device. This issue is detailed in Exhibit 2, Tab 1, Schedule 1, Appendix B02 – Underground Asset Renewal, Page 94-95, Sub-Section 3.1.1.3 First Generation Solid Dielectric Switchgear.

Item	Manufacturer/ Consultant	Summary of Study
3	ABB	Alectra Utilities staff experienced problems with 200A 25kV elbows “backing off” the connection. Following discussions with the manufacturer, a product notice was issued requesting the return of all 200A 25kV elbows.
4	MacLean Power Systems	During training on a new device being installed, a fibreglass bracket failed. Further testing revealed that the bracket could not withstand the forces applied at certain angles. An iron end fitting was used to replace the previous cast aluminium one, and subsequent testing showed no issues. As a result, all the brackets were replaced.
5	RS Isolsec	A small potential transformer (PT) for control power failed after being submerged in water, despite being rated for such conditions. The unit has been returned to the manufacturer, but a final resolution is still pending. In the interim, PTs from a different manufacturer are being used. Additionally, the location of the PT has been elevated to minimize the risk of water submersion.
6	NBM and CIMA+	Two third-party reports were requested to investigate the long-term effects on direct-buried ducts when installed beneath sidewalks. The results of these studies will influence the construction of civil infrastructure within the municipal road allowance.

1

2 d) Alectra Utilities does not maintain centralized historical data that allocates deficiencies
 3 between reactive and planned capital. As noted in Part a), deficiency information is
 4 captured across multiple systems and manual processes, limiting the ability to classify
 5 deficiencies by funding category. Planned Capital addresses assets posing safety,

1 environmental, and reliability risks in a proactive manner, while Reactive Capital
 2 addresses assets that have failed or are at a high risk of imminent failure. The planned
 3 implementation of EAM will improve the ability to classify, track, and report deficiencies.

4

5 e) Please see the response to sub-question (a) above. Alectra Utilities does not have a
 6 centralized system in place to track all potential deficiencies, however the utility plans to
 7 implement an EAM system to establish this centralized location.

8

9 The count of corrective actions identified from 2023-2025 have been classified by asset
 10 type in Table 2 below. Note that there are no corrective actions related to underground
 11 cables as corrective actions stem from deficiencies observed during asset inspections
 12 and buried cables cannot be visually inspected.

13

14 **Table 2 – Count of Corrective Actions**

Asset Type	2023	2024	2025
Poles	32,007	34,929	39,213
Switchgear	1,384	1,645	1,831
Switches	291	258	216
Transformers	53,945	54,782	58,500

15 *Note: Corrective actions from all asset classes 2020-2022 are not available as this information was not collected*
 16 *prior to 2023. Some of these corrective actions are repaired under Reactive Capital, while some are repaired*
 17 *under Overhead/Underground Maintenance and Inspections. Alectra does not have a breakdown of which*
 18 *corrective actions were completed under Reactive Capital.*

19

20 The quantity of assets replaced reactively under the Reactive Capital category from
 21 2020-2025 can be found in Table 3 below.

1 **Table 3 – Quantity of Assets Replaced Reactively**

Asset Type	2020	2021	2022	2023	2024	2025
Poles	276	249	413	282	276	452
Switchgear	59	84	68	66	76	57
Switches (Loadbreak and fused)	615	502	712	639	540	955
Transformers	764	723	971	824	935	1188
Primary Cable	11.1km	13.4km	8.9km	16.3km	13.5km	22.7km
Secondary Cable	2.8km	3.2km	4.9km	3.9km	6.8km	15.2km

**RESPONSES TO ASSOCIATION OF MAJOR POWER CONSUMERS IN ONTARIO
 INTERROGATORIES**

INTERROGATORY 2-AMPCO-44

Ref: 2A-1-1 Appendix B-05 p. 194 Figure B05-6

Please provide the Reactive Replacement Costs by asset type for each of the years 2020-2025.

RESPONSE:

Please see the Reactive Replacement Costs by asset type for years 2020-2025 below:

Table 1 – Reactive Replacement Costs by Asset Type

Category	2020 \$MM	2021 \$MM	2022 \$MM	2023 \$MM	2024 \$MM	2025 \$MM
Poles	\$4.6	\$7.1	\$10.5	\$8.2	\$9.5	\$13.3
Overhead switches	\$1.2	\$1.5	\$1.7	\$1.7	\$1.9	\$2.7
Overhead transformers	\$0.9	\$1.2	\$1.6	\$1.8	\$2.7	\$5.2
Primary cable	\$3.8	\$3.9	\$3.3	\$4.1	\$4.4	\$6.3
Secondary cable	\$0.3	\$0.5	\$0.6	\$0.6	\$0.2	\$0.2
Switchgear	\$2.6	\$4.2	\$3.7	\$3.7	\$4.5	\$4.6
Underground transformers	\$5.0	\$6.2	\$8.9	\$10.8	\$14.5	\$22.0
Other	\$4.0	\$2.3	\$4.0	\$3.4	\$1.2	\$0.0
TOTAL	\$22.5	\$26.8	\$34.3	\$34.2	\$38.9	\$54.4

1 construction needs were identified as noted below. In addition to these Class D design
 2 and construction variances, Alectra incurred incremental costs related to:
 3 (i) borrowing costs, property taxes and legal fees,
 4 (ii) sustainability enhancements, and
 5 (iii) computer equipment and furniture as existing assets could not be repurposed.
 6

7 **Table 1 - 200 Kennedy Road Project Variance (\$ Millions)**

	INITIAL (2019)	FINAL (2023)
LAND COST	\$43.8	\$53.3
BUILDING COSTS	\$45.1	\$70.5
TOTAL COST	\$88.9	\$123.8
ORIGINAL VS. FINAL VARIANCES		
BORROWING COSTS, TAXES AND FEES		
Borrowing Costs - Land		6.5
Borrowing Costs - Building		(1.1)
Due Diligence, Legal and Closing Costs - Land		2.0
Property Tax (while under construction) - Land		1.1
	\$	8.5
CLASS D VARIANCES		
INCREMENTAL OPERATIONAL REQUIREMENTS		
Cash in Lieu of Parklands		1.0
Watercourse & Retaining Wall		1.0
Public Road Works		0.8
Scope Additions (City of Brampton, Regional of Peel, Engineering/Design Changes)		3.0
	\$	5.8
DETAILED DESIGN & CONSTRUCTION		
External Design and Materials		2.3
Electrical Design and Materials		2.1
Internal Design and Materials		2.0
Challenging Site Conditions		1.5

	INITIAL (2019)	FINAL (2023)
Construction Cost Inflationary Pressures		3.7
	\$	11.7
SUSTAINABILITY ENHANCEMENTS		
Dedicated Outdoor Air System (DOAS)		1.5
Solar Panels		1.4
EV Charging Equipment and Electrical Work		1.9
	\$	4.8
FURNITURE AND EQUIPMENT		
Computer Equipment		1.0
Office Furniture		2.8
	\$	3.8
MISCELLANEOUS		
Performance Bond		0.3
Security During Construction		0.1
	\$	0.4
TOTAL PROJECT COST	\$	123.8

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b) The variance explanations below align with the information in the table above.

- **BORROWING COSTS, TAXES AND FEES (\$8.5M)**

- **Borrowing Costs:** Alectra applied the actual weighted average cost of capital of 3.65% to the land and building until final occupancy in December 2023, which was higher than the original forecasted interest rate of 2% to the end of 2022.
- **Taxes and Fees:** Land transfer tax, service costs, property taxes (capitalized during construction) and miscellaneous legal fees were not included in the original estimate.

- **INCREMENTAL OPERATIONAL REQUIREMENTS (\$5.8M)**

- **Cash in Lieu of Parklands** – Payment of cash in lieu of the value of the lands otherwise required to be dedicated as parklands under section 3 of the City of Brampton By-law 283-2013.
- **Watercourse & Retaining Wall:** Relocating the watercourse from the middle of the property to the east side of the property to maximize the land use and

- 1 building a significant retaining wall to comply with Toronto Regional
2 Conservation Authority “TRCA” requirements.
- 3 ○ **Public Road Works:** Building a median along Kennedy Road and making
4 changes to the street lighting as required by the Region of Peel. The
5 requirements were identified in the permitting process and had to be fulfilled
6 to obtain Site Plan approval.
- 7 ○ **Scope Additions due to City Brampton By-Laws, Region of Peel**
8 **Requirements and Engineering/Design Changes:**
- 9 ▪ Watermain service changes as per City of Brampton/Region of Peel
10 direction through the review process.
- 11 ▪ Zoning By-Law exception to increase the height of the fence and
12 incorporate the use of barb wire for security protection.
- 13 ▪ Addition of a staircase from main entrance to the second floor to comply
14 with the Ontario Fire Code.
- 15 ▪ Addition of approximately 29,000 square feet for Metering, protection
16 and control, and substation department shop/testing equipment, and
17 employee office space.
- 18 ▪ Addition of approximately 11,000 square feet for the interior garage and
19 warehouse space to meet parking and safe vehicle movement and
20 inventory levels. The original building design included a two-level roof
21 instead of a single level roof, which was ultimately I required for:
22 increased (vertical) racking capacity in the warehouse; increased ceiling
23 height to support hoist operations and maintenance and repairs of
24 heavy-duty vehicles; and increased air circulation in the garage for
25 vehicle exhaust handling.
- 26 ▪ Standalone PCB storage structure required by the Ministry of
27 Environment Regulations.
- 28 ▪ Additional service staircase to the roof to maintain roof, solar panels and
29 HVAC units.

- 1 ▪ Backup generator upgraded to support equipment and larger building
2 power requirements identified by the engineering firm after the final
3 building design and drawings.
- 4 ▪ Full height (rather than halfway) masonry walls between interior parking
5 garage and rest of the building to meet Ontario Fire Code and
6 Occupational Safety and Health Administration “OSHA” Standards.
- 7 ▪ Rebuild of duct banks that had collapsed due to age along the roadway
8 to support services
- 9 • **DETAILED DESIGN AND CONSTRUCTION COST CHANGES (\$11.7M)**
- 10 ○ **External design and material cost increases** – External design changes
11 and costs associated with the increase in overall building square footage to
12 meet operational requirements (as outlined above) and to obtain access to
13 local materials to mitigate project schedule and budget impacts due to
14 shortage of materials and supply chain cost pressures driven by the COVID-
15 19 Pandemic.
- 16 ○ **Electrical design and material cost increases** – Electrical and mechanical
17 system design changes and costs associated with the increase in overall
18 building square footage to meet operational requirements (as outlined above),
19 increased security systems and EV charging infrastructure (see below).
- 20 ○ **Internal Design and Materials** – Internal design and materials costs
21 associated with the increase in overall building square footage to meet
22 operational requirements (as outlined above), and adding a main staircase to
23 the second floor (see above).
- 24 ○ **Challenging Site Conditions** – Removal of saturated soil and replacement
25 with gravel and other materials due to wet weather conditions. Alectra also
26 had to remove and dispose of some previous building foundation and building
27 material that was below the surface and underground that was not known
28 when the land was purchased.
- 29 ○ **Construction Costs Inflationary Pressures** – Construction costs exceeded
30 the general assumptions in the preliminary estimate which was developed in
31 2019 based on high level scope. Between 2019 and 2023, using Statistics

1 Canada's Non-Residential Building Construction Price Index for the Toronto
2 Census Metropolitan Area, construction costs rose by roughly 40%.

3 • **SUSTAINABILITY ENHANCEMENTS (\$4.8M)**

4 ○ **Dedicated Outdoor Air System (DOAS)** – Installation of a dedicated outdoor
5 air system (DOAS) was added to condition all outdoor air brought into a
6 building for ventilation delivered to each occupied space, either directly or in
7 conjunction with local space or central (zoned) HVAC units. The DOAS is
8 estimated to have reduced energy costs (gas consumption) by approximately
9 \$20,000 annually.

10 ○ **Solar Panels** – Installation of 500kW AC (640 DC) PV Plant that would
11 generate approximately 800MWh/year of renewable energy, 80MWh is
12 estimated to be exported back to the grid through net-metering. The
13 renewable energy generated yields a 10% reduction in GHG emissions and
14 reduces energy costs annually by approximately \$115,000.

15 ○ **EV Charging Equipment and Electrical Work** – EV charging equipment was
16 purchased and installed as the existing infrastructure at Mavis and
17 Sandalwood could not be cost-effectively repurposed due its age, functional
18 limitations, and the cost of relocating this equipment.

19
20 • **FURNITURE AND EQUIPMENT (\$3.8M)**

21 ○ **Computer Equipment** – Some computer equipment had to be purchased as
22 the existing equipment at Mavis and Sandalwood was obsolete and no longer
23 supported by the vendors.

24 ○ **Office Furniture** – Some office furniture had to be purchased as not all the
25 existing Mavis and Sandalwood furniture could be reconfigured to
26 accommodate the needs at Kennedy Road or was no longer supported by the
27 manufacturers (i.e., replacement and configurable parts were no longer
28 available). Alectra was also able to use some surplus furniture from other sites
29 at Kennedy Road to reduce need for all new furniture.

- 1 • **MISCELLANEOUS (\$0.4M)**
- 2 ○ **Performance Bond** – Performance Bonds are established based on scope
- 3 and value of the project. It protects owners from financial loss if contractors’
- 4 default, ensuring confidence in project delivery.
- 5 ○ **Security During Construction** – Due to several break-ins and missing
- 6 materials, Alectra had to obtain additional security during the construction
- 7 phase.
- 8
- 9 c) Table 2 below captures the Kennedy Road Project Key Milestones Schedule.

10

11 **Table 2 – Kennedy Road Project Schedule**

Project Milestone	Original Date (2020)	Revised Date (2021)	Completion Date	> 90 Days Y/N	Reason
Site Plan Approval					
Site Plan Approval	January 2022	March 2022	October 2022	Y	Permits Approvals
Permits Approvals					
Shell Permit	June 2021	June 2021	August 2022	Y	Permits Approvals
Site Servicing Permit	September 2021	September 2021	November 2021	N	-
Conditional Foundation & U/G Plumbing Permit	October 2021	October 2021	December 2021	N	-
Conditional Superstructure Permit	October 2021	October 2021	March 2022	Y	Permits Approvals
Interiors Permit Submission	August 2021	October 2021	May 2022	Y	Permits Approvals
Full Building Permits	January 2022	March 2022	October 2022	Y	Permits Approvals
Construction					
Site Grading	August 2021	September 2021	September 2021	N	-
Foundations	September 2021	January 2022	January 2022	N	Challenging Weather & Site Conditions

Project Milestone	Original Date (2020)	Revised Date (2021)	Completion Date	> 90 Days Y/N	Reason
Steel & Deck	April 2022	May 2022	August 2022	N	Challenging Weather & Site Conditions
Building Enclosed	June 2022	October 2022	December 2022	Y	Challenging Weather & Site Conditions
Interior Concrete Pours	July 2022	October 2022	September 2022	Y	Challenging Weather & Site Conditions
Power On	September 2022	December 2022	January 2023	Y	COVID-19 Pandemic
Construction Completion	May 2023	July 2023	September 2023	Y	Challenging Weather & Site Conditions
Furnishing & Equipment	July 2023	August 2023	October 2023	Y	COVID-19 Pandemic
Turn Over Building to Alectra	August 2023	September 2023	November 2023	Y	Challenging Weather & Site Conditions Trades Labour Strike
Fully Operational	August 2023	September 2023	November 2023	Y	COVID-19 Pandemic
Occupancy	September 2023	October 2023	December 2023	Y	Challenging Weather Site Conditions Trades Labour Strike

1

2 The four main reasons that caused the project schedule delays are.

- 1 • **Permit Approvals** – Site Plan approval went through several revisions and took nine
2 (9) months longer than planned. This was in part due to number of revisions and
3 delayed responses by the City of Brampton planning group due to available staff
4 during the COVID-19 pandemic.
- 5 • **COVID-19 Pandemic** – The project lost over three months due to supply chain delays
6 for steel and other materials, provincial shutdown orders, and safety and social
7 distancing restriction imposed by authorities.
- 8 • **Trades Labour Strike** – The project lost over 3 weeks due to unionized trades
9 (electricians, etc.) going on strike.
- 10 • **Challenging Weather and Site Conditions** – Extreme rain experienced
11 intermittently over a period of two months impacted soil conditions, prevented
12 equipment from being used due to safety concerns and necessitated additional work
13 and materials (e.g. gravel and topsoil) to remediate challenging site conditions.
14
- 15 d) Regular updates on the project were provided to the executive leadership team and the
16 Board throughout the execution of the work; however, there are no formal project
17 variance reports. Please see the responses to questions (a) and (b) for a detailed
18 summary of the variances, and a copy of the project close out report is attached to part
19 f).
- 20
- 21 e) Refer to 2-AMPCO-45_Attach 1_Kennedy Road Change Request.pdf.
- 22
- 23 f) Refer to 2-AMPCO-45_Attach 2_Kennedy Road Project Final Closure Report - January
24 2024.pdf.

2-AMPCO-45

Attachment 1 Kennedy Road Change Request



CONFIDENTIAL

**REPORT TO THE
EXECUTIVE COMMITTEE**

Submitted by	James Macumber, Dan Pastoric, Joseph Almeida and Caroline Karvonen
Subject	Kennedy Road Renewable Systems - GHG reduction proposal(s)
Item #	4
Meeting Date	April 19, 2021

For Information For Approval

Recommendation

Approval of the proposed Energy Renewable and GHG reduction solutions.

Summary

(i) Kennedy Road Project Summary

At the February 16th, 2021 Executive Committee (EC) meeting, approval was received to build the new operations centre at 200 Kennedy Road to LEED Gold Design Standards (LEED Gold) and increase the budget by \$4M for the retaining wall requested by TRCA and to design changes required by City and Regional Bylaws.

In addition to building Kennedy Road to LEED Gold, the project team has been assessing possible renewable energy solutions to further reduce GHG's emissions and operating expenditures. As a result, the project team is recommending the EC approve the following proposals:

- **Dedicated Outdoor Air Systems (DOAS) – (Reduces Gas Consumption) – Capital \$1.5M**
- **A 500kW AC (640 DC) PV Plant - (Reduces Hydro Consumption) – Capital \$1.4M**

(ii) DOAS

Dedicated outdoor air system (DOAS) uses separate equipment to condition all outdoor air brought into a building for ventilation delivered to each occupied space, either directly or in conjunction with local space or central (zoned) HVAC units. The local or central HVAC units are used to maintain space temperature setpoint requirements.



The Kennedy Road two-storey office space is forecasted to contribute higher heating energy demand compared to the warehouse and fleet garage spaces. The DOAS, is an upgrade to both the ventilation and heating/cooling of the office area originally planned in LEED Gold. The analysis done by Ecovert Sustainability Consultants, indicates that the proposed DOAS would reduce 43% of the GHG emissions expected from the new building. They have also estimated that the DOAS would reduce energy cost (gas consumption) by approximately \$20,000 annually.

(iii) PV Plant – 500kW OAS

The 500kW AC (640 DC) PV Plant would generate ~800MWh/year of renewable energy of which 80MWh is estimated to be exported back to the grid (net-metering) credited at the marginal GHG emissions rate. Alectra would benefit from the GHG offsets generated from the renewable energy generation as well as fixed electricity pricing for 800MWh/yr. generated on-site. The renewable energy generated would result in a 10% reduction in GHG emissions when compared to the original LEED Gold. The Solar PV Solution will reduce the hydro consumption compared to the LEED Gold, reducing the annual energy costs by approximately \$115,000.

2-AMPCO-45

Attachment 2 Kennedy Road Project Closure Report January 2024

Project Name	Alectra Utilities Central Operations Consolidation Project
Description	Consolidation of the Mavis Road and Sandalwood Parkway Service Centres into Kennedy Road
Project Sponsor	Joseph Almeida, Director, Supply Chain Operations
Author(s)	Joseph Almeida, Project Lead
Date	January 30 th , 2024

PROJECT RESULTS

SCOPE	
July 19th, 2019, Proposal	Final
Design and construction of a consolidated operations centre of approximately 165,000 SF building on 20 acres of land with materials storage yard employee and Alectra fleet assets parking lots.	Final building size approximately 215,000 SF as result of internal parking garage & warehouse layout needs, and final building design changes to meet city and region by-laws requirements
Building to be comprised of interior fleet parking, warehouse, fleet shop, support functions and 2-storey office space.	Installation of Solar Plant Enhanced HVAC system Installation of EV Charging stations
Explanation of Variance:	
Increase in overall building size resulted from refinement of internal parking garage & warehouse layout and final building design to meet operational needs. Solar Plan and enhanced HVAC Systems to reduce utilities consumption and installation of EV Charging stations to support Alectra EV assets.	

SCHEDULE MILESTONES		
Key Milestones	Original (November 2020)	Actual
<ul style="list-style-type: none"> • Site Plan Approval • Permits Approvals • Commence Site Work • Commence Foundations • Substantial Completion • Occupancy 	<ul style="list-style-type: none"> • January 2021 to January 2022 • May 2021 to January 2022 • August 2021 • September 2021 • May 2023 • September 2023 	<ul style="list-style-type: none"> • May 2021 to October 2022 • August 2022 to October 2022 • September 2021 • January 2022 • November 2023 • December 2023

Explanation of Variance:

- COVID-19 Pandemic impacted Site Plan Approval process in part due to personnel changes at the City and Region
- Delays in Permits approvals due to Site Plan approval delay
- Steel delivery was delayed by 3 months due to COVID-19 Pandemic, impacting entire schedule until completed
- Trades strike in May 2022 resulted in 3-weeks delay in steel erection.
- Approximately 11 days lost due to high levels of rain turning the ground into mud pit.

PROJECT BUDGET

Original Estimate	Actual	
Land Purchase -\$43M	Land Purchase	\$ 53M
Building - \$45M	Building/Property/FF&E	<u>\$ 70.5M</u>
FF&E (furniture, IT equipment)- \$5M	Total	\$ 123.8M

Explanation of Variance

- Increase in overall building size due to interior parking garage. warehouse layout & building design to meet city and region by-laws requirements
- Addition of solar panels & enhanced HVAC system
- Additional costs due to site conditions, winter conditions, development of yards and property to meet city and region requirements
- Increase of material cost between 35% to 75% due to impact COVID-19 Pandemic had on supply chain
- Additional cost due to escalating construction costs between original budget year of 2019 and time of tendering in 2021/2022. Increase of 24.5% as per StatsCan

PROJECT SUCCESSES

- Decision to order required steel at start of COVID Pandemic – still impacted schedule by three months, however it could have been over 12 months – secured price before major increases
- Selection of strong & smaller trades and service providers
- Small, qualified core project team
- City and Region support with regulations and bylaws
- Project team and working group's structure and commitment
- Response on changes, challenges review and decision making
- Communication and transparency
- Project Executive Committee support

PROJECT CHALLENGES

- Discrepancies on consultant and designers' drawings & specifications
- Changes in scope
- Access to materials (COVID-19) & labour (strike)

- Very short schedule for scope of project – COVID-19 Pandemic impact
- Site Plan and Permit approvals
 - Site and weather conditions
 - Changing the building location within the land and design to meet City and Region requirements
 - Relocating swale within the property to meet TRCA requirements – impact to budget and schedule

RECOMMENDATIONS FOR IMPROVEMENT

- More advanced drawings and specifications for tendering of material and services
- Less aggressive project schedule

TRANSITION TO OPERATIONS

- No impact to day-to-day operations. Bringing two service operations and staff together with very different cultures and practices was dealt with ongoing employee communications, engagement and transparency. With a centralized service centre, Alectra is a better position to support the City of Mississauga and Brampton customers.

1 **RESPONSE:**

2

3 a) Vehicles Maintenance and Repairs Work Orders are captured within Alectra Fleet
4 Management Systems with Holman. The “Fleet Availability” metric is based on reporting
5 from the system listing vehicles that are unavailable. When a vehicle is out for service, or
6 in repair, Alectra Utilities updates the system to reflect that the vehicle is not available for
7 use. Alectra Utilities calculates the average vehicle downtime utilizing this data tracked
8 through Vehicles Maintenance & Repairs Work Orders.

9

10 b) The table below captures fleet assets monthly average downtime number of days for
11 the years 2022 to 2025.

12

13 **Table 1 – Fleet Assets Monthly Average Downtime Years 2022 to 2025**

Year	2022	2023	2024	2025
Average Monthly Downtime	3.3	3.6	3.5	4.9

14 Note: Data for 2020 and 2021 is not available for comparison to 2022 to 2025.

15

16 c) Based on the Fleet replacement plan, Alectra Utilities is forecasting the downtime to
17 decrease over time. Alectra Utilities is forecasting to complete vehicle maintenance and
18 repairs within three days by the end of 2031 which would result in fleet assets being
19 available 90% of the time. The Availability target of 90% has been calculated by taking
20 total days out of service (downtime) divided by 365 days. The target was set based on
21 Alectra Utilities’ replacement plan.

1 d) Alectra Utilities used projections of FTE increases in the Lines and Stations/Protection &
 2 Control divisions (see Exhibit 4, Tab 3, Schedule 3 – Table 4-3-2, Overhead Inspections
 3 & Maintenance and Stations programs) with historical average crew size to determine
 4 forecast crew additions. This information was used along with typical vehicle allocation
 5 by crew type (overhead lines, underground lines, P&C) to determine vehicle needs over
 6 the forecast period. Existing fleet capacity, purchasing lead time and investment pacing
 7 options were also considered when forecasting the vehicle additions by year.

8
 9 Alectra Utilities is forecasting FTE growth of those combined programs to be 120.6 FTE
 10 from 2025-2031 (see Exhibit 4, Tab 3, Schedule 3 – Table 4-3-2), which requires vehicle
 11 growth over the same period of 74 units. The lesser number of vehicles than FTEs in the
 12 relevant programs assumes that some vehicle types are used only for specific tasks, and
 13 that some vehicle types allow for multiple occupancy. As per Exhibit 2, Tab 1, Schedule
 14 1, Appendix B08, Table B08-9, Alectra Utilities has a fleet of 462 units (excluding trailers,
 15 equipment and SUVs) which is a ratio of 1.1 units to FTE when comparing to the
 16 combined FTE count of 421.6 in the relevant programs. With the forecast growth in the
 17 same vehicle types, Alectra Utilities forecasts to have 536 units of the same types
 18 (excluding trailers, equipment and SUV's) in 2031, to serve the needs of 534 FTE in the
 19 aforementioned programs in the same year.

20
 21 e) Table below captures that three additional fleet assets between 2020 and 2025 were
 22 purchased to support Operations. From 2019-2025 Alectra Utilities reduced Fleet assets
 23 by 64.

24

25 **Table 2 – Fleet Assets between 2020 and 2025**

Vehicle Types	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Double Bucket	0	0	0	0	0	0	0	5	6	2	1	0	14
Single Bucket	0	0	1	0	0	0	0	5	6	2	1	0	15
Radial Boom Derrick (RBD)	0	0	0	0	0	0	0	4	1	2	1	0	8
Medium & Heavy Duty Van	0	0	0	0	0	0	0	2	1	2	1	0	6
Light Duty Van	0	0	0	0	0	0	2	3	3	0	0	0	8
Pickup	0	2	0	0	0	0	0	6	7	6	5	0	26
Total	0	2	1	0	0	0	2	25	24	14	9	0	74

26

1 f) Please see the modified Table B08-4 below, including 2025 actuals. The need for
 2 additional Medium & Heavy Duty Vans, SUV and a Trailer to support operations, Alectra
 3 Utilities deferred the replacement of several planned vehicle replacements.

4
 5 **Table 3 – Modified B08-4 including 2025**

Vehicle Types	2025	2025 Actuals	2026	2027	2028	2029	2030	2031	Total
Double Bucket	2	2	0	2	1	3	5	2	0
Single Bucket	5	5	3	5	3	6	9	8	0
Radial Boom Derrick (RBD)	2	2	5	4	6	4	2	1	0
Dump-Flatbed Truck	2	2	3	2	0	1	1	2	0
Medium & Heavy Duty Van	5	11	2	6	6	2	0	1	6
Light Duty Van	17	12	8	10	21	6	1	11	-5
Pickup	26	19	31	31	33	17	22	26	-7
SUV	2	4	23	19	0	4	5	13	2
Trailer	1	2	14	2	8	2	5	23	1
Total	62	59	89	81	78	45	50	87	-3

6
 7
 8 g) In 2024, Holman (ARI) conducted a Fleet Assets Health Assessment that included
 9 condition assessments on Alectra Utilities' fleet assets based on age, milage and
 10 condition to better understand the vehicles replacement backlog to develop the 2026 to
 11 2031 replacement plan. The work product prepared by Holman (ARI) consisted of
 12 hundreds of detailed assessments of individual fleet assets providing condition and
 13 demographic information of each, along with multiple photos and videos of each asset.
 14 The assessments were hosted on an online portal operated by Holman (ARI); Alectra
 15 Utilities did not receive a singular report or other document setting out the assessments.

16 h) The 2025 final cost was \$12.98 million.

17
 18 i) Alectra Utilities does not track vehicle failures as we do not allow our vehicles to run to
 19 failure. Alectra Utilities replaces its vehicles based on replacement criteria, condition and
 20 financial plan. When a vehicle reaches the end of its useful life, the fleet department
 21 analyzes utilization information, asset condition and maintenance/repair records to
 22 validate if the asset should be replaced or if a different type of asset or vehicle is required
 23 to meet operational requirements. This screening occurs annually and prior to ordering
 24 new vehicles. When a vehicle is assessed, Alectra Utilities considers whether the actual
 25 vehicle can be reassigned, disposed rather than replaced, based on usage or operational
 26 effectiveness.

1 Table below captures number of fleet assets replaced between 2019 and 2025.
 2

Table 4 – Fleet Assets Replaced between 2019 and 2025

Alectra Utilities Fleet Assets Replacements Between 2019 and 2025								
Fleet Asset Type	2019	2020	2021	2022	2023	2024	2025	Total
Double Bucket	3	2	3	0	2	1	3	14
Single Bucket	4	3	5	6	2	0	5	25
Radial Boom Derrick	0	1	1	2	0	3	1	8
Dump-Flatbed Truck	0	2	1	0	1	3	2	9
Medium & Heavy Duty Van	3	4	2	1	2	0	7	19
Light Duty Van	2	19	0	2	9	12	12	56
Pickup	11	23	1	8	12	31	19	105
SUV	7	17	5	1	4	8	4	46
Trailer	9	0	1	4	9	10	5	38
Yearly Total	39	71	19	24	41	68	58	320

1 as captured within Alectra Utilities’ Productivity Framework for the 2022–2031 period. In
2 addition, the savings presented reflect activities and investments undertaken prior to the
3 rebasing period and represent sustained savings that continue through the 2027–2031
4 plan years. The identified savings comprise a combination of cost reductions, avoided
5 costs, and efficiency improvements.

6
7

Table 1 – IT Investment savings on Framework Initiatives 2022-2031(\$MM)

Framework Initiatives	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
	Actual	Actual	Actual	Actual	Forecast	Plan Sustained				
Capital Financial Benefit										
C55 Alectra: Optimization of Business Practices	-	-	-	-	0.2	0.2	0.2	0.2	0.2	0.2
Human Capital Management(HCM) System	-	-	0.7	0.0	0.0	-	-	-	-	-
Work Force Management / Mobile Dispatch	-	-	-	-	-	-	-	-	-	-
Total Capital Financial	-	-	0.7	0.0	0.2	0.2	0.2	0.2	0.2	0.2
OM&A Financial Benefit										
Business Intelligence and Analytics	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Human Capital Management(HCM) System	-	-	0.1	1.0	1.7	1.8	1.9	1.9	1.9	2.0
Meter-to- Cash Annual Licenses Growth on Meter-to-	-	0.8	1.6	0.8	0.4	0.6	0.8	1.0	1.2	1.4
Business Optimization - ServiceNow Expansion	0.8	1.5	2.1	3.5	2.2	0.0	0.0	0.0	0.0	0.0
C55 Alectra: Optimization of Business Practices	-	-	0.1	0.1	0.3	0.3	0.4	0.4	0.4	0.4
Work Force Management / Mobile Dispatch	-	-	-	-	0.5	0.5	0.5	0.5	0.5	0.6
ERP Continuous	0.5	1.4	2.0	2.8	4.0	4.1	4.2	4.3	4.4	4.5
Meter-to-Cash CIS CC&B Enhancements	-	0.0	0.3	0.7	0.8	0.8	0.8	0.8	0.8	0.9
Total OM&A Financial	1.3	3.9	6.1	8.9	10.0	8.2	8.6	9.0	9.3	9.7
TOTAL FINANCIAL BENEFIT FRAMEWORK	1.3	3.9	6.8	8.9	10.2	8.5	8.8	9.2	9.6	9.9

8

2-AMPCO-47

Attachment 1 ERP Continuous Improvement



Material Investments Report

Project Code

150469

Project Name

ERP Continuous Improvement

Project Description

Alectra Utilities' ERP system is a critical operational backbone, supporting finance, supply chain, asset management, and workforce operations. This investment over seven years ensures the ERP remains functional, efficient, and interoperable as it approaches planned replacement in 2032/2033.

The strategy drives business efficiencies, streamlines workflows, and maintains system stability, with funding structured to align with evolving needs. This phased approach ensures continued enhancements while gradually reducing investment as the ERP lifecycle winds down. Enhancements address inefficiencies, reduce manual work, improve interoperability, and optimize automation, preparing for a seamless ERP transition.

Key focus areas include:

Workflow Optimization: Streamlining processes, improving automation, and ensuring seamless data flow.

System Interoperability: Maintaining integration with key systems like HRIS (HCM Project) and Field Worker Management (WFM Project).
Security & Compliance: Addressing vulnerabilities, ensuring regulatory compliance, and minimizing risk exposure.

Transition Readiness: 2029–2031 focuses on stabilization, ensuring data integrity and operational continuity ahead of ERP replacement. Each enhancement undergoes a rigorous value assessment and time study, prioritizing initiatives with the highest impact. This calculated, low-risk investment ensures ERP efficiency while setting the stage for Alectra's future ERP platform, reinforcing operational excellence and digital transformation.

Investment Category General Plant

02. Additional Information	Branch Plant	10 Alectra
	Units	
	Does this Project include R&D?	No
	Will this Project generate ongoing IT OM&A Costs?	No
03. Project Management Office Information	Is this a Technology Project or does it have a Technology Component?	Yes
04. General Project Information (OEB)	DSP Investment Theme	Renewing and Replacing Infrastructure
	Alectra Grouping	Information Technology Systems
	Alectra Subcategory	IT Software
	Contributed Capital Expenditure Type	Contributed Capital 0% Controllable



Material Investments Report

Project Code

150469

Project Name

ERP Continuous Improvement

<p>05. Evaluation Criteria (OEB)</p>	<p>Urgency and Reasons for Urgency</p>	<p>The urgency for enhancing Alectra’s ERP system stems from the need to sustain operational efficiency and business continuity while preparing for an ERP transition in 2032/2033. The enhancements planned under this initiative are critical for ensuring the ERP system remains functional, efficient, and adaptable throughout its remaining lifecycle.</p> <p>As Alectra’s business processes evolve, ERP enhancements are essential for optimizing system interoperability, reducing manual work, and improving data accuracy. The system must continue supporting core operational needs, including finance, supply chain, and workforce management, ensuring seamless integration with external systems like HRIS (HCM Project) and Field Worker Management (WFM Project).</p> <p>The planned enhancements will ensure system reliability and usability until the ERP replacement in 2032/2033, preventing disruptions in critical business functions. Streamlining key processes and automation will reduce manual inefficiencies, improve reporting accuracy, and enhance decision-making during this transition period.</p> <p>As regulations and business needs evolve, the ERP system must remain capable of supporting compliance, security, and risk management requirements. The budget and enhancements are structured to reduce investment over time, aligning with the ERP replacement roadmap while ensuring continued support for key business processes.</p> <p>This time-sensitive investment is crucial to maintaining ERP system stability during its final years while positioning Alectra for a seamless transition to a next-generation ERP platform. Without these planned enhancements, Alectra risks operational inefficiencies, increased manual work, and system degradation, which could significantly impact business performance leading up to the ERP replacement.</p>
	<p>Customer Attachment / Load (KVA)</p>	<p>Not Applicable</p>
	<p>Safety</p>	<p>Not Applicable</p>
	<p>Cyber-Security, Privacy</p>	<p>Not Applicable</p>
	<p>Coordination, Interoperability</p>	<p>The planned enhancements ensure continued interoperability between Alectra’s ERP system and key enterprise applications during its remaining lifecycle, preventing system silos and maintaining seamless business operations. As the ERP transitions toward end-of-life in 2032/2033, these investments will sustain integration capabilities, allowing the system to support evolving business needs without disrupting critical workflows.</p> <p>This initiative also strengthens data consistency, automation, and reporting accuracy, ensuring that the ERP remains aligned with Alectra’s broader IT ecosystem, including systems like HRIS (HCM Project) and Field Worker Management (WFM Project). By maintaining these connections, the ERP system continues to act as a centralized hub for enterprise-wide data, reducing manual processes and improving decision-making efficiency.</p> <p>The enhancements also ensure that as regulatory and compliance requirements evolve, the ERP remains fully functional, supporting Alectra’s long-term strategic goals while enabling a smooth transition to the future ERP platform.</p>
	<p>Economic Development</p>	<p>Not Applicable</p>
	<p>Environmental Benefits</p>	<p>Not Applicable</p>



Material Investments Report

Project Code

150469

Project Name

ERP Continuous Improvement

06. Qualitative and Quantitative Analysis of Project and Project Alternatives (OEB)	Status Quo	<p>Maintaining the ERP system without pursuing enhancements compromises Alectra Utilities' ability to capitalize on operational improvements, leading to inefficiencies and missed opportunities for streamlining business processes. This approach not only diminishes system usability, affecting productivity and increasing staff dissatisfaction, but also poses a risk to compliance with future regulatory demands. Furthermore, the absence of enhancement initiatives impacts operating costs negatively, with an estimated operational expense impact of \$225,000 annually. Additionally, the potential loss of consulting and development resources familiar with Alectra's systems threatens future enhancement efficiency, as replacing these skilled resources would be challenging and costly.</p>
	Alternative #1	<p>Alternative #1 – Sustained ERP Optimization and Strategic Readiness</p> <p>This alternative proposes a \$15 million investment over 7 years dedicated to strengthening and evolving Alectra Utilities' ERP system as a foundational enterprise platform. The plan spans the period leading up to the ERP Replacement, ensuring consistent progress, operational resilience, and alignment with Alectra's long-term digital strategy.</p> <p>The investment will fund approximately 60 prioritized enhancements per year, selected through a structured value-based assessment framework to ensure alignment with corporate objectives and measurable business impact. These enhancements will focus on streamlining processes, reducing manual effort, improving data accuracy, and advancing system interoperability across Finance, Supply Chain, Work Management, and HCM functions.</p> <p>Governance will be managed through the ERP Steering Committee, which will oversee prioritization, progress, and outcomes, ensuring that investments directly support enterprise efficiency and business readiness. Enhancements will be categorized and sequenced for maximum benefit—ranging from automation and analytics improvements to integrations with emerging platforms such as HCM and Informatica for data management.</p> <p>This consistent funding model safeguards against the operational stagnation that can result from deferred investment. By maintaining steady improvement momentum, Alectra will minimize productivity risks, ensure regulatory compliance, and reduce long-term total cost of ownership.</p> <p>From 2025 through the eventual transition to a new ERP platform, this approach will:</p> <ul style="list-style-type: none"> Maintain ERP system stability and adaptability to evolving business needs. Enhance cross-functional collaboration and data flow. Support continuous process optimization and innovation. Enable proactive readiness for the future ERP replacement in 2032/2033.
		<p>Through this sustained investment, Alectra positions itself to maximize the value of its current ERP environment while building a bridge to its next-generation ERP platform. The result is a stronger, more agile enterprise backbone—one that underpins operational excellence, empowers decision-making, and reinforces Alectra's leadership in the evolving energy sector.</p>



Material Investments Report

Project Code

150469

Project Name

ERP Continuous Improvement

Alternative #2	<p>Alternative #2 – Targeted ERP Sustainment and Transition Readiness</p> <p>This alternative proposes a fixed \$1.5 million annual investment in Alectra Utilities’ ERP system, focusing on maintaining essential functionality, operational stability, and strategic alignment while gradually scaling down in preparation for the ERP replacement planned for 2032/2033.</p> <p>Representing a moderate reduction from the full optimization model, this approach emphasizes sustaining critical processes and ensuring a reliable foundation for business operations. The plan funds approximately 45 high-value enhancements per year, prioritized through established value models to ensure that limited investment continues to deliver measurable business benefit.</p> <p>Enhancements will concentrate on maintaining system performance, addressing compliance requirements, and supporting integrations with key enterprise platforms such as HCM, Supply Chain, and Finance. The emphasis will shift from broad expansion to stabilization and transition planning, with a structured ramp-down period between 2029 and 2031 to align with the future ERP implementation timeline.</p> <p>Governance through the ERP Steering Committee will ensure each enhancement directly supports operational resilience and transition readiness. While the reduced investment may modestly slow innovation and process optimization, it preserves the system’s integrity and ensures business continuity during the transition period.</p> <p>From 2025 onward, this approach will:</p> <ul style="list-style-type: none">Sustain core ERP functions and integrations across business units.Maintain compliance and minimize operational risk through essential updates.Focus resources on stabilization and readiness activities for the future ERP platform.Balance financial responsibility with the need to keep the current system secure and dependable.
	<p>By adopting this measured investment strategy, Alectra ensures continuity, stability, and disciplined progression toward the next-generation ERP environment—safeguarding productivity and maintaining confidence in enterprise operations while managing costs responsibly.</p>



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Project Code

150469

Project Name

ERP Continuous Improvement

	<p>Alternative #3</p>	<p>Alternative #3 – Dramatic Reduction</p> <p>This alternative proposes a total investment of \$11 million over seven years to enhance Alectra Utilities' ERP system, ensuring continuous improvement, operational efficiency, and long-term readiness for the planned ERP replacement in 2032/2033.</p> <p>The plan will deliver strategic, value-driven enhancements each year, prioritized through a rigorous assessment model to maximize business impact. All initiatives will be governed by the ERP Steering Committee, maintaining alignment with Alectra's enterprise objectives and reinforcing the ERP as a critical, adaptive backbone for operations.</p> <p>Enhancements will target process efficiency, productivity gains, and improved system interoperability across Finance, Supply Chain, and HCM functions. This structured approach ensures the ERP remains agile, secure, and capable of supporting evolving business and regulatory needs while aligning with Alectra's long-term ERP Strategy.</p> <p>The final investment phase (2029–2031) will focus on stabilization, knowledge transfer, and transition readiness, ensuring a seamless shift to the future ERP platform. The gradual ramp-down of funding mitigates disruption while sustaining operational performance.</p> <p>From 2025 onward, this investment strategy will:</p> <ul style="list-style-type: none"> Deliver measurable business value through continuous system optimization. Strengthen data integrity, automation, and cross-functional integration. Maintain compliance and reduce operational risk through proactive enhancements. Prepare the organization for a smooth transition to the new ERP environment. <p>By maintaining this disciplined, forward-looking investment model, Alectra safeguards business continuity and positions itself to maximize current ERP value while building a resilient, future-ready enterprise foundation—reinforcing operational excellence and innovation leadership in the energy sector.</p>
	<p>Alternative #4</p>	<p>n/a</p>
	<p>Justification for Recommended Alternative</p>	<p>We recommend adopting Alternative #1, a structured \$15 million investment over seven years into Alectra Utilities' ERP system enhancements, ensuring continuous operational efficiency while preparing for the ERP replacement in 2032/2033. This approach balances necessary system improvements with financial prudence, maintaining ERP stability and interoperability while gradually transitioning toward the next-generation system.</p> <p>Enhancements will focus on streamlining processes, reducing manual inefficiencies, and improving system integration, with prioritization based on business value and impact. The investment is structured to gradually ramp down (2029–2031) as the ERP approaches its end-of-life, ensuring a smooth transition with minimal disruption.</p> <p>Why Alternative #1 is the Best Path Forward</p> <ul style="list-style-type: none"> Sustains ERP Efficiency: Strategic enhancements keep the system functional and adaptable, supporting business needs without excessive spending. Prepares for ERP Replacement: Gradual investment reduction aligns with the planned transition, minimizing unnecessary costs while ensuring system readiness. Reduces Operational Risks: Enhancements address critical system gaps, preventing inefficiencies and mitigating potential disruptions. Supports Regulatory & Compliance Needs: Maintains system security, compliance, and reporting integrity as business requirements evolve. <p>Unlike previous budget-constrained alternatives, Alternative #1 provides a sustainable investment strategy, ensuring Alectra can effectively maintain and optimize its ERP system while preparing for the future replacement. This approach safeguards business continuity, operational excellence, and long-term efficiency, reinforcing Alectra's leadership in technology-driven innovation and energy sector advancements.</p>



Material Investments Report

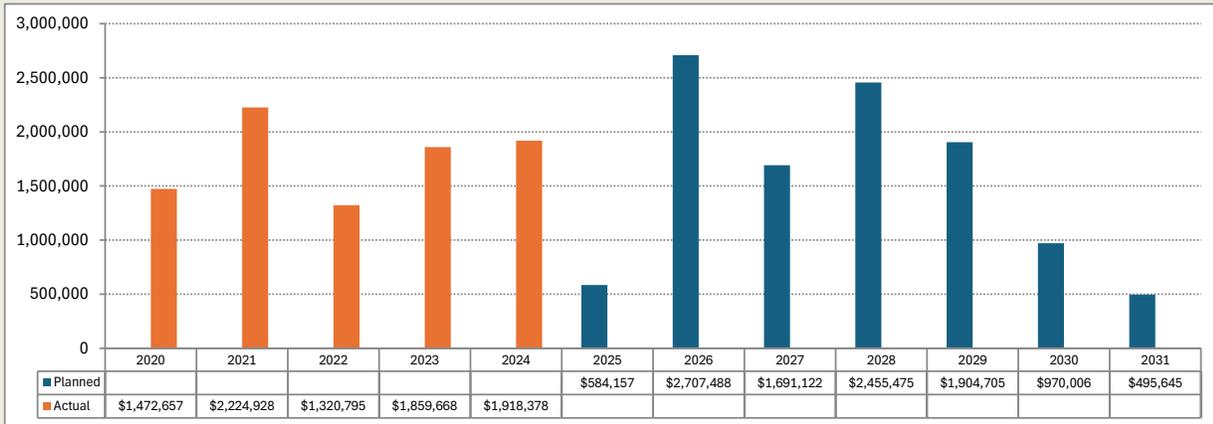
Project Code

150469

Project Name

ERP Continuous Improvement

07. General Information on the Project/Activity (OEB)	Risks to Completion and Risk Management	Not Applicable
	Comparative Information on Equivalent Historical Projects (if any)	Historically the business desire for these enhancements outpace the ability to meet their requests. By fully funding these enhancements we will be better suited to meet the requests of the business.
	Total Capital and OM&A Costs for Renewable Energy Generation portion of Projects (0 if not applicable)	0



2-AMPCO-47

**Attachment 2
ERP System Upgrades**



Material Investments Report

Project Code

152996

Project Name

ERP System Upgrades

Project Description

Alectra relies on the JD Edwards Enterprise Resource Planning (ERP) system, along with its ancillary systems (Transform AP, Transform, DSI, Hubble), to support critical business operations across finance, supply chain, asset management, and workforce management. As technology evolves, maintaining system currency, compliance, and security is essential to ensure operational efficiency, system reliability, and long-term sustainability.

Regular upgrades are a necessary aspect of software lifecycle management, ensuring that business operations remain supported by the most secure, efficient, and up-to-date technology. Keeping the ERP system current is critical for vendor compliance, leveraging new features and functionalities, and maintaining system security by addressing vulnerabilities through timely patches.

Key Benefits of Regular Upgrades:

Ensures System Stability & Compliance: Keeps JD Edwards and ancillary systems current with vendor-supported releases, reducing risks related to security and regulatory compliance.

Enhances Business Process Efficiency: Improves automation, reporting accuracy, and system performance, reducing manual efforts and increasing operational effectiveness.

Strengthens Cybersecurity & Risk Management: Timely updates protect against emerging security threats, ensuring system integrity and data protection.

Optimizes System Performance: Regular updates enhance processing speed, system functionality, and integration capabilities, improving overall user experience.

Alectra continues to refine its upgrade processes to improve efficiency and manage costs, with automation efforts focused on streamlining execution and reducing downtime. These investments ensure that the ERP system remains functional, secure, and aligned with evolving business and regulatory needs, supporting Alectra's long-term strategic goals.

Investment Category

General Plant

02. Additional Information	Branch Plant	10 Alectra
	Units	
	Does this Project include R&D?	No
	Will this Project generate ongoing IT OM&A Costs?	No
03. Project Management Office Information	Is this a Technology Project or does it have a Technology Component?	Yes
04. General Project Information (OEB)	DSP Investment Theme	Renewing and Replacing Infrastructure
	Alectra Grouping	Information Technology Systems
	Alectra Subcategory	IT Software
	Contributed Capital	Contributed Capital 0%
	Expenditure Type	Controllable



Material Investments Report

Project Code

152996

Project Name

ERP System Upgrades

<p>05. Evaluation Criteria (OEB)</p>	<p>Urgency and Reasons for Urgency</p>	<p>Regular upgrades to JD Edwards and its ancillary systems (Transform AP, Transform, DSI, Hubble) are essential to maintaining system stability, compliance, and business continuity as Alectra prepares for ERP replacement in 2032/2033. While an annual upgrade cycle provides the most frequent system improvements, a biennial upgrade approach offers a balanced, cost-effective alternative that maintains system currency while minimizing operational disruption.</p> <p>Key Drivers for Urgency:</p> <p>Maintaining System Currency & Compliance: Regular updates ensure JD Edwards remains on a vendor-supported release, reducing security risks and ensuring regulatory compliance in financial reporting and operational processes.</p> <p>Sustaining Business Efficiency: Upgrades enhance automation, reporting accuracy, and system performance, ensuring finance, supply chain, and operational teams have the tools they need to remain efficient.</p> <p>Reducing Technical Debt: A biennial schedule ensures upgrades remain manageable while avoiding large, disruptive, and expensive catch-up projects as the system nears replacement.</p> <p>Ensuring a Smooth Transition: By keeping JD Edwards stable and modernized through 2031, this approach prepares the system for an easier migration to the new ERP in 2032/2033.</p> <p>Minimizing Disruption: A biennial upgrade cycle provides a structured approach, limiting the impact of upgrades on business operations while ensuring continued system enhancements and risk mitigation.</p> <p>While annual upgrades remain an option, the biennial cycle is a strategic, lower-risk approach that ensures ERP functionality and security without overburdening internal resources. This method balances system modernization with operational stability, supporting Alectra's long-term ERP transition goals.</p>
	<p>Customer Attachment / Load (KVA)</p>	<p>not applicable</p>
	<p>Safety</p>	<p>not applicable</p>
	<p>Cyber-Security, Privacy</p>	<p>This upgrade will address critical cybersecurity needs by ensuring the system is updated with the latest security patches, enhancements, and protocols. Regular updates help mitigate emerging threats, ensuring data protection and compliance with industry standards. The biennial upgrade approach will maintain a proactive stance on cybersecurity, reducing vulnerabilities and safeguarding Alectra's operational and customer data.</p>
	<p>Coordination, Interoperability</p>	<p>not applicable</p>
	<p>Economic Development</p>	<p>not applicable</p>
	<p>Environmental Benefits</p>	<p>not applicable</p>
<p>06. Qualitative and Quantitative Analysis of Project and Project Alternatives (OEB)</p>	<p>Status Quo</p>	<p>Choosing to "do nothing" and skip annual upgrades to our core ERP system, including JD Edwards and its ancillary systems, means we would continue operating with our current capabilities but miss out on specific enhancements and efficiencies that these upgrades could offer. For example, without these upgrades, we would not benefit from the latest advancements in data analytics, which could streamline our supply chain management by predicting demand more accurately and optimizing inventory levels, leading to cost savings.</p> <p>Moreover, newer versions of ERP software often come with improved user interfaces and mobile accessibility, enhancing the ease of use for our staff and potentially increasing productivity. Without these updates, our employees would continue to navigate the existing system, which may not be as user-friendly or efficient, potentially leading to longer task completion times and reduced job satisfaction.</p> <p>In terms of cybersecurity, each upgrade usually strengthens system defenses against new threats. By not upgrading, we're not availing ourselves of these enhancements, potentially leaving our system more vulnerable to security breaches, which could have significant reputational and financial consequences.</p> <p>In essence, the choice to "do nothing" means continuing with the status quo, which might be perceived as sufficient for now but could result in missed opportunities for improvement and growth in these specific areas.</p>



Material Investments Report

Project Code

152996

Project Name

ERP System Upgrades

<p>Alternative #1</p>	<p>Alternative #1:</p> <p>This alternative proposes annual upgrades to JD Edwards and its ancillary systems from 2025 through 2031, ensuring the system remains modern, secure, and fully optimized until the planned ERP replacement in 2032.</p> <p>Upgrading every year provides Alectra with the most up-to-date technology, improved security, and enhanced system functionality, minimizing technical debt and ensuring seamless integration with other business-critical applications.</p> <p>Key Benefits of Annual Upgrades:</p> <p>Continuous Modernization: Ensures Alectra remains on the latest JD Edwards release, benefiting from frequent software enhancements and technology improvements.</p> <p>Enhanced Security & Compliance: Regular updates mitigate cybersecurity risks and ensure alignment with regulatory requirements.</p> <p>Optimized System Performance: Annual upgrades improve data analytics, automation, and workflow efficiencies, enhancing productivity.</p> <p>Consistent User Experience: Keeping interfaces, mobile accessibility, and integrations updated reduces disruptions and boosts user adoption.</p> <p>Smoother ERP Transition in 2032: Staying current minimizes compatibility challenges, allowing for a seamless migration to the new ERP system.</p> <p>While annual upgrades require ongoing resource allocation, they reduce the risk of large, disruptive implementations and ensure that Alectra can leverage the latest innovations. This approach aligns with the ERP Replacement Strategy, providing a proactive, future-ready upgrade path leading to the full system replacement in 2032.</p>
<p>Alternative #2</p>	<p>Alternative #2</p> <p>This project proposes a biennial upgrade cycle for JD Edwards and its ancillary systems from 2025 through 2031, ensuring system stability and modernization while minimizing operational disruptions. In 2034, the ERP will transition to a SaaS-based model, shifting from upgrade projects to ongoing operational costs for system maintenance and quarterly updates.</p> <p>A biennial upgrade schedule strikes a balance between modernization and financial efficiency, providing a structured approach that supports Alectra's long-term ERP transition strategy.</p> <p>This approach:</p> <p>Maintains Core System Stability: Ensures regular updates without excessive downtime or disruption.</p> <p>Optimizes Resource Allocation: Reduces strain on internal teams by avoiding annual upgrades, allowing more time for testing, training, and adoption.</p> <p>Enhances Security & Compliance: Keeps the system protected against cybersecurity threats and aligned with regulatory requirements.</p> <p>Supports Long-Term Transition: Final upgrade in 2031 ensures the system remains reliable until the ERP replacement in 2032/2033, with a seamless transition to SaaS-based operations in 2034.</p> <p>This strategy ensures JD Edwards remains current and secure while avoiding unnecessary cost escalations. It also provides the flexibility needed for future ERP replacement planning, aligning with Alectra's broader ERP Strategy.</p>
<p>Alternative #3</p>	<p>n/a</p>
<p>Alternative #4</p>	<p>n/a</p>

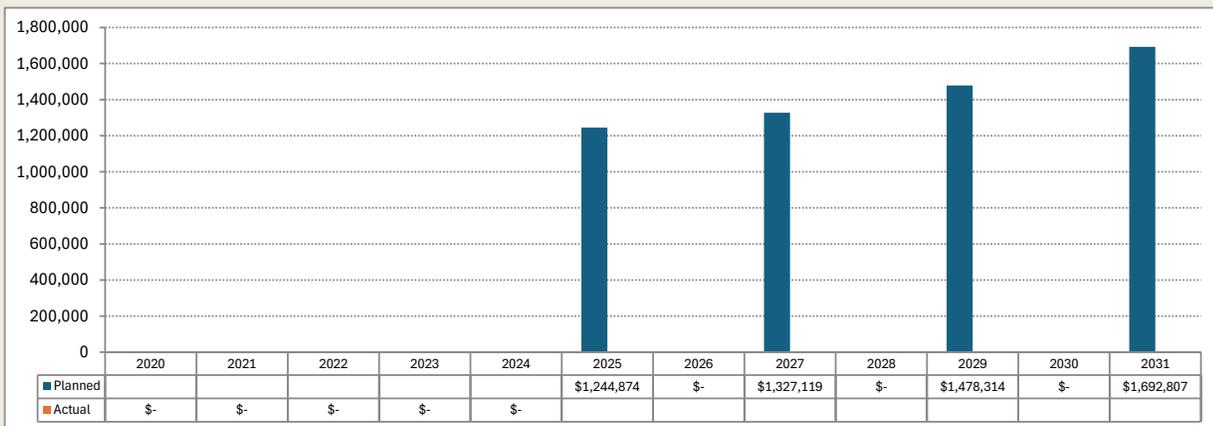


Material Investments Report

Project Code
Project Name

152996
ERP System Upgrades

	<p>Justification for Recommended Alternative</p>	<p>We recommend Alternative #1, an annual ERP upgrade cycle, as the optimal approach to maintaining system stability, security, and efficiency while balancing costs and operational impact. This strategy ensures Alectra's JD Edwards system remains current and supported while minimizing the risks and disruptions associated with less frequent upgrades.</p> <p>An annual upgrade schedule aligns with Alectra's ERP transition strategy, keeping the system modern and functional until the planned replacement in 2032/2033. It provides a structured, proactive approach to system modernization, avoiding the pitfalls of costly, large-scale catch-up projects while ensuring compliance, cybersecurity, and business continuity.</p> <p>By adopting this approach, Alectra maintains a future-ready ERP system that supports operational excellence, mitigates technical debt, and positions the organization for a seamless transition to the next-generation ERP platform.</p>
<p>07. General Information on the Project/Activity (OEB)</p>	<p>Risks to Completion and Risk Management</p>	<p>not applicable</p>
	<p>Comparative Information on Equivalent Historical Projects (if any)</p>	<p>not applicable</p>
	<p>Total Capital and OM&A Costs for Renewable Energy Generation portion of Projects (0 if not applicable)</p>	<p>0</p>



1 achieving operational efficiency through workflows (e.g., approvals, cost estimation); and
2 portfolio optimization of capital investments using established value frameworks and
3 constraints.

4
5 Future work will continue to align the optimization process with new requirements and
6 directives. As discussed in Ex4, Tab2, Sch 1, Pages 12-13, 22-23, Alectra Utilities plans
7 to meet the Non-Wire Solution (NWS) guideline requirements, including the use of the
8 Benefit-Cost Analysis (BCA) framework, and the Vulnerability Assessment and System
9 Hardening (VASH) by integrating these incremental requirements into its existing
10 business case development process in Copperleaf. Other investments in the platform
11 include technical integrations with other enterprise systems to improve operational
12 effectiveness and eliminate the need for duplicate system inputs by users.

13

14 d) Please refer to the response to 2-STAFF-51 for a detailed breakdown of costs and
15 schedule for Project 151136.

2-AMPCO-48

Attachment 1 Business Case 151136



Material Investments Report

Project Code

151136

Project Name

C55 Alectra: Optimization of Business Practices

Project Description

Since 2014, Alectra Utilities has adopted the Copperleaf C55 solution as the Asset Investment Planning & Management (AIPM) platform. The C55 platform has played a pivotal role in developing and optimizing Alectra Utilities' capital budget. It leverages a calibrated Value Framework to evaluate individual investments and optimize the value of investment portfolio. It has been integral to Alectra Utilities' Asset Management Process.

During the 2027-2031 DSP period, Alectra Utilities will continue to enhance its existing Copperleaf solutions to address mandated planning requirements, including those associated with OEB's recognized initiatives; for example, Vulnerability Assessment & System Hardening (VASH) and distribution system planning compliant with non-wires solutions (NWS) guidelines including formal Benefit-Cost Analysis (BCA). This will be achieved by integrating these incremental requirements into the existing business case development process in Copperleaf. Other investments in the platform include technical integrations with other enterprise systems to improve operational effectiveness and eliminate the need for duplicate system inputs by users.

1. Alectra Capital Planning enhancement - Aligning system with the OEB mandated planning requirements
2. Workflow Enhancements
3. Report Enhancements
5. Value Framework Review and Calibration (if needed).

Investment Category General Plant

02. Additional Information	Branch Plant	10 Alectra
	Units	1
	Does this Project include R&D?	No
	Will this Project generate ongoing IT OM&A Costs?	Yes
03. Project Management Office Information	Is this a Technology Project or does it have a Technology Component?	No
04. General Project Information (OEB)	DSP Investment Theme	Renewing and Replacing Infrastructure
	Alectra Grouping	Information Technology Systems
	Alectra Subcategory	IT Software
	Contributed Capital Expenditure Type	Contributed Capital 0% Controllable
05. Evaluation Criteria (OEB)	Urgency and Reasons for Urgency	There is a need to have aligned processes across the organization and a common methodology of evaluating investments. The timing of this investment is aligned with the need for regulatory filing.
	Customer Attachment / Load (KVA)	Not Applicable
	Safety	Not Applicable
	Cyber-Security, Privacy	Not Applicable
	Coordination, Interoperability	Not Applicable
	Economic Development	Not Applicable
06. Qualitative and Quantitative Analysis of Project and Project Alternatives (OEB)	Environmental Benefits	Not Applicable
	Status Quo	The Status Quo is to continue to use the C55 system at a high level for Optimization purposes only and continue to use other processes which exist today to prepare monthly capital budgets and other reporting requirements such as the rate filing, financial reporting, prioritizing resources.



Material Investments Report

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151136

Project Name

C55 Alectra: Optimization of Business Practices

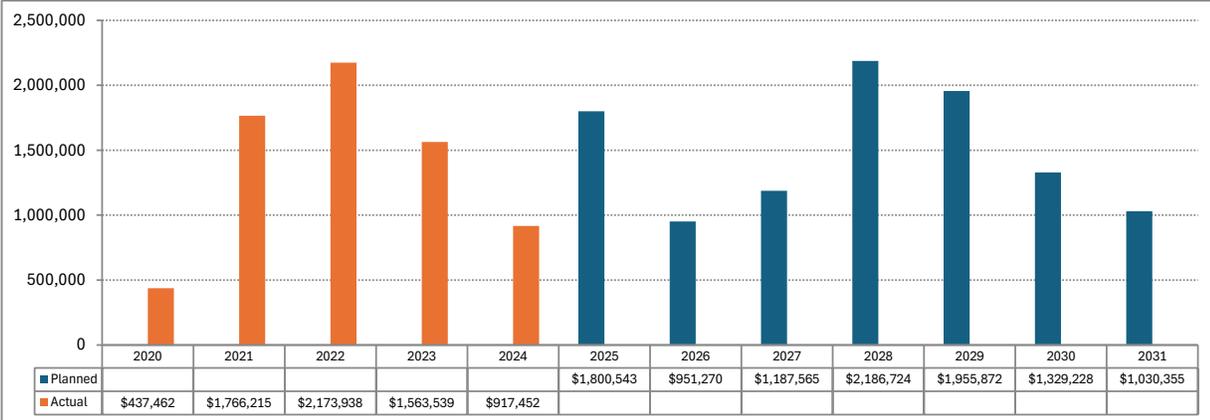
	Alternative #1	The Regular Pacing option will involve further enhancement of the C55 platform. Improvements include, but are not limited to, integration of multiple enterprise systems responsible for planning, scheduling, execution, and tracking of both capital and operating projects. Such integrations will facilitate seamless data transfer between systems, ensuring data accuracy and consistency, minimizing manual data entries, and enhancing overall portfolio management. It will involve consistent spending on resources and scope over the DSP period. The key advantage of this approach is the ease of financial planning and milestone reporting.
	Alternative #2	The Ramp-up option will result in lower expenditures between 2026 and 2027, with module implementation scheduled towards to end of the DSP period. A key advantage of this flexible spending approach is its alignment with the integration of other systems in the DSP, allowing capital funds to be allocated to other projects in the earlier years. Additionally, it enables the organization to prioritize the design phase over module implementation initially. However, this approach requires dynamic resources to adapt and manage the increased workload, with benefits materializing toward the end of the DSP period.
	Alternative #3	Not Applicable
	Alternative #4	Not Applicable
	Justification for Recommended Alternative	<p>In 2018 Alectra determined that Copperleaf's C55 solution provided a harmonized Asset Management solution to allow the consolidated organization to develop a consistent value framework to evaluate all capital investments.</p> <p>The main driver for the initial change is the ability to integrate with the ERP and Finance systems. Originally C55 was set up to be consistent with the legacy PowerStream chart of accounts and burden structure. This was harmonized in the earlier phases of implementation to now reflect Alectra's ERP. This change allowed Finance to incorporate consistent data to model for depreciation purposes and understand the level of burdens that will be absorbed by the capital plan.</p> <p>The regulatory environment is placing increased demands for solid analytics in defending appropriate spend levels. In order to provide sophisticated analytics, new tools and processes are required to ensure current and historical data is fully available, and to aid in the efficient and effective completion of the analysis.</p> <p>It is believed that efficiencies can be gained in multiple ways through the implementation of all phases of this project. These include: reduction of multiple entries into different systems, reduced number of process steps and wait times in the resource allocation and execution of work with one source for project information, improved allocation of resources (financial and non financial) with improved comparability across a consistent enterprise wide framework.</p> <p>The Ramp-up option is recommended, it enables the organization to prioritize the design phase over module implementation initially.</p>
07. General Information on the Project/Activity (OEB)	Risks to Completion and Risk Management	Copperleaf and Alectra have a strong working relationship, with previous phases exceeding expectations and completing within the allotted schedule.
	Comparative Information on Equivalent Historical Projects (if any)	Not applicable
	Total Capital and OM&A Costs for Renewable Energy Generation portion of Projects (0 if not applicable)	0



Material Investments Report

Project Code
Project Name

151136
C55 Alectra: Optimization of Business Practices



1 that occur within the five-year connection horizon and how costs and unit connections
 2 occur over the timeline across all subdivisions. This approach has been used to calculate
 3 historical unit costs as seen in Table 1.

4
 5 **Table 1 – Historical Residential Subdivision Per Unit Pricing – EEM Approach**

Historical Residential Lots (EEM Data)			
YEAR	QTY	TOTAL Gross \$MM	AVG Gross Unit Cost Per Year
2020*	Not available		
2021	5608	\$ 26.1	\$ 4,652
2022	5424	\$ 36.9	\$ 6,810
2023	4609	\$ 39.8	\$ 8,642
2024	5350	\$ 39.5	\$ 7,380
2025	3505	\$ 30.1	\$ 8,591

6 *Consistent EEM data is not available prior to 2021

7

8 b) Similar to the response provided in part a) above, Alectra Utilities has utilized the data
 9 provided at the Offer to Connect (OTC) stage to calculate a more representative unit cost
 10 for High Rise Condominium buildings as shown in Table 2.

11

12 **Table 2 – Historical Condominium Per Unit Pricing – EEM Approach**

Historical Condominium Buildings (EEM Data)			
YEAR	QTY	TOTAL Gross \$MM	AVG Gross Unit Cost Per Year
2020*	Not available		
2021	1	\$ 0.7	\$ 749,520
2022	37	\$ 13.3	\$ 360,356
2023	38	\$ 7.9	\$ 207,384
2024	10	\$ 1.3	\$ 130,576
2025	5	\$ 3.6	\$ 728,855

13 *Consistent EEM data is not available prior to 2021

1 c) The number of Customer-Initiated Expansion and Relocation projects, Transit Expansion
 2 projects, and Customer-Initiated Joint Use projects for each year from 2020 to 2025, and
 3 the forecast for each year from 2026 to 2031, are listed in Table 3 below:
 4

5 **Table 3 – Project Counts for Customer-Initiated Expansion and Relocation projects,**
 6 **Transit Expansion projects, and Customer-Initiated Joint Use projects for each year**
 7 **from 2020 to 2031**

Year	Customer Initiated Expansion and Relocation Projects	Transit Expansion Projects	Customer Initiated Joint Use Projects	Total
2020	8	0	4	12
2021	10	1	4	15
2022	14	2	5	21
2023	27	2	5	34
2024	29	2	5	36
2025	31	2	5	38
2026 Plan	25	1	5	31
2027 Plan	25	3	5	33
2028 Plan	24	3	5	32
2029 Plan	17	3	5	25
2030 Plan	14	1	5	20
2031 Plan	13	2	5	20

8
 9 Please note that the project counts include a mix of individual projects and standing
 10 bucket business cases. Some individual projects span more than one year and are
 11 counted in each year where spending occurs. Other business cases are standing buckets
 12 that group multiple smaller projects together and each standing bucket is counted as one
 13 project.

1
2
3
4
5

d) The breakdown of the Customer Initiated Budget between the following categories: Customer Initiated Expansion and Relocation Projects, Transit Expansion projects and Customer Initiated Joint Use Projects from 2020 to 2031 are listed in Table 4 below.

6 **Table 4 – Breakdown of Customer-Initiated Budget by Project Category: Customer**
 7 **Initiated Expansion and Relocation Projects, Transit Expansion projects and**
 8 **Customer Initiated Joint Use Projects from 2020 to 2031**

Year	Customer Initiated Expansion and Relocation Projects	Transit Expansion Projects	Customer Initiated Joint Use Projects	Grand Total
	(NET)	(NET)	(NET)	(NET)
2020 Net	7	0.0	0.9	7.9
2021 Net	9.7	1.3	0.8	11.8
2022 Net	3.7	-0.9	-0.3	2.6
2023 Net	11.7	3.1	0.1	14.9
2024 Net	25.1	0.0	-0.3	24.8
2025 Net	22.2	0.0	-1.2	21.0
2026 Net Plan	18.2	0.0	0.0	18.2
2027 Net Plan	40.6	1.7	0.0	42.3
2028 Net Plan	54.1	2.6	0.0	56.7

Year	Customer Initiated Expansion and Relocation Projects	Transit Expansion Projects	Customer Initiated Joint Use Projects	Grand Total
	(NET)	(NET)	(NET)	(NET)
2029 Net Plan	39.6	6.2	0.0	45.8
2030 Net Plan	26.7	0.0	0.0	26.7
2031 Net Plan	23.8	7.6	0.0	31.4

1 All dollar amounts shown are in \$MM. Minor variances may exist due to rounding.

2

3 e) For each project in Table B10-8, the spending by year and the in-service date is shown
 4 in Table 5 below:

1 **Table 5 – Project Spending by Year and In-Service Dates**

C55#	Project Name	2027 Net Plan	2028 Net Plan	2029 Net Plan	2030 Net Plan	2031 Net Plan	2027- 2031 Net	In- Service Date
101761	Customer Initiated Distribution System Relocation Projects - East South	0.3	0.3	0.3	0.3	0.3	1.3	N/A
101791	Services (New and Upgrades) - Commercial, Industrial and Institutional (ICI) Projects - East South	0.2	0.2	0.2	0.2	0.2	1	N/A
101887	New Residential Subdivision and Condo Tower Development - Alectra East	11.1	11.5	11.9	12.5	13.2	60.1	N/A
101896	New Institutional/Commercial/Industrial Subdivision Development - Alectra East	0.9	0.9	0.9	0.9	0.9	4.5	N/A
150384	Services (new and upgrades) - Commercial, Industrial and Institutional (ICI) Projects - Central South	0.2	0.2	0.2	0.2	0.3	1.2	N/A
150388	Services (New and Upgrades) - Layouts – Central South	1.9	2.2	2.5	2.8	2.8	12.2	N/A
150389	Services (New and Upgrades) - Layouts – Central North	0.9	1	1.1	1.3	1.3	5.6	N/A
150456	Services (New and Upgrades) - Layouts – Hamilton	1.9	2.1	2.4	2.7	2.8	12	N/A
150457	Services (New and Upgrades) - Layouts – St Catharines	0.7	0.8	0.9	1	1	4.4	N/A
150588	New Residential Subdivision and Condo Tower Development - Alectra West	3.8	3.9	4.1	4.3	4.6	20.6	N/A

C55#	Project Name	2027 Net Plan	2028 Net Plan	2029 Net Plan	2030 Net Plan	2031 Net Plan	2027- 2031 Net	In- Service Date
150630	New Residential Subdivision and Condo Tower Development - Alectra Central North	4.3	4.4	4.6	4.8	5.1	23.2	N/A
150652	New Residential Subdivision and Condo Tower Development - Alectra Central South	1.5	1.5	1.6	1.6	1.7	7.9	N/A
151531	Subdivision Developer Capital Plant Relocation - Alectra East	0.3	0.3	0.3	0.3	0.3	1.4	N/A
151550	Services (New and Upgrades) - Layouts - Guelph	0.4	0.4	0.5	0.5	0.5	2.3	N/A
151577	Services (New and Upgrades) - Layouts - East North	0.4	0.5	0.5	0.6	0.6	2.6	N/A
151578	Services (New and Upgrades) - Layouts - East South	2.2	2.5	2.8	3.2	3.2	13.9	N/A
151584	Customer Initiated Distribution System Project (West) McMaster Innovation Park - Dedicated Feeder- Business Park	0	2.1	3.8	0	0	5.9	2029
151652	New Industrial/Commercial/Institutional Subdivision Development - Alectra West	0.3	0.3	0.3	0.3	0.3	1.5	N/A
151673	New Industrial/Commercial/Institutional Subdivision Development - Alectra Central North	0.3	0.3	0.3	0.4	0.3	1.7	N/A
151696	New Residential Subdivision and Condo Tower Development - Alectra Guelph	0.5	0.5	0.5	0.6	0.6	2.8	N/A
152302	Customer Initiated Distribution System Expansion Projects - Central South	2.5	0.6	1.4	1.3	3.6	9.4	N/A

C55#	Project Name	2027 Net Plan	2028 Net Plan	2029 Net Plan	2030 Net Plan	2031 Net Plan	2027- 2031 Net	In- Service Date
152335	HaLRT OMSF Expansion	1.2	0	0	0	4.5	5.7	2031
152359	Customer Initiated Distribution System Expansion Projects - East South	3.6	1.8	1.8	5.1	5.2	17.6	N/A
152365	Equinox System Expansion	0.8	1.6	0	0	0	2.4	2027
152381	Customer Initiated Distribution System Expansion Projects - West	2.3	1.7	0.9	3.2	3.3	11.4	N/A
152422	Customer Initiated Distribution System Expansion Projects - East North	0.3	0.4	0.3	0.4	0.4	1.7	N/A
152453	Customer Initiated Distribution System Expansion Projects - Central North	1.5	2.7	4.1	4.1	4.2	16.7	N/A
152482	Customer Initiated Distribution System Expansion Project - Trillium Health Partners	3	4.5	0	0	0	7.6	2028
152602	Customer Initiated Distribution System Expansion Project - GTAA Feeders	6.5	3	0	0	0	9.5	2028
152676	Lakeview Expansion	0	0	3	3.7	0	6.6	2030
153088	Customer Initiated Distribution System Expansion Project (East) DC5/DC6 Urbacon Data Centers	1.4	6.1	6.2	0	0	13.7	2029
153092	HaLRT - TPSS 4 System Expansion	0.4	2.6	6.2	0	0	9.2	2029

C55#	Project Name	2027 Net Plan	2028 Net Plan	2029 Net Plan	2030 Net Plan	2031 Net Plan	2027- 2031 Net	In- Service Date
153134	HaLRT TPSS 8 Expansion	0	0	0	0	3.1	3.1	2039
153229	Customer Initiated Distribution System Expansion Project - 2395 Speakman Drive	3.5	7.1	0	0	0	10.6	2028
153230	Customer Initiated Distribution System Expansion - Toronto Gore (Block 47)	0.2	7.7	7.4	0	0	15.3	2029
153231	Customer Initiated Distribution System Expansion (East South) - Angus Glen Developments	5.4	5.7	0	0	0	11.1	2028
153232	Customer Initiated Distribution System Expansion Project - Block 48 Torbram Rd and Mayfield Rd	2.7	0.5	0	0	0	3.2	2028
153233	Customer Initiated Distribution System Expansion (East South) - Block 27	3.1	2.9	0	0	0	5.9	2028
153234	Customer Initiated Distribution System Expansion (East South) - Hwy 48	2.5	0	0	0	0	2.5	2027
153236	Customer Initiated Distribution System Expansion Project - Block 52 Mississauga Rd & Williams Pkwy	0.4	4.7	9.8	8	6.1	29	2028

1 All dollar amounts shown are in \$MM. Minor variances may exist due to rounding.

2

3 Please note that no in-service date has been provided for business cases that are
4 standing buckets. As explained in part (c), standing buckets group multiple smaller
5 projects together and are counted as one project. Since the individual projects within a
6 standing bucket have different in-service dates, the in-service date for these business
7 cases has been marked N/A. The investment drivers for Customer Connections are

1 shown in *Exhibit 2A, Tab 1, Schedule 1 Appendix B10 – Customer Connections, Table*
2 *B10-5 Investment Drivers.*

Road Authority Projects	DSP Forecast Net \$MM (2020–2024)	Actual Net \$MM (2020–2024)	Variance Budget
Road Authority Projects - West (St. Catharines)	5.0	4.9	(0.1)
Road Authority Projects - Central South	21.0	3.0	(18.0)
Road Authority Projects - West (Guelph)	3.8	2.4	(1.4)

1

2 All dollar amounts shown are in \$MM. Minor variances may exist due to rounding.

3

4 b) The DSP forecast budgets from 2020 to 2024 were shown in net dollars as they reflect
 5 the costs incurred by Alectra Utilities. These were all \$0M.

6

7 Table 2 below reflects the total DSP forecasted capital expenditures (gross) for Transit
 8 projects, as well as the projects which had km identified.

1 **Table 2 - Transit Projects Total Dollars**

Transit Project	DSP		Actual \$MM (2020–2024)	Actual km	Variance Budget	Variance km
	Forecast Budget \$MM (Gross, 2020–2024)	DSP Forecast km				
Hurontario LRT (HuLRT)	\$49	20.9	\$27.3	18.4	\$(21.7)	-2.5
Hamilton LRT (HaLRT)	\$67	14	\$4.7	14	\$(62.3)	0
Regional Express Rail (RER)	\$49	Not Applicable	\$98.6	Not Applicable	\$49.6	Not Applicable

2

3 All dollar amounts shown are in \$MM. Minor variances may exist due to rounding.

Table 2 – Lines capacity projects – Forecasted spending by year and in-service date

Project Code	Project Name	In-Service Date	CAPEX (\$MM)	Forecasted Spending (\$MM)				
				2027	2028	2029	2030	2031
101489	Markham TS#5 Feeder Integration - Part 1	> 2031	17.4		6.4	6.6	4.4	
101490	Markham TS#5 Feeder Integration - Phase 2	> 2031	16.8			10.4	6.4	
152854	St. Catharines Downtown - Feeder Consolidation	> 2031	15.3			5.4	2.6	7.3
153068	New 4 Feeders Common Elements - Goreway TS 2	> 2031	15.2			7.5	7.7	
152763	VTS#5 Feeder Integration Part 1	> 2031	11.1					11.1
152865	New Station - Hamilton South-West (Egress)	2031	10.4				5.2	5.2
150716	42M69 Feeder Extension - Williams Pkwy to Heart Lake/Sandalwood	2029	8.9		3.6	5.3		
152496	New Build - Waterdown 4th Feeder, Hamilton	2029	8.8		4.4	4.4		
151676	136M10 Feeder Extension Goreway TS to Highway 410	2029	8.4		3.3	5.1		
152853	New Station - Newton TS (Feeder Consolidation)	2031	8				4	4
152893	Feeder Integration Plan (I) - 27.6kV Lakeview TS - South Mississauga	2031	7.6				3.8	3.8
152879	Feeder 1 Integration - Goreway TS 2	> 2031	7.1				3.5	3.6
152942	New Build - Guelph Downtown	2031	5.9		1.8	1.2		2.9
152882	Feeder 4 Integration - Goreway TS 2	> 2031	3.4					3.4
153073	3 Feeder Integration out of Goreway TS 2 - Along Castlemore Road	> 2031	3.3			1.6	1.7	
100904	Install Double-Circuits Pole Line on Major Mackenzie - Highway 27 to Huntington Rd	2029	3.2			3.2		
152880	Feeder 2 Integration - Goreway TS 2	> 2031	3					3
100917	Add one additional 27.6kV Circuit on 19th Ave from Bayview to Bathurst St	2030	2.4			2.4		
150007	Extend 153M10 to Transfer MS322	2027	2.4	2.4				
152881	Feeder 3 Integration - Goreway TS 2	> 2031	2.4					2.4
152852	New Build - Nebo 3101X Extension, Hamilton	2028	2.4		2.4			
100924	Install two additional 27.6kV circuits on Highway 7 from Jane St to Weston Rd	2028	2.2		2.2			
150369	New build – 44kV Feeder Extension York/Meadowpine, Mississauga	2031	2.1					2.1

Table 2 – Lines capacity projects – Forecasted spending by year and in-service date

Project Code	Project Name	In-Service Date	CAPEX (\$MM)	Forecasted Spending (\$MM)				
				2027	2028	2029	2030	2031
150368	New Build - Carlton TS to Linwell Rd/Lake St, St. Catharines	2030	2.1			1	1.1	
152749	Rebuild pole line on 19th Ave into two circuits from McCowan Rd to Highway 48	2029	2		2			
100461	New Barrie 20MVA Substation - 13.8kV Feeder Integration	> 2031	2					2
152849	New Build - Carlton TS to Martindale Rd/Port, St. Catharines	2029	2		1.5	0.5		
103633	Install two 27.6kV Circuits on 16th Ave from Highway 404 to Woodbine Ave	2029	1.9			1.9		
100281	Build Four 27.6kV Circuits on 19th Ave from Woodbine Ave to Warden Ave	2028	1.7		1.7			
152751	Rebuild existing pole line on Nashville Rd into 2 two circuits from Huntington Rd to Highway 50	2028	1.6		1.6			
100913	Pole Line Installation Double-Circuits on Major Mack - Huntington Rd to Highway 50	2028	1.5		1.5			
152890	Webb MS 20MVA Substation - Feeder Integration Plan (I)	2028	1.5	1.5				
101487	Add one Additional 27.6kV Circuits on Major Mack Dr and 9th Line	2029	1.3			1.3		
152967	Webb MS 20MVA Substation - Feeder Integration Plan (II)	2029	1.3	1.3				
151238	New Build - Maltby Rd W (Crawley to Gordon), Guelph	2028	1.3		1.3			
152757	Rebuild existing pole line on Keele St into two circuits from Teston Rd to Kirby Rd	2029	1.2			1.2		
102386	Rebuild 44kV pole line into two circuits on Tiffin Street from Ferndale Ave to Miller Drive	2029	1.2			1.2		
153111	Feeder 2 integration 4xCircuits Duct bank - Goreway TS 2	> 2031	1.2			0.5	0.7	
101571	New Alliston 2 x 20MVA Substation - 13.8kV Feeder Integration	2029	1			1		

1 **Table 1 - Summary of assets in Rear Lot Conversions by Quantity**

C55#	Project Name	Asset Category	Total Quantity	Total Poor & Very Poor
150047	Rear Lot Renewal Project - Royal Orchard - North, Markham	Poles	43	0
		Transformers	31	2
		Conductor/Cable (km)	5.5	0.44
		Switches	1	0
150329	Rear Lot Renewal Project - Main Street / Unionville / Carlton, Markham	Poles	204	2
		Transformers	96	4
		Conductor/Cable (km)	18.2	6.1
150330	Rear Lot Renewal Project - Marsdale, St.Catharines	Poles	183	44
		Transformers	78	5
		Conductor/Cable (km)	11.6	1.3
		Switches	1	0
150331	Rear Lot Renewal Project - Royal Orchard - South, Markham	Poles	34	0
		Transformers	40	1
		Conductor/Cable (km)	13.3	2.7
150383	Rear Lot Renewal Project - Bluebird	Poles	20	0
		Transformers	3	0
		Conductor/Cable (km)	0.16	0
150397	Rear Lot Renewal Project - Riverview Blvd and Northcliffe	Poles	46	3
		Transformers	62	2
		Conductor/Cable (km)	12.5	0.31
150398	Rear Lot Renewal Project - Strathcona Dr	Poles	82	55
		Transformers	23	1
		Conductor/Cable (km)	3.5	1.2
		Switches	1	0
150399	Rear Lot Renewal Project - Richlieu Dr and Trelawne Dr, St.Catharines	Poles	64	7
		Transformers	20	1
		Conductor/Cable (km)	2.6	0.54
151896	Rear Lot Renewal - (199) - Douglas St, Guelph	Poles	11	0
		Transformers	12	0
		Conductor/Cable (km)	0.27	0.03

C55#	Project Name	Asset Category	Total Quantity	Total Poor & Very Poor
152467	Rear Lot Renewal - (HAM) - St.Andrew's Drive	Poles	36	0
		Transformers	24	1
		Conductor/Cable (km)	5.0	2.0
152503	Rear Lot Renewal Project - Steeles and Henderson, Markham	Poles	157	4
		Transformers	54	0
		Conductor/Cable (km)	7.80	0
152514	Rear Lot and Voltage Conversion - Dickson Park Crescent, Mississauga	Poles	20	20
		Transformers	4	0
		Conductor/Cable (km)	0.45	0
152673	Rear Lot Renewal Project - Bayview and Steeles, Markham	Poles	301	17
		Transformers	104	6
		Conductor/Cable (km)	26.5	0.86
		Switches	1	1
152677	Rear Lot Renewal Project - Aurora Heights, Aurora	Poles	267	39
		Transformers	82	3
		Conductor/Cable (km)	20.2	0.52
		Switches	4	0
152843	Rear Lot Renewal Project - Highway 7/ McCown (SE) - Markham	Poles	152	4
		Transformers	26	0
		Conductor/Cable (km)	3.7	0

2-AMPCO-53

Attachment 1

Please see live Excel

- 1 h) Page 13: Please add 2019 and 2025 data to Table L-4.
2
- 3 i) Page 13: With respect to Table L-4, please provide a further breakdown of
4 Defective Equipment by cause for each of the years 2019 to 2025.
5
- 6 j) Pages 13-14: Please provide Planned compared to Actuals for Scheduled Outages
7 for the following: Number of Interruption Events, Customer Interruptions and
8 Customer Hours of Interruption.
9
- 10 k) Page 13: Please add 2019 and 2025 data to Table L-5.
11
- 12 l) Page 13: With respect to Table L-5, please provide a further breakdown of
13 Defective Equipment by cause for each of the years 2019 to 2025.
14
- 15 m) Page 14: Please add 2019 and 2025 data to Table L-6.
16
- 17 n) Page 14: With respect to Table L-6, please provide a further breakdown of
18 Defective Equipment by cause for each of the years 2019 to 2025.
19
- 20 o) Page 14: Alectra Utilities along with Toronto Hydro and Ottawa Hydro are part of the
21 same peer reliability benchmark group (Very Large with High Undergrounding).
22
- 23 p) Please provide the % of Undergrounding for Alectra, Toronto Hydro and Ottawa
24 Hydro.
25
- 26 q) Please confirm Alectra's targets for SAIDI and SAIFI.

1 r) Please provide Alectra’s SAIDI and SAIFI targets excluding LOS.

2

3 s) Does Alectra have a MAIFI Target? if yes, please provide.

4

5 **RESPONSE:**

6

7 a) Please find Table 1 AMPCO54-a which is Table L-1 updated with 2025 results.

8

9 **Table 1 – AMPCO-54-a: Table L - 1 updated with 2025 results**

Metric (Hours)	2019	2020	2021	2022	2023	2024	2025
SAIDI	1.40	1.19	1.19	2.64	0.86	0.87	1.86
SAIDI - Excluding MEDs	1.15	0.98	1.05	0.94	0.86	0.79	0.95
SAIDI - Excluding MEDs and LOS	1.07	0.95	0.98	0.88	0.83	0.75	0.88

10

11 b) Please see Table 2 AMPCO-54-b which contains the number of Momentary Outages
 12 from 2019 to 2025.

13

14 **Table 2 – AMPCO-54-b: Number of Momentary Interruptions**

Momentary Interruptions	2019	2020	2021	2022	2023	2024	2025
MED Included	1,664	1,913	1,816	1,909	1,718	1,647	1,615
MED Excluded	1,650	1,865	1,763	1,801	1,718	1,601	1,611

15

1 c) Please find Table 3 AMPCO54-c which is Table L-3 updated with 2025 results.

2

3 **Table 3 – AMPCO-54-c: Table L - 3 updated with 2025 results**

Metric (Number of Outages)	2019	2020	2021	2022	2023	2024	2025
SAIFI	1.54	1.39	1.40	1.63	1.19	1.21	1.67
SAIFI - Excluding MEDs	1.50	1.24	1.32	1.25	1.19	1.17	1.50
SAIFI - Excluding MEDs and LOS	1.26	1.18	1.15	1.07	1.06	1.08	1.26

4

5

6 d) *With respect to Figure L-4, please explain the major causes of Foreign Interference*
 7 *and provide Alectra’s response to the significant contribution of Foreign Interference*
 8 *to the Average Number of Sustained Outages (2020-2024).*

9

10 In alignment with the Electricity Reporting and Record Keeping Requirements (RRR),
 11 outages triggered by external elements including wildlife, vehicle collisions,
 12 underground dig-ins, customer equipment failures, foreign objects, vandalism, and
 13 sabotage are categorized as Foreign Interference.

14 Wildlife (41%), vehicle collisions (34%), and Dig-Ins (14%) are the top three causes
 15 for Foreign Interference outages.

16 For interruptions caused by wildlife, Alectra Utilities has integrated several projects
 17 into its Distribution System Plan (DSP) focused on the installation of Tree Wire
 18 Conductors and various wildlife mitigation solutions. As detailed in Exhibit 2A, Tab 1,
 19 Schedule 1, Page 60, Table B01 – 22 Material Projects and Initiatives, the eighth
 20 project on the list includes these proactive measures and represents a total
 21 investment of \$7.9 million.

1 Regarding vehicle collisions, Alectra Utilities does review the location of the asset
2 and for poles, the material (wood vs. concrete vs. composite) to determine if changes
3 should be made to avoid or better protect from future collisions. Beyond these
4 measures no proactive capital investment has been proposed to prevent vehicle
5 collisions.

6 For Dig-Ins, Alectra Utilities communicates and supports the Ontario One Call public
7 safety administrative authority to communicate the importance for everyone to call for
8 locates before beginning excavation. Additionally, Alectra Utilities communicates
9 requirements to excavators during the locate process, for example stipulating “hand
10 digging” is required within proximity to infrastructure. Lastly, Alectra Utilities standards
11 stipulate burial method of cables in a variety of situations. These are continuously
12 reviewed based on feedback or incidents to ensure safety of Alectra Utilities
13 infrastructure and the public.

14

15 e) *With respect to Figure L-9, please confirm the 344 Transformer outages are on Hydro*
16 *One’s system and fall under Loss of Supply.*

17

18 The 344 transformers outages and all other outages by the asset category in Figure
19 L-9 were caused by equipment owned by Alectra Utilities. Consequently, these are
20 all classified as Failed Equipment, in accordance with the Electricity Reporting and
21 Record Keeping Requirements (RRR).

22 Interruption due to problems associated with the distribution system owned and/or
23 operated by another distributor, and/or in the transmission system would be classified
24 as a Loss of Supply.

25

26 f) *Please provide the Failed Equipment without MEDs average for 2020-2024 in the*
27 *same format as Figure L-9 split between Overhead, Underground and Stations.*

28 The data presented in Figure L-9 provides the most accurate classification available.

1 Certain assets are exclusively underground or overhead: Cables and Accessories
2 and Switchgears are exclusively associated with the underground system, whereas
3 failures categorized under Overhead Hardware and Switches are exclusively
4 associated with the overhead system.

5 The following asset categories cannot be broken into Overhead, Underground, and
6 Stations:

- 7 • Transformers: This grouping includes both overhead pole-mounted transformers
8 and underground units, such as pad-mounted transformers or those located in
9 vaults.
- 10 • Other: This category aggregates various components from both systems,
11 including underground secondary cables and services alongside overhead
12 transformer cutouts and station equipment.

13

14 *g) Details on reliability data by OEB cause code is provided in Table L – 4, Table L - 5*
15 *and Table L - 6). Please confirm Tables L-4, L-5 and L-6 exclude MEDs in the Outage*
16 *Cause Codes. If not, please provide Tables L-4, L-5 and L-6 excluding MEDs.*

17

18

19 The values in Tables L-4, L-5, and L-6 include MEDs in the Outage Cause Codes.

20 Refer to the tables below for the MED excluded values.

1 **Table 4 – AMPCO-54-g: Number of Interruption Events by Outage Cause Code (MED**
 2 **Excluded)**

Cause Code	2020	2021	2022	2023	2024
0-Unknown/Other	333	271	321	263	286
1-Scheduled Outage	2,046	2,041	1,943	1,860	2,162
2-Loss of Supply	38	68	67	50	60
3-Tree Contacts	227	210	199	203	254
4-Lightning	58	36	9	34	35
5-Defective Equipment	1,476	1,242	1,277	1,096	1,163
6-Adverse Weather	101	61	98	85	54
7-Adverse Environment	39	37	25	26	14
8-Human Element	54	59	38	40	36
9-Foreign Interference	969	857	870	892	689
Total	5,341	4,882	4,847	4,549	4,753

3

1 **Table 5 – AMPCO-54-g: Customer Interruptions by Outage Cause Code (MED**
2 **Excluded)**

Cause Code	2020	2021	2022	2023	2024
0-Unknown/Other	264,792	203,881	253,973	226,405	262,037
1-Scheduled Outage	43,237	60,230	43,150	52,224	51,361
2-Loss of Supply	60,883	185,640	192,411	132,982	98,820
3-Tree Contacts	56,757	132,778	96,092	94,075	127,829
4-Lightning	62,821	26,696	5,623	15,197	20,711
5-Defective Equipment	470,107	440,986	423,622	354,266	363,237
6-Adverse Weather	42,154	23,540	35,764	60,811	23,553
7-Adverse Environment	24,536	38,842	6,066	21,461	11,794
8-Human Element	9,776	33,886	17,098	27,869	30,162
9-Foreign Interference	281,074	274,329	277,714	304,124	286,709
Total	1,316,137	1,420,808	1,351,513	1,289,414	1,276,213

3

1 **Table 6 – AMPCO-54-g: Customer Hours of Interruption by Outage Cause Code (MED**
 2 **Excluded)**

Cause Code	2020	2021	2022	2023	2024
0-Unknown/Other	36,898	22,743	44,828	20,864	28,835
1-Scheduled Outage	118,354	94,324	105,879	144,318	132,499
2-Loss of Supply	30,329	69,976	71,596	31,377	47,468
3-Tree Contacts	73,966	100,264	97,659	82,102	73,004
4-Lightning	34,855	28,641	1,204	10,683	7,523
5-Defective Equipment	478,038	517,499	462,423	362,804	394,743
6-Adverse Weather	48,080	48,434	32,554	51,078	26,106
7-Adverse Environment	55,082	63,807	7,789	25,986	8,356
8-Human Element	3,445	9,669	2,192	28,230	8,013
9-Foreign Interference	162,776	171,134	194,349	177,931	139,346
Total	1,041,823	1,126,491	1,020,473	935,373	865,894

3

1 h) Page 13: Please add 2019 and 2025 data to Table L-4.

2

3 The 2019 and 2025 data has been added to Table L-4 as requested below.

4

5 **Table 7 – AMPCO-54-h: Table L - 4 Number of Interruption Events by Outage Cause**

6 **Code (2019-2025)**

Cause Code	2019	2020	2021	2022	2023	2024	2025
0-Unknown/Other	287	333	273	324	263	286	288
1-Scheduled Outage	2,069	2,050	2,045	1,948	1,860	2,162	2,017
2-Loss of Supply	47	51	72	70	50	60	126
3-Tree Contacts	273	254	241	363	203	255	206
4-Lightning	36	58	36	10	34	39	9
5-Defective Equipment	1,335	1,492	1,257	1,295	1,096	1,163	1,273
6-Adverse Weather	271	146	97	262	85	67	293
7-Adverse Environment	25	40	38	25	26	14	51
8-Human Element	59	55	59	38	40	36	81
9-Foreign Interference	801	971	858	875	892	689	763
Total	5,203	5,450	4,976	5,210	4,549	4,771	5,107

7

1 *i) Page 13: With respect to Table L-4, please provide a further breakdown of Defective*
 2 *Equipment by cause for each of the years 2019 to 2025.*

3

4 Defective Equipment has been separated into sub-causes as requested in the table
 5 below.

6

7 **Table 8 – AMPCO-54-i: Number of Interruption Events Due to Failed Equipment (2019-**
 8 **2025)**

Cause Code	2019	2020	2021	2022	2023	2024	2025
Cables & Accessories	427	507	444	444	396	438	513
OH Line Hardware	244	295	199	231	142	145	159
Switchgear	36	35	50	49	24	35	28
Switches	82	61	58	52	65	58	71
TX	280	393	334	331	348	321	306
Other	266	201	172	188	121	166	196
Total	1,335	1,492	1,257	1,295	1,096	1,163	1,273

9

10

11 *j) Pages 13-14: Please provide Planned compared to Actuals for Scheduled Outages*
 12 *for the following: Number of Interruption Events, Customer Interruptions and*
 13 *Customer Hours of Interruption.*

14

15

16

17

18

Alectra Utilities does not set specific targets for scheduled outages, as these planned interruptions are essential for the successful execution of its System Renewal programs. Despite the necessity of these outages, the company actively manages the process to ensure that the number of customers impacted remains as low as possible.

1 k) Page 13: Please add 2019 and 2025 data to Table L-5.

2 2019 and 2025 data have been added to Table L-5 below.

3 **Table 9 – AMPCO-54-k: Table L - 5 Customer Interruptions by Outage Cause Code**
4 **(2019-2025)**

Cause Code	2019	2020	2021	2022	2023	2024	2025
0-Unknown/Other	215,656	264,792	204,589	254,932	226,405	262,037	225,998
1-Scheduled Outage	43,668	43,298	60,280	43,534	52,224	51,361	40,588
2-Loss of Supply	254,378	111,405	194,429	196,760	132,982	98,820	267,902
3-Tree Contacts	142,108	109,758	152,280	198,171	94,075	135,064	77,565
4-Lightning	36,527	62,821	26,696	6,261	15,197	22,864	7,879
5-Defective Equipment	445,362	480,179	446,593	447,516	354,266	363,237	517,020
6-Adverse Weather	179,351	87,837	74,996	301,166	60,811	61,323	245,923
7-Adverse Environment	10,286	24,821	38,845	6,066	21,461	11,794	56,233
8-Human Element	33,752	9,777	33,886	17,098	27,869	30,162	65,252
9-Foreign Interference	265,318	281,083	274,342	290,749	304,124	286,709	324,328
Total	1,626,406	1,475,771	1,506,936	1,762,253	1,289,414	1,323,371	1,828,688

1 *l) Page 13: With respect to Table L-5, please provide a further breakdown of Defective*
 2 *Equipment by cause for each of the years 2019 to 2025.*

3

4 Defective Equipment has been separated by the sub-causes for 2019 and 2025 in
 5 the table below.

6

7 **Table 10 – AMPCO-54-I: Customer Interruptions Due to Failed Equipment (2019-2025)**

Cause Code	2019	2020	2021	2022	2023	2024	2025
Cables & Accessories	176,114	222,387	242,510	192,675	167,611	156,087	292,307
OH Line Hardware	133,964	107,117	85,470	90,698	70,380	64,509	85,524
Switchgear	28,517	29,427	54,658	29,339	33,388	64,589	34,052
Switches	40,528	32,990	22,743	67,245	53,946	24,369	77,058
TX	12,704	26,602	31,076	20,068	22,393	13,842	11,843
Other	53,535	61,656	10,136	47,491	6,548	39,841	16,236
Total	445,362	480,179	446,593	447,516	354,266	363,237	517,020

8

9 *m) Page 14: Please add 2019 and 2025 data to Table L-6.*

10 2019 and 20215 data have been added to Table L-6 below.

1 **Table 11 – AMPCO-54-m: Table L - 6 Customer Hours of Interruption by Outage Cause**
2 **Code (2019-2025)**

Cause Code	2019	2020	2021	2022	2023	2024	2025
0-Unknown/Other	40,319	36,898	22,786	44,856	20,864	28,835	17,577
1-Scheduled Outage	121,850	118,477	94,522	108,470	144,318	132,499	97,321
2-Loss of Supply	77,603	106,728	70,881	135,306	31,377	47,468	107,089
3-Tree Contacts	290,520	126,495	152,631	840,014	82,102	110,896	37,357
4-Lightning	14,829	34,855	28,641	19,026	10,683	7,777	2,877
5-Defective Equipment	472,589	486,090	523,367	492,597	362,804	394,743	476,707
6-Adverse Weather	257,407	135,556	142,971	967,907	51,078	74,129	1,034,518
7-Adverse Environment	17,471	56,023	63,811	7,789	25,986	8,356	82,550
8-Human Element	21,763	3,446	9,669	2,192	28,230	8,013	30,607
9-Foreign Interference	160,690	162,779	171,156	237,837	177,931	139,346	151,672
Total	1,475,041	1,267,347	1,280,434	2,855,995	935,373	952,063	2,038,275

1 n) Page 14: With respect to Table L-6, please provide a further breakdown of Defective
 2 Equipment by cause for each of the years 2019 to 2025.

3 Defective Equipment has been separated by the sub-causes for 2019 and 2025 in
 4 the table below.

5

6 **Table 12 – AMPCO-54-n: Customer Hours of Interruption Due to Failed Equipment**
 7 **(2019-2025)**

Cause Code	2019	2020	2021	2022	2023	2024	2025
Cables & Accessories	215,458	251,666	298,722	229,902	184,729	209,033	263,279
OH Line Hardware	110,711	116,244	89,222	104,685	48,208	56,364	108,865
Switchgear	30,605	22,981	69,463	30,970	25,338	42,917	33,905
Switches	33,086	18,119	22,682	62,729	53,811	22,038	21,116
TX	39,545	48,162	33,832	40,630	38,920	35,016	32,980
Other	43,183	28,917	9,445	23,682	11,799	29,376	16,563
Total	472,589	486,090	523,367	492,597	362,804	394,743	476,707

8

9 o) Page 14: Alectra Utilities along with Toronto Hydro and Ottawa Hydro are part of the
 10 same peer reliability benchmark group (Very Large with High Undergrounding).

11 Please refer to the answer to Part p) below.

1 *p) Please provide the % of Undergrounding for Alectra, Toronto Hydro and Ottawa*
 2 *Hydro.*

3 The data presented in the table below is derived from the Ontario Energy Board’s
 4 (OEB) open data webpage. This is in accordance with the Electricity Reporting and
 5 Record Keeping Requirements (RRR), Section 2.1.5.5 Utility Characteristics. These
 6 figures represent the average circuit lengths recorded from 2019 to 2022 and
 7 encompass both primary and secondary overhead lines, as well as primary and
 8 secondary underground circuits.

9

10 **Table 13 – AMPCO-54-p:**

Local Distribution Company	Total Overhead Circuit Kilometers of Line	Total Underground Circuit Kilometers of Line	Total Circuit Kilometers of Line	Percentage of Undergrounding
Alectra Utilities Corporation	14,449	35,990	50,439	71%
Hydro Ottawa Limited	4,370	7,496	11,866	63%
Toronto Hydro-Electric System Limited	15,433	13,603	29,036	47%

11

12

13 *q) Please confirm Alectra’s targets for SAIDI and SAIFI.*

14 As stated in Exhibit 2A, Tab 1, Schedule 1, Table 5.2.3 – 8 System Reliability (SAIDI
 15 – Excluding MEDs) Custom Performance Measure, Alectra Utilities has established
 16 a SAIDI target of 0.74 hours by the end of 2031. This objective is founded upon the

1 infrastructure investments proposed within the current Distribution System Plan
2 (DSP) for the 2027-2031 period. Achievement of this target would represent a 20%
3 improvement in reliability performance when measured against the historical five-year
4 average.

5 In accordance with Exhibit 2A, Tab 1, Schedule 1, Page 75, Line 6, Alectra Utilities is
6 committed to monitoring several reliability metrics, including SAIFI. However, the
7 current proposal introduces two specific performance measures designed to track the
8 direct outcomes of the Distribution System Plan (DSP): SAIDI and the total Customer
9 Hours of Interruption attributed to Failed Equipment. As a result, there is no target for
10 SAIFI.

11

12 *r) Please provide Alectra's SAIDI and SAIFI targets excluding LOS.*

13 As detailed in Exhibit 2A, Tab 1, Schedule 1, Page 1, Line 25, while outages caused
14 by loss of supply are beyond Alectra Utilities' control, these events negatively impact
15 customers. Therefore, Alectra Utilities continues to support the inclusion of LOS in its
16 performance metrics for reliability. As a result, there is no target for SAIDI excluding
17 loss of supply.

18 Please also see the response to part q.

19

20 *s) Does Alectra have a MAIFI Target? if yes, please provide.*

21 Alectra Utilities does not have a MAIFI target.

1 **Table 1 – Overview of TMED and Number of MEDs (2019-2025)**

Year	Number of MEDs	Date of MED	Number of Interruption events	Customer Interruptions	Customer hours of Interruption
2019	1	1-Dec	104	39,179	264,185.67
2020	2	14-Sep 15-Nov	8 101	36,682 122,952	59,589.37 165,933.95
			109	159,634	225,523.32
2021	1	11-Dec	94	86,128	153,942.93
2022	4	15-Apr 21-May 17-Sep 23-Dec	38 250 6 69	46,884 297,650 8,000 58,206	68,011.39 1,515,746.90 57,464.33 194,298.68
			363	410,740	1,835,521.31
2023	0		0	0	0
2024	2	28-Feb 17-Aug	1 17	7,235 39,923	37,891.72 48,276.92
			18	47,158	86,168.64
2025	2	29-Mar 29-Apr	142 50	141,390 42,134	965,187.92 36,705.38
			192	183,524	1,001,893.30

- 1 b) Tables L-4, L-5, and L-6 already include MEDs and therefore contain the total for
- 2 Number of Interruption Events, Number of Customers Interruptions and Number of
- 3 Customer Interruption Hours. Therefore the data in Table M-1 should not be added to
- 4 these tables.

2-AMPCO-56

Attachment 1

Please see live Excel

1 **Table 1-2: Historical Internal/External Resource Expenditures by Program Segment**
2 **(\$MM)**

Program	Segment		Historical							
			2017	2018	2019	2020	2021	2022	2023	2024
Asset Management	Asset Management	I	4.18	3.93	5.00	4.85	4.43	4.22	4.56	6.03
		E	0.70	0.40	0.72	0.26	0.07	0.41	0.46	0.02
		T	4.88	4.33	5.72	5.11	4.50	4.63	5.02	6.05
		I%	86%	91%	87%	95%	98%	91%	91%	100%
	Grid Modernization	I	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
		E	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
		T	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
		I%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Program	Segment		Historical							
			2017	2018	2019	2020	2021	2022	2023	2024
Distribution Design	N/A	I	3.35	2.69	4.53	4.69	4.64	5.04	5.34	5.37
		E	0.07	0.13	0.13	0.07	0.14	0.31	0.31	0.23
		T	3.42	2.82	4.66	4.76	4.78	5.35	5.65	5.60
		I%	98%	95%	97%	99%	97%	94%	95%	96%

3

Program	Segment		Historical							
			2017	2018	2019	2020	2021	2022	2023	2024
Corporate Services	Regulatory	I	2.81	2.67	3.37	3.52	3.32	3.43	3.46	3.83
		E	0.20	0.61	0.70	-0.07	0.10	0.27	0.19	0.17
		T	3.01	3.28	4.07	3.45	3.42	3.70	3.65	4.00
		I%	93%	81%	83%	102%	97%	93%	95%	96%
	Legal	I	0.90	0.94	1.25	1.49	1.41	1.51	1.43	1.11
		E	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
		T	0.90	0.94	1.25	1.49	1.41	1.51	1.43	1.12
		I%	100%	100%	100%	100%	100%	100%	100%	99%
	Internal Audit	I	0.61	0.78	0.72	0.77	0.72	0.32	0.36	0.50
		E	0.10	0.11	0.13	0.04	0.00	0.00	0.02	0.00
		T	0.71	0.89	0.85	0.81	0.72	0.32	0.38	0.50
		I%	86%	88%	85%	95%	100%	100%	95%	100%
	Government and Corporate Relations	I	1.38	1.61	1.30	1.73	1.54	1.67	1.82	1.86
		E	0.41	0.30	0.20	0.16	0.17	0.13	0.18	0.10
		T	1.79	1.91	1.50	1.89	1.71	1.80	2.00	1.96

Program	Segment		Historical							
			2017	2018	2019	2020	2021	2022	2023	2024
		I%	77%	84%	87%	92%	90%	93%	91%	95%
	Strategy, ERM & Sustainability	I	0.44	1.03	1.01	1.00	1.09	0.71	0.72	0.77
		E	0.12	0.24	0.27	0.30	0.35	0.29	0.03	0.00
		T	0.56	1.27	1.28	1.30	1.44	1.00	0.75	0.77
		I%	79%	81%	79%	77%	76%	71%	96%	100%

1

Program	Segment		Historical							
			2017	2018	2019	2020	2021	2022	2023	2024
Finance and Treasury	Finance	I	9.28	10.07	10.94	11.40	10.53	9.63	10.28	10.80
		E	0.69	0.19	0.19	0.63	0.58	0.21	0.13	0.08
		T	9.97	10.26	11.13	12.03	11.11	9.84	10.41	10.88
		I%	93%	98%	98%	95%	95%	98%	99%	99%
	Treasury	I	0.69	1.34	1.40	1.54	1.57	1.59	1.59	1.87
		E	0.01	0.26	0.23	0.18	0.29	0.33	0.38	0.32
		T	0.70	1.60	1.63	1.72	1.86	1.92	1.97	2.19
		I%	99%	84%	86%	90%	84%	83%	81%	85%

2

Program	Segment		Historical							
			2017	2018	2019	2020	2021	2022	2023	2024
Supply Chain Services	N/A	I	5.89	6.30	7.06	7.21	7.10	7.46	8.47	7.77
		E	0.18	0.11	0.05	0.01	0.00	0.04	0.04	0.07
		T	6.07	6.41	7.11	7.22	7.10	7.50	8.51	7.84
		I%	97%	98%	99%	100%	100%	99%	100%	99%

3

Program	Segment		Historical							
			2017	2018	2019	2020	2021	2022	2023	2024
Human Resources	Human Resources	I	4.25	5.21	6.20	6.47	6.55	7.11	7.57	7.64
		E	0.35	0.20	0.79	0.73	1.15	1.30	1.01	0.86
		T	4.60	5.41	6.99	7.20	7.70	8.41	8.58	8.50
		I%	92%	96%	89%	90%	85%	85%	88%	90%
	Health & Safety and Environment	I	2.13	2.01	1.90	2.01	2.03	2.24	1.83	2.04
		E	0.39	0.09	0.18	0.09	0.21	0.31	0.40	0.29
		T	2.52	2.10	2.08	2.10	2.24	2.55	2.23	2.33
		I%	85%	96%	91%	96%	91%	88%	82%	88%
		I	4.33	3.34	2.72	1.94	2.11	2.83	2.95	3.46

Program	Segment		Historical							
			2017	2018	2019	2020	2021	2022	2023	2024
	Business Transformation	E	0.18	0.42	-0.01	0.03	0.03	0.19	0.40	0.25
		T	4.51	3.76	2.71	1.97	2.14	3.02	3.35	3.71
		I%	96%	89%	100%	98%	99%	94%	88%	93%

1

Program	Segment		Historical							
			2017	2018	2019	2020	2021	2022	2023	2024
Customer Service	Billing	I	4.43	5.47	6.99	5.77	6.33	6.34	6.85	7.02
		E	2.18	2.33	3.20	2.93	2.82	3.13	3.19	3.56
		T	6.61	7.80	10.19	8.70	9.15	9.47	10.04	10.58
		I%	67%	70%	69%	66%	69%	67%	68%	66%
	Collections and Payments	I	3.07	4.07	4.22	3.36	3.11	3.32	3.85	4.28
		E	1.16	1.02	1.60	1.62	2.05	1.95	2.70	3.27
		T	4.23	5.09	5.82	4.98	5.16	5.27	6.55	7.55
		I%	73%	80%	73%	67%	60%	63%	59%	57%
	Customer Care	I	7.59	6.61	7.09	6.62	7.58	8.31	8.34	8.41
		E	2.19	3.67	4.52	4.29	4.20	4.64	6.12	6.77
		T	9.78	10.28	11.61	10.91	11.78	12.95	14.46	15.18
		I%	78%	64%	61%	61%	64%	64%	58%	55%
	Customer Connections and Key Accounts	I	0.44	1.13	1.14	1.32	1.44	1.69	1.48	1.49
		E	0.00	0.07	0.21	-0.11	0.30	0.15	0.16	0.14
		T	0.44	1.20	1.35	1.21	1.74	1.84	1.64	1.63
		I%	100%	94%	84%	109%	83%	92%	90%	91%
	Customer Service Excellence	I	0.65	0.66	1.52	1.17	1.56	1.53	1.54	2.55
		E	0.01	0.10	0.59	0.49	0.05	0.03	0.00	0.01
		T	0.66	0.76	2.11	1.66	1.61	1.56	1.54	2.56
		I%	98%	87%	72%	70%	97%	98%	100%	100%

2

1

Program	Segment		Historical							
			2017	2018	2019	2020	2021	2022	2023	2024
Digital and Innovation	Product Management	I	5.28	4.33	4.45	5.39	5.00	5.31	5.44	5.93
		E	0.76	1.00	0.96	2.77	2.59	2.55	2.61	2.96
		T	6.04	5.33	5.41	8.16	7.59	7.86	8.05	8.89
		I%	87%	81%	82%	66%	66%	68%	68%	67%
	IT Operations	I	2.80	2.48	3.57	2.46	2.74	3.19	3.54	3.98
		E	0.46	0.36	0.36	0.16	0.29	0.28	0.31	0.63
		T	3.26	2.84	3.93	2.62	3.03	3.47	3.85	4.61
		I%	86%	87%	91%	94%	90%	92%	92%	86%
	D&I Business	I	1.25	1.62	1.92	2.05	2.26	2.27	2.60	4.00
		E	0.17	0.11	0.14	0.41	0.55	0.57	1.02	1.33
		T	1.42	1.73	2.06	2.46	2.81	2.84	3.62	5.33
		I%	88%	94%	93%	83%	80%	80%	72%	75%
	Cyber Security	I	0.23	0.32	0.56	0.55	0.62	0.61	0.84	0.94
		E	0.04	0.01	0.02	0.16	0.09	0.25	0.27	0.17
		T	0.27	0.33	0.58	0.71	0.71	0.86	1.11	1.11
		I%	85%	97%	97%	77%	87%	71%	76%	85%
GRE&T Centre	I	0.46	0.78	1.46	1.80	1.21	1.50	1.85	2.68	
	E	1.89	1.82	2.87	0.88	0.76	0.74	0.27	0.43	
	T	2.35	2.60	4.33	2.68	1.97	2.24	2.12	3.11	
	I%	20%	30%	34%	67%	61%	67%	87%	86%	

2

Program	Segment		Historical							
			2017	2018	2019	2020	2021	2022	2023	2024
System Control	N/A	I	10.77	11.39	12.68	13.04	12.69	13.51	16.03	15.62
		E	1.20	0.15	0.05	0.06	0.03	0.06	0.07	0.13
		T	11.97	11.54	12.73	13.10	12.72	13.57	16.10	15.75
		I%	90%	99%	100%	100%	100%	100%	100%	99%

3

Program	Segment		Historical							
			2017	2018	2019	2020	2021	2022	2023	2024
Stations	N/A	I	4.23	5.83	5.54	5.60	5.65	6.57	7.16	6.16
		E	0.71	0.84	1.07	1.22	0.13	0.34	0.67	0.22
		T	4.94	6.67	6.61	6.82	5.78	6.91	7.83	6.38
		I%	86%	87%	84%	82%	98%	95%	91%	97%

1

Program	Segment		Historical							
			2017	2018	2019	2020	2021	2022	2023	2024
Records and Mapping Services	N/A	I	2.42	2.75	2.21	2.85	3.25	3.55	3.82	3.85
		E	0.00	0.00	0.13	0.00	0.12	0.35	0.49	0.54
		T	2.42	2.75	2.34	2.85	3.37	3.90	4.31	4.39
		I%	100%	100%	94%	100%	96%	91%	89%	88%

2

Program	Segment		Historical							
			2017	2018	2019	2020	2021	2022	2023	2024
Cable Locates	N/A	I	1.65	1.43	1.46	1.55	0.80	0.09	-0.12	1.96
		E	4.49	4.65	4.41	4.66	4.90	4.96	1.89	-1.51*
		T	6.14	6.08	5.87	6.21	5.70	5.05	1.77	0.45
		I%	27%	24%	25%	25%	14%	2%	-7%	436%

3

4 *Regulatory Adjustment to GOCA variance account is processed entirely to an OSP
 5 account.

6

Program	Segment		Historical							
			2017	2018	2019	2020	2021	2022	2023	2024
Network Metering	N/A	I	5.17	5.62	5.83	6.12	6.05	4.74	4.65	5.66
		E	2.04	2.47	3.11	3.86	3.21	3.33	3.04	2.82
		T	7.21	8.09	8.94	9.98	9.26	8.07	7.69	8.48
		I%	72%	69%	65%	61%	65%	59%	60%	67%

7

Program	Segment		Historical							
			2017	2018	2019	2020	2021	2022	2023	2024
Program Delivery	N/A	I	1.02	0.69	0.64	0.60	0.62	0.66	0.61	0.71
		E	0.00	0.01	0.00	0.04	0.00	0.00	0.01	0.01
		T	1.02	0.70	0.64	0.64	0.62	0.66	0.62	0.72
		I%	100%	99%	100%	94%	100%	100%	98%	99%

8

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Program	Segment		Historical							
			2017	2018	2019	2020	2021	2022	2023	2024
Vegetation Management	No Segment Split Available	I	0.37	0.55	0.51	N/A	N/A	N/A	N/A	N/A
		E	3.96	4.12	4.34	N/A	N/A	N/A	N/A	N/A
		T	4.33	4.67	4.85	N/A	N/A	N/A	N/A	N/A
		I%	9%	12%	11%	N/A	N/A	N/A	N/A	N/A
	Vegetation Management Cut Cycle	I	N/A	N/A	N/A	0.99	0.76	0.88	1.40	1.17
		E	N/A	N/A	N/A	4.11	4.15	4.25	5.18	4.52
		T	N/A	N/A	N/A	5.10	4.91	5.13	6.58	5.69
		I%	N/A	N/A	N/A	19%	15%	17%	21%	21%
	Reactive Tree Trimming	I	N/A	N/A	N/A	0.21	0.18	0.18	0.20	0.21
		E	N/A	N/A	N/A	0.00	0.02	0.00	0.00	0.02
		T	N/A	N/A	N/A	0.21	0.20	0.18	0.20	0.23
		I%	N/A	N/A	N/A	100%	90%	100%	100%	91%

2

Program	Segment		Historical							
			2017	2018	2019	2020	2021	2022	2023	2024
Overhead Inspections and Maintenance	No Segment Split Available	I	9.55	12.70	16.44	N/A	N/A	N/A	N/A	N/A
		E	0.92	1.32	1.86	N/A	N/A	N/A	N/A	N/A
		T	10.47	14.02	18.30	N/A	N/A	N/A	N/A	N/A
		I%	91%	91%	90%	N/A	N/A	N/A	N/A	N/A
	Asset Inspection	I	N/A	N/A	N/A	0.69	0.57	0.61	0.47	0.29
		E	N/A	N/A	N/A	0.44	0.38	2.09	1.42	1.51
		T	N/A	N/A	N/A	1.13	0.95	2.70	1.89	1.80
		I%	N/A	N/A	N/A	61%	60%	23%	25%	16%
	Disconnect/Reconnects	I	N/A	N/A	N/A	5.83	5.26	5.53	6.21	5.31
		E	N/A	N/A	N/A	0.95	1.49	2.22	1.30	1.99
		T	N/A	N/A	N/A	6.78	6.75	7.75	7.51	7.30
		I%	N/A	N/A	N/A	86%	78%	71%	83%	73%
	Preventative Maintenance	I	N/A	N/A	N/A	0.44	0.51	0.67	0.57	0.33
		E	N/A	N/A	N/A	0.26	0.71	0.53	0.67	0.52
		T	N/A	N/A	N/A	0.70	1.22	1.20	1.24	0.85
		I%	N/A	N/A	N/A	63%	42%	56%	46%	39%
	System Reactive Repairs and Trouble Calls	I	N/A	N/A	N/A	13.29	8.99	11.96	9.86	9.14
		E	N/A	N/A	N/A	0.50	0.44	0.92	0.51	1.36
		T	N/A	N/A	N/A	13.79	9.43	12.88	10.37	10.50
		I%	N/A	N/A	N/A	96%	95%	93%	95%	87%

1

Program	Segment		Historical							
			2017	2018	2019	2020	2021	2022	2023	2024
Underground Inspections and Maintenance	No Segment Split Available	I	8.97	11.51	12.69	N/A	N/A	N/A	N/A	N/A
		E	5.63	7.90	8.41	N/A	N/A	N/A	N/A	N/A
		T	14.60	19.41	21.10	N/A	N/A	N/A	N/A	N/A
		I%	61%	59%	60%	N/A	N/A	N/A	N/A	N/A
	Asset Inspection	I	N/A	N/A	N/A	1.46	1.78	1.68	1.36	0.75
		E	N/A	N/A	N/A	0.56	0.71	1.61	1.04	1.33
		T	N/A	N/A	N/A	2.02	2.49	3.29	2.40	2.08
		I%	N/A	N/A	N/A	72%	71%	51%	57%	36%
	Preventative Maintenance	I	N/A	N/A	N/A	0.10	0.18	0.08	0.02	0.01
		E	N/A	N/A	N/A	0.29	0.28	0.33	0.23	0.28
		T	N/A	N/A	N/A	0.39	0.46	0.41	0.25	0.29
		I%	N/A	N/A	N/A	26%	39%	20%	8%	3%
	System Reactive Repairs and Trouble Calls	I	N/A	N/A	N/A	9.83	8.67	10.99	10.57	9.62
		E	N/A	N/A	N/A	5.53	6.58	7.52	7.96	9.89
		T	N/A	N/A	N/A	15.36	15.25	18.51	18.53	19.51
		I%	N/A	N/A	N/A	64%	57%	59%	57%	49%

2

Program	Segment		Historical							
			2017	2018	2019	2020	2021	2022	2023	2024
Facilities	N/A	I	2.23	2.45	2.42	2.75	2.12	2.33	2.63	2.70
		E	0.22	0.32	0.41	1.01	0.49	0.31	1.85	0.32
		T	2.45	2.77	2.83	3.76	2.61	2.64	4.48	3.02
		I%	91%	88%	86%	73%	81%	88%	59%	89%

3

Program	Segment		Historical							
			2017	2018	2019	2020	2021	2022	2023	2024
Fleet	N/A	I	2.47	2.52	2.66	2.80	2.86	2.85	2.80	2.79
		E	0.06	0.02	0.18	0.08	0.10	0.08	0.00	0.06
		T	2.53	2.54	2.84	2.88	2.96	2.93	2.80	2.85
		I%	98%	99%	94%	97%	97%	97%	100%	98%

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1

Program	Segment		Historical							
			2017	2018	2019	2020	2021	2022	2023	2024
Property Taxes	N/A	I	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		E	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		T	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		I%	0%	0%	0%	0%	0%	0%	0%	0%

2

Program	Segment		Historical							
			2017	2018	2019	2020	2021	2022	2023	2024
Corporate Allocations	Shared Service Allocations	I	2.05	1.61	0.43	-0.01	0.21	0.06	0.03	0.00
		E	0.85	0.17	-0.02	0.00	0.00	0.00	0.00	0.00
		T	2.90	1.78	0.41	-0.01	0.21	0.06	0.03	0.00
		I%	71%	90%	105%	100%	100%	100%	100%	0%
	Fleet Recoveries	I	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		E	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		T	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		I%	0%	0%	0%	0%	0%	0%	0%	0%
	Material Recoveries	I	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		E	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		T	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		I%	0%	0%	0%	0%	0%	0%	0%	0%
	Other Recoveries	I*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-0.10
		E	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		T	0.07	0.00	0.00	0.00	0.00	0.00	0.00	-0.10
		I%	0%	0%	0%	0%	0%	0%	0%	100%

3

4 *Includes reclassification of employee safety costs that are allocated via the benefit pool.

5

6 b) Please see below for the requested information related to the programs segments in
7 Table 4-1-2, updated for 2025 Actual. For each segment only the Internal Resources
8 (I), External Resources (E), Total (T), and Internal Resources as a percentage of Total
9 (I%) have been provided. Internal Resources are comprised of Direct Labour, and
10 External Resources are comprised of Outside Service Provider (Contract Labour) and
11 Consulting. Other Program line items have been excluded.

1 **Table 2-2: 2025-2031 Internal/External Resource Expenditures by Program Segment**
 2 **(\$MM)**

Program	Segment		Actual	Bridge	Test	Forecast			
			2025	2026	2027	2028	2029	2030	2031
Asset Management	Asset Management	I	6.48	7.88	7.34	7.85	7.97	8.22	8.49
		E	0.20	0.36	0.41	0.42	0.58	0.64	0.70
		T	6.68	8.24	7.75	8.27	8.55	8.86	9.19
		I%	97%	96%	95%	95%	93%	93%	92%
	Grid Modernization	I	0.48	0.90	0.94	1.62	1.90	1.96	2.02
		E	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		T	0.48	0.90	0.94	1.62	1.90	1.96	2.02
		I%	100%	100%	100%	100%	100%	100%	100%

3

Program	Segment		Actual	Bridge	Test	Forecast			
			2025	2026	2027	2028	2029	2030	2031
Distribution Design	N/A	I	5.08	6.53	7.52	8.43	9.16	9.66	10.02
		E	0.49	0.18	0.10	0.10	0.11	0.22	0.22
		T	5.57	6.71	7.62	8.53	9.27	9.88	10.24
		I%	91%	97%	99%	99%	99%	98%	98%

4

1

Program	Segment		Actual	Bridge	Test	Forecast			
			2025	2026	2027	2028	2029	2030	2031
Corporate Services	Regulatory	I	4.10	4.44	4.80	5.13	5.31	5.48	5.66
		E	0.11	0.32	2.15	2.04	2.05	2.07	2.09
		T	4.21	4.76	6.95	7.17	7.36	7.55	7.75
		I%	97%	93%	69%	72%	72%	73%	73%
	Legal	I	1.20	1.84	1.92	1.98	2.04	2.10	2.17
		E	0.05	0.01	0.01	0.01	0.01	0.01	0.01
		T	1.25	1.85	1.93	1.99	2.05	2.11	2.18
		I%	96%	99%	99%	99%	100%	100%	100%
	Internal Audit	I	0.46	0.53	0.64	0.84	1.13	1.17	1.22
		E	0.00	0.30	0.30	0.30	0.30	0.30	0.30
		T	0.46	0.83	0.94	1.14	1.43	1.47	1.52
		I%	100%	64%	68%	74%	79%	80%	80%
	Government and Corporate Relations	I	2.02	2.27	2.38	2.48	2.58	2.67	2.76
		E	0.07	0.19	0.20	0.20	0.20	0.21	0.21
		T	2.09	2.46	2.58	2.68	2.78	2.88	2.97
		I%	97%	92%	92%	93%	93%	93%	93%
Strategy, ERM & Sustainability	I	0.78	0.78	0.81	0.84	0.87	0.90	0.94	
	E	0.01	0.03	0.03	0.03	0.03	0.03	0.03	
	T	0.79	0.81	0.84	0.87	0.90	0.93	0.97	
	I%	99%	96%	96%	97%	97%	97%	97%	

2

Program	Segment		Actual	Bridge	Test	Forecast			
			2025	2026	2027	2028	2029	2030	2031
Finance and Treasury	Finance	I	11.53	12.03	12.84	13.80	15.23	16.05	16.50
		E	0.18	0.25	0.46	0.53	0.57	0.27	0.35
		T	11.71	12.28	13.30	14.33	15.80	16.32	16.85
		I%	98%	98%	97%	96%	96%	98%	98%
	Treasury	I	1.90	2.05	2.23	2.19	2.26	2.33	2.40
		E	0.30	0.28	0.10	0.10	0.10	0.10	0.10
		T	2.20	2.33	2.33	2.29	2.36	2.43	2.50
		I%	86%	88%	96%	96%	96%	96%	96%

3

1

Program	Segment		Actual	Bridge	Test	Forecast			
			2025	2026	2027	2028	2029	2030	2031
Supply Chain Services	N/A	I	8.06	8.32	8.72	9.46	10.12	10.44	10.77
		E	0.16	0.00	0.00	0.00	0.00	0.00	0.00
		T	8.22	8.32	8.72	9.46	10.12	10.44	10.77
		I%	98%	100%	100%	100%	100%	100%	100%

2

Program	Segment		Actual	Bridge	Test	Forecast			
			2025	2026	2027	2028	2029	2030	2031
Human Resources	Human Resources	I	8.49	8.97	9.49	10.04	10.70	11.08	11.45
		E	1.13	0.72	0.82	0.88	0.80	0.92	0.83
		T	9.62	9.69	10.31	10.92	11.50	12.00	12.28
		I%	88%	93%	92%	92%	93%	92%	93%
	Health & Safety and Environment	I	2.20	2.15	2.35	2.58	2.91	3.02	3.13
		E	0.30	0.41	0.34	0.39	0.46	0.40	0.35
		T	2.50	2.56	2.69	2.97	3.37	3.42	3.48
		I%	88%	84%	87%	87%	86%	88%	90%
	Business Transformation	I	3.69	3.93	4.07	4.38	4.83	4.99	5.15
		E	0.36	0.10	0.83	0.50	0.31	0.31	0.31
		T	4.05	4.03	4.90	4.88	5.14	5.30	5.46
		I%	91%	98%	83%	90%	94%	94%	94%

3

1

Program	Segment		Actual	Bridge	Test	Forecast			
			2025	2026	2027	2028	2029	2030	2031
Customer Service	Billing	I	7.16	8.62	7.53	7.80	8.04	8.44	8.86
		E	3.26	2.21	2.15	2.27	0.54	0.55	0.57
		T	10.42	10.83	9.68	10.07	8.58	8.99	9.43
		I%	69%	80%	78%	77%	94%	94%	94%
	Collections and Payments	I	4.12	4.73	4.46	4.77	5.23	5.42	5.75
		E	3.19	2.55	2.86	2.82	2.42	2.41	2.40
		T	7.31	7.28	7.32	7.59	7.65	7.83	8.15
		I%	56%	65%	61%	63%	68%	69%	71%
	Customer Care	I	8.61	9.49	9.79	10.38	12.39	13.55	14.91
		E	7.46	6.35	6.40	6.54	6.53	6.99	6.71
		T	16.07	15.84	16.19	16.92	18.92	20.54	21.62
		I%	54%	60%	60%	61%	65%	66%	69%
	Customer Connections and Key Accounts	I	1.88	2.28	2.32	2.43	2.70	2.91	3.08
		E	0.06	0.16	0.21	0.24	0.28	0.29	0.29
		T	1.94	2.44	2.53	2.67	2.98	3.20	3.37
		I%	97%	93%	92%	91%	91%	91%	91%
Customer Service Excellence	I	3.08	4.05	4.23	4.90	5.60	5.97	6.18	
	E	0.31	0.00	0.00	0.00	0.28	0.29	0.29	
	T	3.39	4.05	4.23	4.90	5.88	6.26	6.47	
	I%	91%	100%	100%	100%	95%	95%	96%	

2

1

Program	Segment		Actual	Bridge	Test	Forecast			
			2025	2026	2027	2028	2029	2030	2031
Digital and Innovation	Product Management	I	7.33	7.10	7.39	7.70	8.49	9.58	10.93
		E	3.15	3.25	3.86	4.34	3.83	5.41	3.73
		T	10.48	10.35	11.25	12.04	12.32	14.99	14.66
		I%	70%	69%	66%	64%	69%	64%	75%
	IT Operations	I	5.41	5.45	6.04	6.69	7.02	7.26	7.52
		E	0.42	0.81	0.84	0.83	0.84	0.85	0.86
		T	5.83	6.26	6.88	7.52	7.86	8.11	8.38
		I%	93%	87%	88%	89%	89%	90%	90%
	D&I Business	I	2.32	2.34	2.60	2.67	3.41	3.54	3.67
		E	1.21	0.75	1.16	0.82	0.63	0.64	0.64
		T	3.53	3.09	3.76	3.49	4.04	4.18	4.31
		I%	66%	76%	69%	77%	84%	85%	85%
	Cyber Security	I	1.03	1.00	1.17	1.58	1.87	1.94	2.01
		E	0.39	0.57	1.41	0.55	0.62	0.51	0.58
		T	1.42	1.57	2.58	2.13	2.49	2.45	2.59
		I%	73%	64%	45%	74%	75%	79%	78%
GRE&T Centre	I	2.28	2.96	3.12	3.08	3.29	3.43	3.57	
	E*	0.27	-0.22	-0.28	-0.53	0.06	0.06	0.06	
	T	2.55	2.74	2.84	2.55	3.35	3.49	3.63	
	I% **	89%	108%	110%	121%	98%	98%	98%	

2

3 *Note 1: Negative values are due to the budgeting of all expected reimbursements to the
4 OSP statement line. Actual will reflect an allocation between OSP and Labour.

5

6 **Note 2: Values greater than 100% are due to Note 1

7

Program	Segment		Actual	Bridge	Test	Forecast			
			2025	2026	2027	2028	2029	2030	2031
System Control	N/A	I	11.96	12.98	14.60	15.53	16.01	16.50	17.03
		E	0.18	0.05	0.11	0.12	0.12	0.12	0.12
		T	12.14	13.03	14.71	15.65	16.13	16.62	17.15
		I%	99%	100%	99%	99%	99%	99%	99%

8

1

Program	Segment		Actual	Bridge	Test	Forecast			
			2025	2026	2027	2028	2029	2030	2031
Stations	N/A	I	7.52	8.76	9.30	9.70	10.08	10.40	10.72
		E	0.44	0.25	0.16	0.16	0.16	0.17	0.18
		T	7.96	9.01	9.46	9.86	10.24	10.57	10.90
		I%	94%	97%	98%	98%	98%	98%	98%

2

Program	Segment		Actual	Bridge	Test	Forecast			
			2025	2026	2027	2028	2029	2030	2031
Records and Mapping Services	N/A	I	4.45	4.33	4.70	4.96	5.13	5.29	5.14
		E	0.51	0.52	0.42	0.43	0.44	0.45	0.45
		T	4.96	4.85	5.12	5.39	5.57	5.74	5.59
		I%	90%	89%	92%	92%	92%	92%	92%

3

Program	Segment		Actual	Bridge	Test	Forecast			
			2025	2026	2027	2028	2029	2030	2031
Cable Locates	N/A	I	1.30	0.72	0.77	0.79	0.81	0.84	0.86
		E	-0.83	0.01	7.89	8.14	8.40	8.66	8.94
		T	0.47	0.73	8.66	8.93	9.21	9.50	9.80
		I%	277%	99%	9%	9%	9%	9%	9%

4

Program	Segment		Actual	Bridge	Test	Forecast			
			2025	2026	2027	2028	2029	2030	2031
Network Metering	N/A	I	5.46	5.80	6.01	6.24	6.39	6.60	6.83
		E	4.15	3.23	5.16	4.81	4.72	4.09	3.34
		T	9.61	9.03	11.17	11.05	11.11	10.69	10.17
		I%	57%	64%	54%	56%	58%	62%	67%

5

Program	Segment		Actual	Bridge	Test	Forecast			
			2025	2026	2027	2028	2029	2030	2031
Program Delivery	N/A	I	1.06	1.44	1.50	1.56	1.62	1.67	1.73
		E	0.02	0.00	0.08	0.08	0.08	0.09	0.09
		T	1.08	1.44	1.58	1.64	1.70	1.76	1.82
		I%	98%	100%	95%	95%	95%	95%	95%

1

Program	Segment		Actual	Bridge	Test	Forecast			
			2025	2026	2027	2028	2029	2030	2031
Vegetation Management	Vegetation Management Cut Cycle	I	0.64	0.08	0.08	0.08	0.08	0.08	0.08
		E	5.63	5.89	6.69	6.83	6.97	7.11	7.25
		T	6.27	5.97	6.77	6.91	7.05	7.19	7.33
		I%	10%	1%	1%	1%	1%	1%	1%
	Reactive Tree Trimming	I	0.20	0.22	0.24	0.25	0.27	0.28	0.29
		E	-0.01	0.00	0.00	0.00	0.00	0.00	0.00
		T	0.19	0.22	0.24	0.25	0.27	0.28	0.29
		I%	105%	100%	100%	100%	100%	100%	100%

2

Program	Segment		Actual	Bridge	Test	Forecast			
			2025	2026	2027	2028	2029	2030	2031
Overhead Inspections and Maintenance	Asset Inspection	I	0.39	0.56	0.62	0.67	0.71	0.73	0.76
		E	2.07	1.88	1.68	1.81	1.86	1.91	1.97
		T	2.46	2.44	2.30	2.48	2.57	2.64	2.73
		I%	16%	23%	27%	27%	28%	28%	28%
	Disconnect/Reconnects	I	5.55	5.57	6.15	6.62	7.03	7.29	7.54
		E	1.92	1.94	1.96	1.98	2.02	2.06	2.10
		T	7.47	7.51	8.11	8.60	9.05	9.35	9.64
		I%	74%	74%	76%	77%	78%	78%	78%
	Preventative Maintenance	I	0.64	1.06	1.17	1.26	1.34	1.39	1.44
		E	0.95	1.15	1.16	1.18	1.19	1.21	1.22
		T	1.59	2.21	2.33	2.44	2.53	2.60	2.66
		I%	40%	48%	50%	52%	53%	53%	54%
	System Reactive Repairs and Trouble Calls	I	10.41	12.53	13.48	14.28	15.01	15.53	16.05
		E	0.39	0.31	0.33	0.33	0.34	0.35	0.35
		T	10.80	12.84	13.81	14.61	15.35	15.88	16.40
		I%	96%	98%	98%	98%	98%	98%	98%

3

1

Program	Segment		Actual	Bridge	Test	Forecast			
			2025	2026	2027	2028	2029	2030	2031
Underground Inspections and Maintenance	Asset Inspection	I	0.70	0.71	0.78	0.84	0.89	0.93	0.96
		E	1.36	1.80	1.82	1.97	2.03	2.09	2.15
		T	2.06	2.51	2.60	2.81	2.92	3.02	3.11
		I%	34%	28%	30%	30%	30%	31%	31%
	Preventative Maintenance	I	0.04	0.07	0.08	0.09	0.09	0.10	0.10
		E	0.28	0.32	0.34	0.35	0.36	0.37	0.38
		T	0.32	0.39	0.42	0.44	0.45	0.47	0.48
		I%	13%	18%	19%	20%	20%	21%	21%
	System Reactive Repairs and Trouble Calls	I	12.09	12.52	13.83	14.88	15.80	16.40	16.96
		E	11.11	6.47	6.93	7.07	7.21	7.35	7.50
		T	23.20	18.99	20.76	21.95	23.01	23.75	24.46
		I%	52%	66%	67%	68%	69%	69%	69%

2

Program	Segment		Actual	Bridge	Test	Forecast			
			2025	2026	2027	2028	2029	2030	2031
Facilities	N/A	I	2.82	2.73	2.84	2.93	3.02	3.11	3.21
		E	0.69	0.00	0.02	0.02	0.10	0.02	0.02
		T	3.51	2.73	2.86	2.95	3.12	3.13	3.23
		I%	80%	100%	99%	99%	97%	99%	99%

3

Program	Segment		Actual	Bridge	Test	Forecast			
			2025	2026	2027	2028	2029	2030	2031
Fleet Asset Management	N/A	I	3.09	3.04	3.15	3.25	3.35	3.45	3.56
		E	0.02	0.00	0.02	0.02	0.11	0.02	0.02
		T	3.11	3.04	3.17	3.27	3.46	3.47	3.58
		I%	99%	100%	99%	99%	97%	99%	99%

4

Program	Segment		Actual	Bridge	Test	Forecast			
			2025	2026	2027	2028	2029	2030	2031
Property Taxes	N/A	I	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		E	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		T	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		I%	0%	0%	0%	0%	0%	0%	0%

5

1

Program	Segment		Actual	Bridge	Test	Forecast			
			2025	2026	2027	2028	2029	2030	2031
Corporate Allocations	Shared Service Allocations	I	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		E	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		T	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		I%	0%	0%	0%	0%	0%	0%	0%
	Fleet Recoveries	I	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		E	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		T	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		I%	0%	0%	0%	0%	0%	0%	0%
	Material Recoveries	I	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		E	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		T	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		I%	0%	0%	0%	0%	0%	0%	0%
	Other Recoveries	I	-1.06*	-7.75	-8.46	-9.18	-9.86	-10.34	-10.78
		E	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		T	-1.06	-7.75	-8.46	-9.18	-9.86	-10.34	-10.78
		I%	100%	100%	100%	100%	100%	100%	100%

2

3 *Includes reclassification of employee safety costs that are allocated via the benefit pool.

**RESPONSES TO ASSOCIATION OF MAJOR POWER CONSUMERS IN ONTARIO
 INTERROGATORIES**

INTERROGATORY 2-AMPCO-60

Ref: Ex 4-2-5 p.11

Please provide the forecast value of the commodity types in Table 4-2-30 in 2031 based on projected quantities by 2031.

RESPONSE:

Please find attached the updated Table 4-2-30 with forecasted value of the commodity types by 2031. Please note that the forecasted values reflect inflationary increases as outlined in the capital expenditure plan and do not account for broader market fluctuations, tariff impacts, or changes in commodity pricing.

Table 1 – Forecasted Value of the Commodity Types

Commodity Type	Projected Materials by 2031 (Qty)	Projected Value in 2031 (\$)	Expected Average Price/Unit with Inflation
Insulators	58534	\$ 6,325,534	\$ 108
Metering	601551	\$ 16,397,369	\$ 27
Misc	2544661	\$ 36,012,904	\$ 14
Switches & Fuses	81852	\$ 31,927,568	\$ 390
Switchgear	269	\$ 18,826,927	\$ 69,916
Transformer	3311	\$ 51,843,969	\$ 15,658
Wire/Cable	1958180	\$ 37,447,134	\$ 19
Wood Poles	3767	\$ 10,664,185	\$ 2,831
Concrete Poles	1530	\$ 7,508,041	\$ 4,908
Total		\$ 216,953,629	

- 1 • Project Change Request process: Please refer to 2-AMPCO-28 for a description or
- 2 the Project Change Request thresholds and approvals as defined by the project
- 3 governance framework.

1 required. Based on the results of the review, Alectra will recommend and/or implement
2 appropriate corrective actions to address the power quality issues.
3
4 c) Alectra does not forecast or track capital expenditures specifically for improving power
5 quality for Large Use customers, as distribution infrastructure and feeders are shared
6 across multiple customer classes. Accordingly, costs cannot be isolated by customer
7 group. Over the 2027–2031 period, a significant portion of Alectra’s forecast capital
8 investments are directed toward Asset Renewal, Capacity Upgrades, and Grid
9 Resiliency. These programs are intended to improve overall system reliability and
10 performance, including reducing outage frequency and voltage disturbances, which in
11 turn enhances power quality for all customers, including Large Use customers.

**RESPONSES TO ASSOCIATION OF MAJOR POWER CONSUMERS IN ONTARIO
 INTERROGATORIES**

INTERROGATORY 4-AMPCO-63

Ref : Ex 4-2-12 p.7

a) Page 7: Please add 2025 actuals to Table 4-2-84.

b) Page 7: Please add 2025 data to Table 4-2-86.

RESPONSE:

a) **Table 1 – (Table 4-2-84: Gross and Net Cable Locate Program Costs (\$MM)
 (Updated for 2025 Actuals)**

	2023	2024	2025	2026
Locate Program Costs (Gross)	7.3	7.0	7.9	7.6
Amounts recorded in the Variance Account	3.1	1.7	2.5	2.1
Locate Program Costs (Net)	4.2	5.2	5.4	5.5

b) The table below contains a correction to prefiled evidence for locate volumes for 2023 and 2024 which were previously stated at 199,510 and 189,661, respectively. Previous evidence had counted a portion of the locates more than once in the affected years.

Table 2 – (Table 4-2-86: Locate Notification Volumes 2017-2024 (Updated for 2025 Actuals)

2017	2018	2019	2020	2021	2022	2023	2024	2025
200,686	191,447	180,767	174,313	198,805	198,381	199,452	189,460	185,372

**RESPONSES TO ASSOCIATION OF MAJOR POWER CONSUMERS IN ONTARIO
 INTERROGATORIES**

INTERROGATORY 4-AMPCO-64

Ref : Ex 4-2-14 p.9

a) Page 6: Please provide the document that governs the Request for Change process.

b) Page 7: Please provide the full list and description of key project performance indicators monitored by PDG.

c) Page 7: Please complete the following table:

	Total # Projects Delivered	# Projects Delivered within 90 days of Planned Finish (Late)	# Projects Delivered > 90 days of Planned Finish (Late)	# Projects Delivered > 10% of Planned Cost and >\$100,000
2020-2025				

RESPONSE:

a) Alectra Utility’s Request for Change process is provided in Attachment 4-AMPCO-64_Attach 1_RFC Process

b) Please see response to 2-AMPCO-23 for a list of metrics monitored by PDG. In addition, PDG monitors Cost Performance Indicator and Schedule Performance Indicator.

Cost Performance Index (“CPI”), measures the company’s ability to complete projects within their established budget. Actual project costs are measured as a ratio of actual to planned estimated costs so to determine the CPI.

1 Schedule Performance Index (“SPI”), measures the company’s ability to complete
 2 projects within their planned schedule. SPI is calculated by comparing the actual finish
 3 date of a project to the anticipated (scheduled) finished date. The SPI metric is the
 4 percentage of projects which were completed within 90 days before or after the
 5 anticipated finished date.

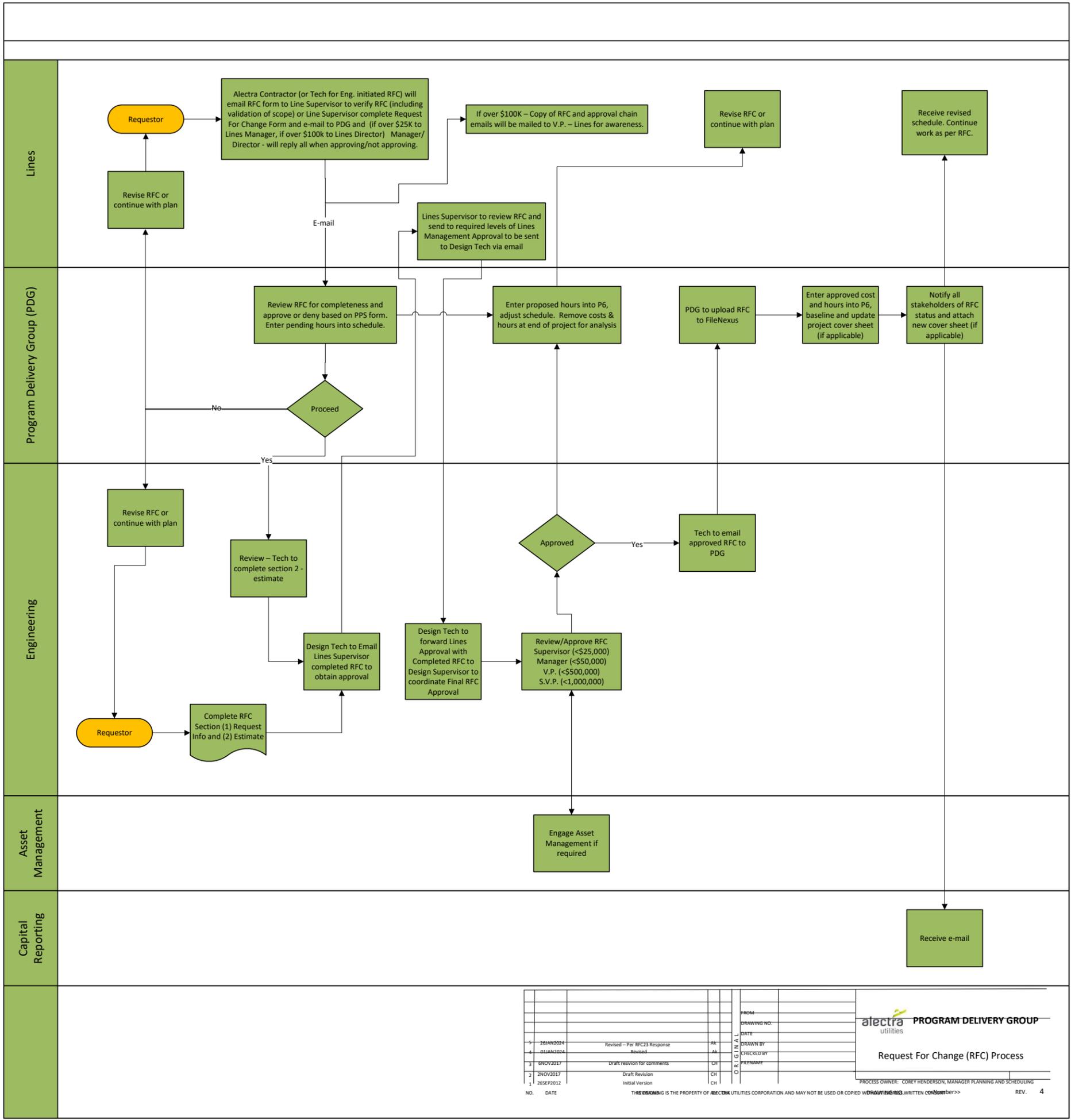
6

7 c) **Table 1 - Project Delivered from 2020-2025**

	Total # Projects Delivered	# Projects Delivered within 90 days of Planned Finish (Late)	# Projects Delivered > 90 days of Planned Finish (Late)	# Projects Delivered > 10% of Planned Cost and >\$100,000
2020-2025	5,534	2,059	1,616	1,617

2-AMPCO-64

Attachment 1 RFC Process



NO.	DATE	DESCRIPTION	BY	CHKD BY	STATUS
5	26JAN2024	Revised - Per RFC23 Response	AK		ORIGINAL
4	01JAN2024	Revised	AK		ORIGINAL
3	8NOV2017	Draft Revision for comments	CH		ORIGINAL
2	2NOV2017	Draft Revision	CH		ORIGINAL
1	25SEP2012	Initial Version	CH		ORIGINAL


PROGRAM DELIVERY GROUP
 utilities
Request For Change (RFC) Process
 PROCESS OWNER: COREY HENDERSON, MANAGER PLANNING AND SCHEDULING
 REV. 4

1 **RESPONSE:**

2

- 3 a. Table 1 includes a correction to prefiled evidence for Overhead Asset Inspections
 4 completed in the years 2021 and 2022. Exhibit 4, Tab 2, Schedule 16 page 26 previously
 5 noted 13,285 and 100,900 inspections were completed in 2021 and 2022, respectively.
 6 These numbers have been updated to the corrected volumes in the table below.

7

8 **Table 1: Unit Cost of Overhead Asset Inspections Completed (2020-2025)**

	2020	2021	2022	2023	2024	2025
# Overhead Asset Inspections Completed	26,931	7,786	79,486	43,363	46,288	52,444
Cost \$	\$1.25M	\$1.08M	\$2.92M	\$1.98M	\$1.88M	\$2.33M
\$/Unit	\$46.41	\$138.71	\$36.74	\$45.66	\$40.62	\$44.43

9

10 b) **Table 2 - Unit Cost of Overhead Asset Inspections Completed (2026-2031)**

	2026	2027	2028	2029	2030	2031
# Overhead Asset Inspections Forecast	60,127	47,039	57,188	60,127	47,039	57,188
Cost \$	\$2.54M	\$2.41M	\$2.59M	\$2.69M	\$2.77M	\$2.85M
\$/Unit	\$42.24	\$51.23	\$45.29	\$44.74	\$58.89	\$49.84

11

- 12 c) The information requested is provided for 2023-2025 in Table 3 below. Prior to 2023,
 13 Alectra Utilities did not track and categorize corrective actions:

14

15 **Table 3 - Number of Potential Corrective Actions**

	2023	2024	2025
# Potential Corrective Actions	87,627	91,614	99,760
# Classified as Grade 1	11,032	13,825	17,178

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- d)
- i. Please see Table 4 below for number of disconnect/reconnect requests from 2021-2025 (note that 2021 is a partial year beginning in June 2021, following updates to the intake system which enabled tracking of this data):

Table 4 - Disconnect/Reconnect Requests (2021-2025)

2021	2022	2023	2024	2025
7,019	12,701	11,116	10,568	9,212

A forecast of disconnect/reconnect activities for the years 2026-2031 has been provided in Table 5 below.

Table 5 - Disconnect/Reconnect Requests (2026-2031)

2026	2027	2028	2029	2030	2031
7,210	7,035	7,074	7,114	7,152	7,190

- ii. Please refer to 2-AMPCO-43-a.
- iii. Please refer to 4-CCC-58-e.
- iv. Please refer to IR 4-CCC-57 (f) and (g) for overhead assets requiring maintenance. Alectra does not track quantities of assets requiring repairs outside of corrective actions.

1 b) **Table 2 - Underground Asset Inspections 2026-2031**

	2026	2027	2028	2029	2030	2031
# Underground Asset Inspections Forecast	28,617	33,175	29,347	28,617	33,175	29,347
Cost \$	\$2.65M	\$2.75M	\$2.96M	\$3.07M	\$3.17M	\$3.26M
\$/Unit	\$92.60	\$82.89	\$100.86	\$107.28	\$95.55	\$111.08

1 in their career. In addition, Supervisory staff oversee a mix of overhead and underground
2 work and clerical staff assist overhead and underground functions.

1 **Table 1 - Apprentice, Student and Temporary FTEs (2017-2031)**

Number of FTEs	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Apprentice	62.2	57.9	62.8	61.9	58.1	65.7	60.5	54.6	79.4	83	92	101	107	107	107
Student	73.8	49.6	64.9	26.8	44.4	52.8	61.3	63.6	64.6	74.4	75.3	76	75	75	75
Temporary	63.1	120.9	60.1	38.7	46	27.5	33	37.7	43.9	30.3	11.8	11	8	5	5

2

- 1 2. The impacts in this category consider positions that are in the FTE schedule throughout
2 the entire 2027 to 2031 period. The full impact of position additions/removals between
3 2028-2031 are quantified under the 'Incremental Workforce' category.
4 3. This category quantifies the cost paid to employees above and beyond the amount
5 allocated to the 'Inflation' category.

6

7 Calculation Inputs:

8

9 A: 2027 Position dollars in Plan per assumption 2.

10 B: Inflation on 2027 Position dollars, calculated as 1.7% per year with compounding per
11 assumption 1. *This amount is allocated to the 'Inflation' category.*

12 C: 2031 Position dollars In Plan per assumption 2.

13

14 Allocation to Labour Progressions/Adjustments is calculated at the position level.

15

16 Input C - Input A – Input B: Quantifies the Total Cost Change from 2027 to 2031 and removes
17 the impact that can be attributed to inflation. The remaining amount is the increase that is
18 attributed to labour progressions for this position.

19

20 **Illustrative Example:**

21

22 A position is costed as \$100,000 in 2027 and \$114,000 in 2031. Assume Inflation of 1.7%
23 (2.0% less 0.3% Cohort 3 productivity factor):

24

25 A: \$100,000

26 B: $(\$100,000 * 1.017 ^ 4) - \$100,000 = \$6,975$

27 C: \$114,000

28

29 Allocation to Progressions/Adjustments = $\$114,000 - \$100,000 - \$6,975 = \$7,025$

**RESPONSES TO ASSOCIATION OF MAJOR POWER CONSUMERS IN ONTARIO
INTERROGATORIES**

INTERROGATORY 4-AMPCO-78

Ref: Ex 4-3-5 p.6; Appendix 2-K

Please reconcile the employee benefit costs in Table 4-3-12 to the Total Benefits line in Appendix 2-K.

RESPONSE:

The tables below provide the reconciliation of the employee benefit costs in Table 4-3-12 to the Total Benefits line in Appendix 2-K and have been updated with 2025 actuals.

Table 1 – Reconciliation of the Employee Benefit Costs

	2017	2018	2019	2020	2021	2022	2023	2024
Total Benefits in Table 4-3-12	34,711,892	36,223,834	38,358,338	37,364,575	39,235,747	40,439,968	46,029,285	47,851,657
Employee Future Benefits	3,045,147	3,907,890	3,183,423	4,713,260	4,658,301	5,287,584	4,642,871	4,634,251
Total Benefits in Appendix 2-K	37,757,039	40,131,724	41,541,761	42,077,835	43,894,048	45,727,551	50,672,156	52,485,909

	2025	2026	2027	2028	2029	2030	2031
Total Benefits in Table 4-3-12	50,822,144	54,044,595	59,511,925	64,920,304	70,227,930	74,224,953	78,115,916
Employee Future Benefits	4,678,221	4,570,058	4,597,533	4,625,362	4,625,362	4,625,362	4,625,362
Total Benefits in Appendix 2-K	55,500,365	58,614,653	64,109,458	69,545,666	74,853,292	78,850,315	82,741,278

1 c) This table provides the turnover rate for 2019-2025:

2

3 **Table 2 – Turnover Rate**

2019	2020	2021	2022	2023	2024	2025
7.13%	5.60%	7.57%	9.52%	5.88%	5.36%	5.09%

**RESPONSES TO ASSOCIATION OF MAJOR POWER CONSUMERS IN ONTARIO
 INTERROGATORIES**

INTERROGATORY 4-AMPCO-80

Ref: Appendix 2-K

a) With respect to Appendix 2-K, please provide the number of employees, Salary and Wages, Benefits and Compensation data by the following FTE categories: Executive, Management, Union, and Non-Union. In the response, please provide a further breakdown of overtime, short-term incentive pay, long-term incentive pay by the above FTE categories, update for 2025 actuals, and provide an excel version of the response.

b) Please complete the following Table.

Labour	2020	2021	2022	2023	2024	2025
Regular Hours - Forecast						
Regular Hours - Actual						
Overtime Hours - Forecast						
Overtime Hours - Actual						
Regular \$ - Forecast						
Regular \$ - Actual						
Overtime \$ - Forecast						
Overtime \$ Actual						

c) Please complete the following Table.

Labour	2026	2027	2028	2029	2030	2031
Regular Hours - Forecast						
Overtime Hours - Forecast						
Regular \$ - Forecast						
Overtime \$ - Forecast						

- 1 d) Please provide the number of Part-Time FTEs for each of the years 2017 to 2031 by
 2 Employee category.
 3
- 4 e) Please provide the number of employees that are eligible for short-term incentive pay,
 5 and long-term incentive pay, by FTE categories (Executive, Management, Union, and
 6 Non-Union) for each of the years 2017 to 2031.
 7
- 8 f) Please provide the number of eligible employees who received short-term incentive pay,
 9 and long-term incentive pay, for each year 2020 to 2025.
 10
- 11 g) Please provide the assumptions in the 2027-2031 budget with respect to incentive pay.
 12

13 **RESPONSE:**

14

15 a) See attachment 4-AMPCO-80_Attach_1_2K.

16

17 b)

18 **Table 1 – Labour 2020 to 2025**

Labour	2020	2021	2022	2023	2024	2025
Regular Hours - Forecast	n/a	n/a	n/a	n/a	n/a	n/a
Regular Hours - Actual	2,436,965	2,599,837	2,804,822	2,792,622	2,790,610	2,924,909
Overtime Hours - Forecast	n/a	n/a	n/a	n/a	n/a	n/a
Overtime Hours - Actual	150,341	196,369	196,896	192,324	172,261	179,827
Regular \$ - Forecast	n/a	n/a	n/a	n/a	n/a	n/a
Regular \$ - Actual	\$146.13	\$152.78	\$156.57	\$158.43	\$166.48	\$178.21
Overtime \$ - Forecast	n/a	n/a	n/a	n/a	n/a	n/a

Labour	2020	2021	2022	2023	2024	2025
Overtime \$ Actual	\$18.08	\$17.36	\$19.04	\$20.07	\$18.57	\$20.33

1 Note: the dollar figures are provided in (\$MM).

2

3 c)

4 **Table 2 – Labour 2026 to 2031**

<u>Labour</u>	2026	2027	2028	2029	2030	2031
Regular Hours - Forecast	3,105,157	3,215,939	3,351,517	3,473,038	3,515,057	3,544,550
Regular Hours - Actual	n/a	n/a	n/a	n/a	n/a	n/a
Overtime Hours – Forecast (Note 1)	n/a	n/a	n/a	n/a	n/a	n/a
Overtime Hours - Actual	n/a	n/a	n/a	n/a	n/a	n/a
Regular \$ - Forecast	\$255.9	\$277.7	\$299.9	\$320.8	\$335.5	\$349.3
Regular \$ - Actual	n/a	n/a	n/a	n/a	n/a	n/a
Overtime \$ - Forecast	\$15.5	\$15.9	\$16.2	\$16.6	\$17.1	\$17.5
Overtime \$ - Actual	n/a	n/a	n/a	n/a	n/a	n/a

5 Note: the dollar figures are provided in (\$MM).

6

7 Note 1 – Overtime costs are planned based on total cost during the planning
8 process. Forecasted overtime hours are not available.

9

10 d) The following table provides the part time FTE by employee category. There are no
11 planned part time FTE in 2026-2031.

1 f) The table provide the number of eligible employees who received short-term incentive
 2 pay, and long-term incentive pay, for each year 2020 to 2025. The year the incentive is
 3 paid is utilized in this table.
 4

5 **Table 6 – Eligible and Received Short-term and Long-term Incentive Pay 2020 to 2025**

Category	2020	2021	2022	2023	2024	2025
Executive	N/A	N/A	1	2	2	2
Management	294	277	283	295	286	309
Non-Union	196	192	199	200	208	234
Total STIP Received	490	469	483	497	496	545
Total LTIP Received	0	0	1	2	2	2

6 Note: from 2017-2020 Executive positions were in Alectra Inc.

7 g) Alectra Utilities forecasts eligible non-union incentive payments by job grade, using
 8 applicable ratios of incentive pay target to base salaries for each grade.
 9 For 2027-2031, Alectra Utilities assumed that incentive pay (STIP) achievements will be
 10 consistent with planned targets (100%) and remain stable throughout the period.

4-AMPCO-80

Attachment 1 App 2-K Position Category Breakdown

Please see live Excel

1 Network Metering programs. For the 2026-2031 period, after normalizing for the
2 impact of the GOCA deferral account, increases pertain to annual work volumes for
3 planned vegetation management, UG reactive repairs and maintenance, and AMI
4 renewal (which declines after AMI Renewal completion).

- 5
- 6 • **Employee Training, Travel and Admin:** Employee Training, Travel and Admin costs
7 are expected to increase throughout the forecast period based on higher permanent
8 headcount increases. Please refer to Exhibit 4, Tab 3, Schedule 3 for more
9 information on headcount.
 - 10
 - 11 • **OEB costs:** OEB costs are expected to increase in 2027 due to the treatment of OEB
12 cost assessment fees. Please refer to Exhibit 4, Tab 2, Schedule 3, Page 11-12 for
13 more information.
 - 14
 - 15 • **Property Taxes:** Property taxes are expected to increase due to the anticipated start
16 of a new property tax assessment cycle in 2026. Please refer to Exhibit 4, Tab 2,
17 Schedule 7, Page 5 for more information.
 - 18
 - 19 • **Consulting:** Consulting expenditures are expected to increase in 2027 as a result of
20 the recovery of 1/5 one-time costs related to the preparation of this application,
21 recovered over a 5-year period (see Exhibit 4, Tab 2, Schedule 3, Page 12) and
22 system upgrades and cyber security enhancements in IT. In 2030, consulting is
23 increasing primarily attributable to the ERP replacement initiative in IT. Please refer
24 to Exhibit 4, Tab 2, Schedule 8 for more information.
 - 25
 - 26 • **Insurance:** Insurance premiums are expected to increase in all planned years
27 because of annual price increases.
 - 28
 - 29 • **Credit Losses:** Credit losses increase in 2019 principally due to system integrations
30 and the clearing of legacy accounts. In 2020 the increase is mainly attributable to
31 higher arrears as a result of the COVID-19 pandemic. Credit losses gradually

1 returned to more historical levels by 2024. The increased costs in 2027 are principally
2 due to increased arrears balances. Please refer to Exhibit 4, Tab 2, Schedule 7 for
3 more information.

4

- 5 • **Other:** Other expenditures increase in 2020 principally due to higher bank charges
6 as a result of market uncertainty, triggered by the onset of the COVID-19 pandemic.
7 Please refer to Exhibit 4, Tab 2, Schedule 4 for more information. The increase in
8 2022 is a result of shared service allocations. The lower expenditures in 2023 are
9 principally attributable to lower environmental expenses and lower direct vehicle
10 costs in the OH and UG inspection and maintenance programs. In 2026, the increase
11 is mainly due to the Hamilton water billing exit resulting in higher allocated OM&A
12 costs, offset by lower repairs and maintenance in the facilities and fleet programs. In
13 2027 the increase is mainly due to increased LEAP program funding in the Customer
14 Service program and the recovery of costs associated with this application in the
15 Regulatory program, partially offset by lower postage and delivery costs in Customer
16 Service.

4-AMPCO-81

Attachment 1 Appendix 2-JB Cost Driver Breakdown

Please see live Excel

**RESPONSES TO ASSOCIATION OF MAJOR POWER CONSUMERS IN ONTARIO
INTERROGATORIES**

INTERROGATORY 8-AMPCO-82

Ref: 8-1-1 p.24

Please provide the number of customers by applicable customer class and rate zone that pay the Transformer Ownership Allowance.

RESPONSE:

Customers do not pay the Transformer Ownership Allowance. The Transformer Ownership Allowance is a bill credit to customers who own their own transformers. The number of customers that currently¹ receive the Transformer Ownership Allowance is provided in Table 1, below.

Table 1 – Number of Customers Receiving Transformer Ownership Allowance

Rate Class	BRZ	ERZ	GRZ	HRZ	PRZ
GS<50 kW	2	1	-	6	35
GS>50 kW, Regular	101	124	48	225	417
GS>50 kW, Intermediate	72	142	-	-	-
Large Use	-	11	-	-	2

¹ 2026 OEB-approved rates, EB-2025-0055

1 **Table 1 - Monthly Distribution Bill Impact due to Distribution Rate Harmonization**

Rate Class	Consumption per Customer (kWh)	Demand per Customer (kW)	BRZ		ERZ		GRZ		HRZ		PRZ	
			change (\$)	change (%)								
Residential	750	-	\$2.63	8.8%	\$2.70	9.0%	(\$3.43)	-9.5%	(\$0.34)	-1.0%	(\$1.87)	-5.4%
GS<50 kW	2,000	-	\$6.54	8.9%	(\$6.89)	-7.9%	\$24.26	43.6%	\$1.26	1.6%	(\$2.42)	-2.9%
GS>50 kW, Regular	100,000	250	\$337.45	32.1%	(\$162.15)	-10.5%	\$299.72	27.5%	\$102.75	8.0%	(\$111.51)	-7.4%
GS>50 kW, Intermediate	100,000	250	(\$1,071.04)	-43.6%	(\$1,559.75)	-52.9%	(\$284.56)	-17.0%	\$0.00	0.0%	\$0.00	0.0%
Large Use	5,000,000	10,000	\$9,627.56	25.8%	(\$7,541.07)	-13.8%	\$11,175.15	31.3%	(\$625.75)	-1.3%	\$11,088.67	30.9%
LUDA	10,000,000	20,000	\$0.00	0.0%	\$0.00	0.0%	\$0.00	0.0%	\$0.00	0.0%	\$0.00	0.0%
Street Lighting	28	0.1	\$0.12	5.1%	(\$0.62)	-20.3%	\$0.87	55.7%	(\$0.46)	-15.9%	\$0.32	15.2%
Sentinel Lighting	122	0.3	\$0.00	0.0%	\$0.00	0.0%	(\$0.94)	-7.3%	(\$1.26)	-9.5%	\$2.60	27.8%
USL	343	-	\$6.85	69.5%	(\$1.66)	-9.0%	\$1.06	6.8%	\$0.40	2.5%	(\$2.52)	-13.1%

2

**RESPONSES TO ASSOCIATION OF MAJOR POWER CONSUMERS IN ONTARIO
 INTERROGATORIES**

INTERROGATORY 8-AMPCO-84

Ref: 8-2-2 p.3

a) Please provide the F/V split for the Large Use class for 2025 for each legacy rate zone.

b) Please provide the F/V split for the LUDA class for 2025.

RESPONSE:

a) The F/V split for the Large Use rate class for 2025 is provided in Table 1, below.

Table 1 – 2025 Large Use Fixed/Variable Split

Rate Class	2025 Fixed Base Revenue at 2025 Approved Rates	2025 Variable Base Revenue at 2025 Approved Rates	2025 Total Base Revenue at 2025 Approved Rates	Fixed Revenue Proportion	Variable Revenue Proportion
BRZ	\$412,187	\$1,324,210	\$1,736,397	23.7%	76.3%
ERZ	\$2,214,139	\$6,626,857	\$8,840,996	25.0%	75.0%
GRZ	\$63,870	\$1,513,640	\$1,577,510	4.0%	96.0%
HRZ	\$2,429,888	\$873,933	\$3,303,821	73.5%	26.5%
PRZ	\$266,008	\$1,520,064	\$1,786,073	14.9%	85.1%
Total	\$5,386,093	\$11,858,704	\$17,244,797	31.2%	68.8%

b) The F/V split for the Large Use with Dedicated Assets rate class for 2025 is provided in Table 2, below.

Table 2 - 2025 Large Use with Dedicated Assets Fixed/Variable Split

Rate Class	2025 Fixed Base Revenue at 2025 Approved Rates	2025 Variable Base Revenue at 2025 Approved Rates	2025 Total Base Revenue at 2025 Approved Rates	Fixed Revenue Proportion	Variable Revenue Proportion
HRZ	\$493,754	\$655,671	\$1,149,425	43.0%	57.0%

