



August 25, 2022

Ms. Nancy Marconi  
Registrar  
Ontario Energy Board  
2300 Yonge Street  
P.O. Box 2319  
Toronto, ON M4P 1E4

Re: Alectra Utilities Corporation – ICM Application  
AMPCO Final Submissions  
Board File No. EB-2022-0013

Dear Ms. Marconi:

Attached please find AMPCO's final submissions in the above proceeding.

Please do not hesitate to contact me if you have any questions or require further information.

Best Regards,

A handwritten signature in blue ink, appearing to read 'Colin Anderson'.

Colin Anderson  
President

Copy to: Alectra Utilities Corporation

**EB-2022-0013**  
**Alectra Utilities Corporation Application for Incremental Capital Module funding**  
**effective January 1, 2023**

**AMPCO Submissions August 23, 2022**

Alectra Utilities Corporation (Alectra) filed an application with the Ontario Energy Board (OEB) on May 18, 2022, under section 78 of the Ontario Energy Board Act, 1998, S.O. 1998, c. 15, (Schedule B) seeking approval for Incremental Capital Module (ICM) funding for certain underground cable renewal projects, effective January 1, 2023.

ICM Request

Alectra is requesting approval of ICM funding for what it describes as urgent underground cable renewal investments in the PowerStream and Enersource rate zones (“RZs”) for 2023 and 2024. Alectra seeks incremental capital funding of \$25.4MM in 2023 and \$26.9MM in 2024, as shown in Table 1 below.<sup>1</sup> 67% of the proposed ICM funding is in the PowerStream RZ and 33% is in the Enersource RZ.

**Table 1: Underground Cable Injection and Replacement Capital Budgets**

**Alectra - 2020-2024**

Rate Zone	Year							
	2020	2021	2022	2023	2024	2020-2024	% Base	% ICM
	Actual	Actual	Q1 Forecast	Forecast	Forecast			
Brampton	\$ 4.46	\$ 10.01	\$ 5.05	\$ 3.47	\$ 5.34	\$ 28.34	14%	
	<b>\$ 4.46</b>	<b>\$ 10.01</b>	<b>\$ 5.05</b>	<b>\$ 3.47</b>	<b>\$ 5.34</b>	<b>\$ 28.34</b>		
Enersource	\$ 15.19	\$ 9.73	\$ 9.29	\$ 6.73	\$ 7.00	\$ 47.94	24%	
	\$ -	\$ -	\$ -	<b>\$ 8.73</b>	<b>\$ 8.69</b>	<b>\$ 17.42</b>		<b>33%</b>
	<b>\$ 15.19</b>	<b>\$ 9.73</b>	<b>\$ 9.29</b>	<b>\$ 15.46</b>	<b>\$ 15.69</b>	<b>\$ 65.36</b>		
Guelph	\$ 1.55	\$ 1.04	\$ -	\$ 0.47	\$ 0.43	\$ 3.49	2%	
	<b>\$ 1.55</b>	<b>\$ 1.04</b>	<b>\$ -</b>	<b>\$ 0.47</b>	<b>\$ 0.43</b>	<b>\$ 3.49</b>		
Horizon	\$ 5.96	\$ 4.43	\$ 6.84	\$ 8.21	\$ 9.25	\$ 34.70	17%	
	<b>\$ 5.96</b>	<b>\$ 4.43</b>	<b>\$ 6.84</b>	<b>\$ 8.21</b>	<b>\$ 9.25</b>	<b>\$ 34.70</b>		
PowerStream	\$ 19.79	\$ 13.71	\$ 19.21	\$ 16.20	\$ 16.96	\$ 85.88	43%	
	\$ -	\$ -	\$ -	<b>\$ 16.63</b>	<b>\$ 18.24</b>	<b>\$ 34.88</b>		<b>67%</b>
	<b>\$ 19.79</b>	<b>\$ 13.71</b>	<b>\$ 19.21</b>	<b>\$ 32.83</b>	<b>\$ 35.21</b>	<b>\$ 120.75</b>		
Alectra (total)	\$ 46.96	\$ 38.92	\$ 40.40	\$ 35.09	\$ 38.99	\$ 200.35	100%	
	\$ -	\$ -	\$ -	<b>\$ 25.36</b>	<b>\$ 26.93</b>	<b>\$ 52.30</b>		<b>100%</b>
	<b>\$ 46.96</b>	<b>\$ 38.92</b>	<b>\$ 40.40</b>	<b>\$ 60.45</b>	<b>\$ 65.92</b>	<b>\$ 252.64</b>		

Using its new Asset Analytics Platform (implemented in 2020 and 2021), Alectra identified 78 projects to address hotspots for XLPE cable failures. 52 of these projects are considered high priority: 32 in the PowerStream RZ and 20 in Enersource RZ. The remaining 26

<sup>1</sup> Staff-20 Att#2

projects (in the PowerStream and Enersource RZs) have been deferred and will be planned in later years.<sup>2</sup>

Alectra proposes that base funding will address 24 of the 52 projects and the remaining 28 projects are included in this ICM. There are more ICM projects than base projects. As discussed on page 5 of these submissions, Alectra did not include the ICM projects in its budget optimization process using Copperleaf C55 so the OEB has no way of knowing how the base budget priorities would change if the ICM projects had been included in the budget analysis.

**Table 2: Proposed ICM Projects**

<b>U/G Cable</b>	<b>PRZ</b>	<b>ERZ</b>	<b>Total</b>	<b>%</b>
# Replacement Projects	8	7	15	54%
# Injection Projects	9	4	13	46%
<b>Total projects</b>	<b>17</b>	<b>11</b>	<b>28</b>	<b>100%</b>

For the reasons discussed below, AMPCO submits the OEB should not approve Alectra’s incremental capital funding request totaling \$52.3 MM.

- ***Alectra has not sufficiently demonstrated that this work is urgent based on condition and reliability trends.***

In its February 10, 2022 letter, the OEB provides additional flexibility for electricity distributors that select an extended deferred rebasing period (beyond five years) to apply for incremental capital funding for an annual capital program during the extended rebasing period if they can demonstrate:

“An urgent need for such additional funding that is based on new information that has arisen since the utility’s most recent rebasing application related to the management of risk associated with asset condition, reliability and quality of service and public safety.”

Alectra is requesting approval of \$52.3 M in ICM funding for 294 km of urgent underground cable renewal impacting 17, 194 customers,<sup>3</sup> in the PowerStream and Enersource RZs. Alectra references condition and reliability trends to justify this urgent funding.<sup>4</sup>

### Condition

Alectra indicates that the asset condition of underground cables has deteriorated from 14% in 2018 to 17% in 2020. AMPCO notes the Health Index for underground cables is based on cable

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<sup>2</sup> AMPCO-19 (a)

<sup>3</sup> AMPCO-20 Att#1

<sup>4</sup> Exhibit 1 Tab 1 Schedule 4, Exhibit 3 Tab 1 Schedule 2

age and cable type including installation.<sup>5 6 7</sup> Recognizing that it is difficult to test underground cables to assess condition, asset condition based on age does not provide the true condition of the asset. In AMPCO’s view, a change in the Health Index of XLPE cable assets between 2018 and 2020 based on age does not present an urgent situation that requires an immediate accelerated pace of cable replacement.

Reliability

Alectra previously requested \$265MM in incremental capital funding through the M-factor over the 2020 to 2024 period. As part of the M-Factor, Alectra proposed an accelerated pace of spending on underground cable<sup>8</sup> over the 2020 to 2024 period based on an increasing decline in reliability on the utility's distribution system. The OEB rejected Alectra’s M-Factor application and as a result incremental funding for underground cable renewal was not approved.

Consistent with evidence in the M-Factor evidence, this application points to failure of direct-buried XLPE cable and accessories as the most significant driver of the increasing trend in defective equipment. However, AMPCO notes that the 3-year average of customer hours of interruption from XLPE cables has decreased since the M-Factor application. As shown in Table 3<sup>9</sup>, the average customer hours of interruption driven by XLPE cable failures has improved from 208,785 customer hours of interruption (2016-2018) to 152, 434 (2019-2021), an improvement of 27%. Similarly, the average number of customer interruptions has decreased when comparing to the historical 3-year average.

AMPCO submits Alectra has not demonstrated to the OEB that the proposed ICM projects are needed on an urgent basis and the management of risk associated with the condition and reliability of underground cable has increased.

**Table 3: Alectra Utilities Defective Equipment - Cable XLPE & Accessories**

Defective Equipment - XLPE Cable - All RZ	2016	2017	2018	2016-2018 AVG	2019	2020	2021	2019-2021 AVG
Customer Hours of Interruptions	208,444	190,354	227,553	<b>208,784</b>	124,042	112,229	221,032	<b>152,434</b>
Customer Interruptions	177,149	163,118	182,122	<b>174,130</b>	140,786	104,839	183,930	<b>143,185</b>

<sup>5</sup> EB-2019-0018 Exhibit 04 Tab 01 Schedule 01 Appendix A10 — Underground Asset Renewal Page 13

<sup>6</sup> EB-2019-0018 Exhibit 04 Tab 01 Schedule 01 Appendix A10 — Underground Asset Renewal Page 2

<sup>7</sup> The majority (97.7%) of underground conductors in Alectra Utilities' system is encased in Cross-Linked Polyethylene or Tree-resistant Cross- Linked Polyethylene, collectively XLPE

<sup>8</sup> EB-2019-0018 Exhibit 04 Tab 01 Schedule 01 Appendix A10 — Underground Asset Renewal Page 1

<sup>9</sup> AMPCO-9 Att#1

With respect to the time span of reliability results used in Alectra’s engineering assessments, Alectra indicates a greater emphasis is placed on data within the last 3-5 years, specifically when estimating: customers impacted, duration and number of events; or estimating future reliability impacts.<sup>10</sup> As shown in Table 3, the latest average 3-year reliability data for underground cable reflects a positive trend.

Further analysis shows that the Horizon RZ has the largest increase in cable failure contribution to Defective Equipment SAIDI and SAIFI when comparing 2021 data to the historical 5-year average.<sup>11</sup> The Horizon RZ was not identified as an ICM priority area.

**Table 4: Defective Equipment and Cable Contribution to SAIDI and SAIFI By Rate Zone**

BRZ	SAIDI					2017-2021 AVG	2021 vs AVG	SAIFI					2017-2021 AVG	2021 vs AVG
	2017	2018	2019	2020	2021			2017	2018	2019	2020	2021		
Defective Equipment	0.24	0.39	0.40	0.19	0.50	0.34	0.16	0.35	0.43	0.41	0.28	0.48	0.39	0.09
Cables	0.09	0.22	0.19	0.13	0.15	0.16	0.00	0.06	0.15	0.18	0.14	0.15	0.14	0.01
<b>ERZ</b>														
Defective Equipment	0.34	0.57	0.45	0.33	0.49	0.44	0.05	0.54	0.76	0.51	0.49	0.56	0.57	-0.01
Cables	0.30	0.39	0.33	0.26	0.38	0.33	0.05	0.37	0.39	0.36	0.35	0.47	0.39	0.08
<b>GRZ</b>														
Defective Equipment	0.18	0.08	0.07	0.09	0.09	0.10	-0.01	0.38	0.18	0.16	0.41	0.35	0.29	0.05
Cables	0.07	0.01	0.04	0.01	0.02	0.03	-0.01	0.17	0.01	0.02	0.07	0.00	0.05	-0.05
<b>HRZ</b>														
Defective Equipment	0.39	0.65	0.62	0.71	0.64	0.60	0.04	0.35	0.45	0.51	0.53	0.50	0.47	0.03
Cables	0.12	0.15	0.15	0.20	0.30	0.19	0.11	0.15	0.07	0.07	0.11	0.22	0.12	0.09
<b>PRZ</b>														
Defective Equipment	0.47	0.49	0.41	0.53	0.44	0.47	-0.03	0.41	0.46	0.36	0.46	0.26	0.39	-0.13
Cables	0.22	0.19	0.14	0.25	0.23	0.21	0.02	0.13	0.10	0.08	0.15	0.13	0.12	0.01

- **Alectra has in essence re-packaged the M-Factor that the OEB disallowed in EB-2019-0018.**

Alectra’s ICM is a subset of the previous M-factor proposal, this time focusing on underground cable and again seeking multi-year funding. Many ICM projects were included in the M-Factor:

- Four projects submitted in EB-2019-0018 as M-Factor projects are now ICM projects.<sup>12</sup>
- An additional eight ICM projects were base projects in the M-Factor.<sup>13</sup>
- Five projects which were included in the M-Factor, are now in base.<sup>14</sup>
- Seven of the 28 ICM projects were included in the \$125MM deferred underground cable renewal work.<sup>15</sup>

<sup>10</sup> AMPCO-18 (i)

<sup>11</sup> Staff-2 Att#1

<sup>12</sup> AMPCO-20 (c)

<sup>13</sup> AMPCO-24

<sup>14</sup> AMPCO-19 (b)

<sup>15</sup> AMPCO-3

- ***There is no indication that Alectra has reprioritized its capital spending to address the need incremental cable replacement.***
- ***Alectra has not sufficiently justified that it has exhausted other available options to manage its costs within the envelope provided.***

Alectra reviews its capital plan on an annual basis and sets priorities for the distribution system. Alectra updated its capital plan in response to the OEB’s Decision on the M-Factor and COVID-19 impacts. Relative to the DSP, the Adjusted Capital Plan reflects a net reduction in investments of \$150.2MM over the 2020 to 2024 period. Instead of prioritizing spending on underground cable for the years 2022 to 2024 as part of its Adjusted Capital Plan, Alectra chose to reduce the pace of planned capital work, specifically in System Renewal and System Service and allocated \$36.3 MM more on General Plant related to Information Technology (IT).<sup>16</sup>

Specifically, the increase in IT is driven by investments in customer experience applications and processes; enhancements to systems to enable business optimization; and investments in ongoing IT infrastructure to support efficient business operations and communications.<sup>17</sup> Alectra allocated General Plant funding to enhance the customer experience by applying a “one-window” approach to provide a unified and personal solution for all customer interactions as part of its balancing of multiple priorities over the 2022-2024 planning period. Not all of this work is mandatory.

In AMPCO’s view, some proposed spending on IT work could have been deferred in the short term to allow Alectra to focus on cable injection and replacement. Alectra has some discretion with respect to General Plant spending and has not appropriately prioritized its 2022-2024 Adjusted Capital Plan.

- ***Alectra inappropriately identified ICM projects before project optimization.***

Alectra indicates it uses its Copperleaf C55 program to optimize its yearly budget. However, the identification of ICM projects is completed before projects are submitted for optimization, as only projects funded in rates are optimized.<sup>18</sup> Alectra provided project value scores for base cable projects and ICM projects.<sup>19</sup> Value represents the entire value of the project including future years. AMPCO notes many value scores for ICM projects are higher than the value scores for the base cable renewal projects.<sup>20</sup>

By identifying ICM projects before projects are submitted for optimization, AMPCO submits Alectra has not appropriately optimized its capital budget for 2022 to 2024. As a result, the OEB has no way of knowing how the ICM projects would be ranked and prioritized against base

<sup>16</sup> Exhibit 3 Tab 1 Schedule 1 Page 3 Table 19 (\$6.8 + \$13.9 + \$15.6M = \$36.3 MM)

<sup>17</sup> Exhibit 3 Tab 1 Schedule 1 Page 8

<sup>18</sup> AMPCO-18 (k)

<sup>19</sup> AMPCO-18 (l)

<sup>20</sup> AMPCO-18 (i) Table 1 and Table 2

budget projects and if some base projects could potentially be deferred with the highest value work completed within the base budget envelope. Priorities in cable renewal work have changed as a result of the recent Asset Analytics Platform analysis which produced a list of pressing neighbourhoods. These results need to be included in Alectra's annual project optimization so that C55 optimizes a portfolio with the greatest value. Without this overall project optimization and analysis, AMPCO submits the OEB should not approve the ICM.

All of which is respectfully submitted.