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Materiality Threshold

Reference 1: EB-2014-0219, Report of the OEB on New Policy Options for the Funding of Capital Investments: Supplemental Report, January 22, 2016, page 23
Reference 2: Exhibit 2, Tab 1, Schedule 1, pages 4-5

As per Reference 1, the policy states that in the calculation of the materiality threshold, distributors "should use the IPI from its most recent Price Cap IR application as a placeholder for the initial application filing. This information is updated if new information becomes available during the proceeding."

In Reference 2, Alectra Utilities proposed a deviation from ICM policy. Alectra Utilities proposed to use a geometric mean of IPIs from each rate zone (RZ)'s first IRM year to 2024 in the calculation of the materiality threshold.[1] Alectra Utilities believes that "the use using the most recent inflation factor value will not accurately represent the historical effect of inflation on depreciation."

a) **Has Alectra Utilities considered any other alternative calculation methods to adjust the materiality threshold formula? If so, please provide the alternative(s) you have considered, and the calculations associated with each method.**
b) **Please provide the calculation of the ICM materiality thresholds for each RZ by applying the historical years' actual IPIs issued by the OEB since the last rebasing year of the RZs.**
c) **Please provide the reasoning, analysis, or explanations supporting the rationale for using an IPI based on a Geometric Mean**
d) **Please recalculate the Maximum Eligible Incremental Capital for each of the PowerStream and Enersource RZs using the OEB's 2024 Inflation Parameters for electricity distributors of 4.8%.**
e) **Please include in the response the updated ICM model excel workbook for each of the PowerStream and Enersource RZs.**

As per the literal interpretation of the policy outlined in Reference 1, the IPI used in the materiality threshold calculation should match that of the most recent Price Cap IR application.

f) **Has Alectra Utilities considered the impact of using the geometric mean IPI used in this proceeding for its 2024 Price Cap IR application for each RZ?**
g) **Please provide a rate impact summary for the two RZs that considers the combined impact of the 2024 ICM and the 2024 IRM.**

[1] Alectra Utilities has calculated the geometric mean IPI for its PowerStream RZ to be 2.4% and considers all OEB-approved IPIs from 2018-2024. Alectra Utilities has calculated the geometric mean IPI for its Enersource RZ to be 2.17% and considers all OEB-approved IPIs from 2014-2024.

Response:

a) Alectra Utilities also considered using the arithmetic average calculation. The arithmetic average calculation for the PowerStream and Enersource rate zones, is provided in Table 1 below. The average for the PowerStream RZ was calculated using the values over the 2018 to 2024 period. The average for the Enersource RZ was calculated using the values over the 2014 to 2024 period.

Table 1: Arithmetic Average Calculation for ERZ and PRZ

Year	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
OEB-Approved Inflation Factors	1.70%	1.60%	2.10%	1.90%	1.20%	1.50%	2.00%	2.20%	3.30%	3.70%	4.80%
Arithmetic Avg - ERZ	**2.36%**										
Arithmetic Avg - PRZ	**2.67%**										

b) The calculation of the ICM materiality thresholds for the PowerStream and Enersource RZs by applying the historical years' actual IPI issued by the OEB since the last rebasing year of the RZs is provided as Attachment 1. A comparison of the materiality threshold calculated using the geometric mean and the annual IPI values are provided in Table 2 below. Under both scenarios, Alectra Utilities' proposed ICM investments are below the annual maximum eligible incremental capital amount.

Table 2 – Materiality Threshold Comparison

Materiality Threshold	PRZ	ERZ
Geometric Mean	90,514,914	39,599,322
Annual IPI Calculation	92,903,687	40,573,721
Difference $	**(2,388,773)**	**(974,399)**
Difference %	-2.6%	-2.5%

Eligible Incremental Capital	PRZ	ERZ
Capital Budget	117,556,163	56,233,618
Less: Materiality Threshold (Annual IPI)	92,903,687	40,573,721
Maximum Eligible Incremental Capital	**24,652,476**	**15,659,897**
Proposed ICM Investment	**17,273,508**	**7,865,203**

Attachment 1 also includes a calculation of the materiality threshold by year, using 4.5% PCI in each historical year since each RZ's last rebasing application, to illustrate that the current threshold calculation applies the most recent inflation factor to each historical year.

c) As provided in Exhibit 2, Tab 1, Schedule 1, pp. 4-5, the multi-year ICM materiality threshold formula factors in the cumulative impact of both growth and the price cap index over the years since the utility's last cost of service rebasing application. The retroactive application of the most recent inflation factor has a material impact on the resultant threshold value. This was unlikely to have been an issue when the ICM was introduced in the 3rd Generation IR, when inflation rate variability was minimal. As a result, the use of the most recent inflation factor value will not accurately represent the historical effect of inflation on depreciation.

d) Alectra Utilities has provided the Threshold Capital Expenditure Calculation and Maximum Eligible Incremental Capital for the PowerStream and Enersource RZs using the OEB-approved 2024 inflation factor in Tables 3 to Table 6 below.

Table 3 – Threshold Capital Expenditure Calculation – PowerStream RZ

Description	PRZ
Inflation	4.80%
Less: Productivity Factor	0.00%
Less: Stretch Factor	0.30%
Price Cap Index	4.50%
Growth Factor	0.50%
Rebasing Year	2017
# Years since rebasing	7
Price Cap Index	4.50%
Growth Factor	0.50%
Dead Band	10%
Rate Base	$1,082,805,162
Depreciation	$52,272,173
Threshold Value	
Price Cap IR Year 2024	**250%**
Threshold CAPEX	
Price Cap IR Year 2024	**$130,502,043**

Table 4 – Maximum Eligible Incremental Capital – PowerStream RZ

Eligible Incremental Capital	2024
Capital Budget	117,556,163
Less: Materiality Threshold	130,502,043
Maximum Eligible Incremental Capital	**(12,945,880)**

Table 5 – Threshold Capital Expenditure Calculation – Enersource RZ

Description	ERZ
Inflation	4.80%
Less: Productivity Factor	0.00%
Less: Stretch Factor	0.30%
Price Cap Index	4.50%
Growth Factor	-0.28%
Rebasing Year	2013
# Years since rebasing	11
Price Cap Index	4.50%
Growth Factor	-0.28%
Dead Band	10%
Rate Base	$623,497,832
Depreciation	$25,461,389
Threshold Value	
Price Cap IR Year 2024	**266%**
Threshold CAPEX	
Price Cap IR Year 2024	**$67,665,866**

Table 6 – Maximum Eligible Incremental Capital – Enersource RZ

Eligible Incremental Capital	ERZ
Capital Budget	56,233,618
Less: Materiality Threshold	67,665,866
Maximum Eligible Incremental Capital	**(11,432,248)**

e) Alectra Utilities has included the updated ICM Models with 4.8% IPI for the PowerStream and Enersource RZs as Attachments 2 and 3.

f) The OEB's materiality threshold formula serves to define the level of capital expenditures that a distributor should be able to manage within current rates. As provided in response to part c) above, the formula factors in the cumulative impact of both growth and the price cap index over the years ***since the utility's last cost of service rebasing application.*** As a result, the threshold should reflect the actual historical years' IPI approved by the OEB since the last rebasing of each RZ to the current rate year.

The Price Cap IR rate setting method involves mechanistic adjustments in each rate year ***after*** the rebasing year. The IPI used in the Price Cap IR application is intended to adjust base rates on a forward-looking basis to account for inflationary impacts on a distributor's capital and operating costs. As the result, the most recent OEB-approved inflation factor is applied annually to distribution rates in a distributor's IRM application.

g) The combined rate impacts of the 2024 ICM and the 2024 IRM are provided for PRZ and ERZ in Tables 7 to 10 below.

Table 7 – Distribution Bill Impacts by Rate Class – PRZ

Distribution Bill Impacts				
Customer Class	Billing Units	Average Monthly Volume	2024 vs. 2023	
			$	%
Residential	kWh	750	$ 1.55	4.9%
GS<50	kWh	2,000	$ 4.63	6.0%
GS>50 to 4,999	kW	250	$ 122.36	8.4%
Large User	kW	7,350	$ 2,662.08	9.2%
Unmetered Scattered Load	kWh	150	$ 0.84	6.3%
Street Lighting	kW	2,962	$ 16,728.94	23.1%
Sentinel Lighting	kW	1	$ 2.45	13.4%

Table excludes the impact of HST & OER

Table 8 – Total Bill Impacts by Rate Class – PRZ

Total Bill Impacts				
Customer Class	Billing Units	Average Monthly Volume	2024 vs. 2023	
			$	%
Residential	kWh	750	$ 2.30	1.9%
GS<50	kWh	2,000	$ 7.03	2.2%
GS>50 to 4,999	kW	250	$ 457.56	3.7%
Large User	kW	7,350	$ 10,087.79	2.5%
Unmetered Scattered Load	kWh	150	$ 1.02	3.2%
Street Lighting	kW	2,962	$ 20,930.89	9.6%
Sentinel Lighting	kW	1	$ 2.92	6.9%

Table excludes the impact of HST & OER

Table 9 – Distribution Bill Impacts by Rate Class – ERZ

Distribution Bill Impacts				
Customer Class	Billing Units	Average Monthly Volume	2024 vs. 2023	
			$	%
Residential	kWh	750	$ 1.32	4.8%
GS<50	kWh	2,000	$ 3.62	4.4%
GS>50 to 499	kW	230	$ 130.65	8.7%
GS 500 to 4,999	kW	2,250	$ 744.93	8.3%
Large User	kW	5,000	$ 2,219.13	6.4%
Unmetered Scattered Load	kWh	300	$ 1.61	9.3%
Street Lighting	kW	0.1	$ (0.28)	(10.7)%

Table excludes the impact of HST & OER

Table 10 – Total Bill Impacts by Rate Class – ERZ

Total Bill Impacts				
Customer Class	Billing Units	Average Monthly Volume	2024 vs. 2023	
			$	%
Residential	kWh	750	$ 3.05	2.5%
GS<50	kWh	2,000	$ 8.42	2.6%
GS>50 to 499	kW	230	$ 455.00	3.1%
GS 500 to 4,999	kW	2,250	$ 3,366.04	4.6%
Large User	kW	5,000	$ 8,609.13	2.0%
Unmetered Scattered Load	kWh	300	$ 2.33	4.3%
Street Lighting	kW	0.1	$ (0.15)	(2.1)%

Table excludes the impact of HST & OER

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Attachment 1
Materiality Threshold Calculation

Ontario Energy Board

Capital Module
Applicable to ACM and ICM

Alectra Utilities Corporation - Enersource RZ

Threshold Breakdown Calculation with OEB Approved IPI since 2014

$$\textbf{Threshold Value}\ (\%) = 1 + \left|\left(\frac{RB}{d}\right) \times (g + PCI \times (1 + g))\right| \times \left((1 + g) \times (1 + PCI)\right)^{n-1} + 10\%$$

Cost of Service Rebasing Year	**2013**	
2014 Price Cap IR Year in which Application is made	**1**	
2015 Price Cap IR Year in which Application is made	**2**	
2016 Price Cap IR Year in which Application is made	**3**	
2017 Price Cap IR Year in which Application is made	**4**	
2018 Price Cap IR Year in which Application is made	**5**	
2019 Price Cap IR Year in which Application is made	**6**	n
2020 Price Cap IR Year in which Application is made	**7**	
2021 Price Cap IR Year in which Application is made	**8**	
2022 Price Cap IR Year in which Application is made	**9**	
2023 Price Cap IR Year in which Application is made	**10**	
2024 Price Cap IR Year in which Application is made	**11**	

2014 Price Cap Index	1.40%
2015 Price Cap Index	1.30%
2016 Price Cap Index	1.80%
2017 Price Cap Index	1.60%
2018 Price Cap Index	0.90%
2019 Price Cap Index	1.20%
2020 Price Cap Index	1.70%
2021 Price Cap Index	1.90%
2022 Price Cap Index	3.00%
2023 Price Cap Index	3.40%
2024 Price Cap Index	4.50%

2015 Compounded PCI	1.35%	
2016 Compounded PCI	1.50%	
2017 Compounded PCI	1.52%	
2018 Compounded PCI	1.40%	
2019 Compounded PCI	1.37%	PCI
2020 Compounded PCI	1.41%	
2021 Compounded PCI	1.47%	
2022 Compounded PCI	1.64%	
2023 Compounded PCI	1.82%	
2024 Compounded PCI	2.06%	

2015 Compounded (1+PCI)	**101.35%**
2016 Compounded (1+PCI)	**102.87%**
2017 Compounded (1+PCI)	**104.44%**
2018 Compounded (1+PCI)	**105.90%**
2019 Compounded (1+PCI)	**107.35%**
2020 Compounded (1+PCI)	**108.86%**
2021 Compounded (1+PCI)	**110.47%**
2022 Compounded (1+PCI)	**112.28%**
2023 Compounded (1+PCI)	**114.33%**
2024 Compounded (1+PCI)	**116.68%**

Growth Factor Calculation

Revenues Based on 2022 Actual Distribution Demand	**$143,364,332**	
Revenues Based on 2013 Board-Approved Distribution Demand	**$147,025,657**	
2024 Growth Factor	**-0.28%**	g (*Note* 1)
Dead Band	**10%**	

Average Net Fixed Assets		
Gross Fixed Assets Opening	$ 554,341,087	
Add: CWIP Opening	$ 4,371,726	
Capital Additions	$ 46,257,875	
Capital Disposals	-$ 1,026,755	
Capital Retirements	-$ 2,063,957	
Deduct: CWIP Closing	-$ 4,371,726	
Gross Fixed Assets - Closing	$ 597,508,250	
Average Gross Fixed Assets	$ 575,924,669	
Accumulated Depreciation - Opening	$ 47,380,643	
Depreciation Expense	$ 25,461,389	
Disposals	-$ 2,063,957	
Retirements	-$ 1,026,755	
Accumulated Depreciation - Closing	$ 69,751,320	
Average Accumulated Depreciation	$ 58,565,982	
Average Net Fixed Assets	$ 517,358,687	
Working Capital Allowance		
Working Capital Allowance Base	$ 786,215,891	
Working Capital Allowance Rate	13.5%	
Working Capital Allowance	$ 106,139,145	
Rate Base	**$ 623,497,832**	RB
Depreciation	**$ 25,461,389**	d

Threshold Value (varies by Price Cap IR Year subsequent to CoS rebasing)	
Price Cap IR Year 2014	**137%**
Price Cap IR Year 2015	**136%**
Price Cap IR Year 2016	**141%**
Price Cap IR Year 2017	**142%**
Price Cap IR Year 2018	**139%**
Price Cap IR Year 2019	**138%**
Price Cap IR Year 2020	**140%**
Price Cap IR Year 2021	**142%**
Price Cap IR Year 2022	**147%**
Price Cap IR Year 2023	**152%**
Price Cap IR Year 2024	**159%**

Threshold CAPEX		
Price Cap IR Year 2014	**$ 34,987,152**	
Price Cap IR Year 2015	**$ 34,747,514**	
Price Cap IR Year 2016	**$ 35,782,411**	
Price Cap IR Year 2017	**$ 36,040,432**	
Price Cap IR Year 2018	**$ 35,314,543**	
Price Cap IR Year 2019	**$ 35,174,776**	
Price Cap IR Year 2020	**$ 35,572,954**	
Price Cap IR Year 2021	**$ 36,071,777**	
Price Cap IR Year 2022	**$ 37,331,350**	
Price Cap IR Year 2023	**$ 38,683,416**	
Price Cap IR Year 2024	**$ 40,573,721**	*Threshold Value* $\times d$

Ontario Energy Board

Capital Module
Applicable to ACM and ICM

Alectra Utilities Corporation - PowerStream RZ

Threshold Breakdown Calculation with OEB Approved IPI since 2018

$$\textbf{Threshold Value}\ (\%) = \mathbf{1} + \left[\left(\frac{RB}{d}\right) \times (g + PCI \times (\mathbf{1} + g))\right] \times ((\mathbf{1} + g) \times (\mathbf{1} + PCI))^{n-1} + \mathbf{10}\%$$

Cost of Service Rebasing Year	**2017**	
2018 Price Cap IR Year in which Application is made	**1**	
2019 Price Cap IR Year in which Application is made	**2**	
2020 Price Cap IR Year in which Application is made	**3**	
2021 Price Cap IR Year in which Application is made	**4**	
2022 Price Cap IR Year in which Application is made	**5**	n
2023 Price Cap IR Year in which Application is made	**6**	
2024 Price Cap IR Year in which Application is made	**7**	
2018 Price Cap Index	0.90%	
2019 Price Cap Index	1.20%	
2020 Price Cap Index	1.70%	
2021 Price Cap Index	1.90%	
2022 Price Cap Index	3.00%	
2023 Price Cap Index	3.40%	
2024 Price Cap Index	4.50%	
2019 Compounded PCI	**1.05%**	
2020 Compounded PCI	**1.27%**	
2021 Compounded PCI	**1.42%**	
2022 Compounded PCI	**1.74%**	
2023 Compounded PCI	**2.01%**	PCI
2024 Compounded PCI	**2.36%**	
2019 Compounded (1+PCI)	**101.05%**	
2020 Compounded (1+PCI)	**102.33%**	
2021 Compounded (1+PCI)	**103.79%**	
2022 Compounded (1+PCI)	**105.59%**	
2023 Compounded (1+PCI)	**107.72%**	
2024 Compounded (1+PCI)	**110.26%**	
Growth Factor Calculation		
Revenues Based on 2022 Actual Distribution Demand	**$233,554,857**	
Revenues Based on 2017 Board-Approved Distribution Demand	**$227,841,740**	
Growth Factor	**0.50%**	g $(Note\ 1)$
Dead Band	**10%**	
Average Net Fixed Assets		
Gross Fixed Assets Opening	$ 1,183,508,940	
Add: CWIP Opening	$ 57,486,862	
Capital Additions	$ 114,494,289	
Capital Disposals	-$ 2,734,108	
Capital Retirements	$ -	
Deduct: CWIP Closing	-$ 39,959,632	
Gross Fixed Assets - Closing	$ 1,312,796,351	
Average Gross Fixed Assets	$ 1,248,152,646	
Accumulated Depreciation - Opening	$ 229,378,962	
Depreciation Expense	$ 52,272,173	
Disposals	-$ 717,703	
Retirements	$ -	
Accumulated Depreciation - Closing	$ 280,933,432	
Average Accumulated Depreciation	$ 255,156,197	
Average Net Fixed Assets	$ 992,996,449	
Working Capital Allowance		
Working Capital Allowance Base	$ 1,197,449,515	
Working Capital Allowance Rate	7.5%	
Working Capital Allowance	$ 89,808,714	
Rate Base	**$ 1,082,805,162**	RB
Depreciation	**$ 52,272,173**	d

Threshold Value (varies by Price Cap IR Year subsequent to CoS rebasing)

Price Cap IR Year 2018	**139%**
Price Cap IR Year 2019	**143%**
Price Cap IR Year 2020	**148%**
Price Cap IR Year 2021	**152%**
Price Cap IR Year 2022	**160%**
Price Cap IR Year 2023	**168%**
Price Cap IR Year 2024	**178%**

Threshold CAPEX

Price Cap IR Year 2018	**$ 72,723,763**	
Price Cap IR Year 2019	**$ 74,617,287**	
Price Cap IR Year 2020	**$ 77,353,189**	
Price Cap IR Year 2021	**$ 79,549,553**	
Price Cap IR Year 2022	**$ 83,716,947**	
Price Cap IR Year 2023	**$ 87,686,630**	
Price Cap IR Year 2024	**$ 92,903,687**	$Threshold\ Value \times d$

Ontario Energy Board

Capital Module Applicable to ACM and ICM

Alectra Utilities Corporation - Enersource RZ

Threshold Breakdown Calculation with 2024 OEB Approved IPI

$$\textit{Threshold Value}\ (\%) = 1 + \left|\left(\frac{RB}{d}\right) \times (g + PCI \times (1 + g))\right| \times ((1 + g) \times (1 + PCI))^{n-1} + 10\%$$

Cost of Service Rebasing Year	**2013**	
2014 Price Cap IR Year in which Application is made	**1**	
2015 Price Cap IR Year in which Application is made	**2**	
2016 Price Cap IR Year in which Application is made	**3**	
2017 Price Cap IR Year in which Application is made	**4**	
2018 Price Cap IR Year in which Application is made	**5**	
2019 Price Cap IR Year in which Application is made	**6**	n
2020 Price Cap IR Year in which Application is made	**7**	
2021 Price Cap IR Year in which Application is made	**8**	
2022 Price Cap IR Year in which Application is made	**9**	
2023 Price Cap IR Year in which Application is made	**10**	
2024 Price Cap IR Year in which Application is made	**11**	

2014 Price Cap Index	1.40%
2015 Price Cap Index	1.30%
2016 Price Cap Index	1.80%
2017 Price Cap Index	1.60%
2018 Price Cap Index	0.90%
2019 Price Cap Index	1.20%
2020 Price Cap Index	1.70%
2021 Price Cap Index	1.90%
2022 Price Cap Index	3.00%
2023 Price Cap Index	3.40%
2024 Price Cap Index	4.50%

2014 Compounded PCI	4.50%	
2015 Compounded PCI	4.50%	
2016 Compounded PCI	4.50%	
2017 Compounded PCI	4.50%	
2018 Compounded PCI	4.50%	
2019 Compounded PCI	4.50%	PCI
2020 Compounded PCI	4.50%	
2021 Compounded PCI	4.50%	
2022 Compounded PCI	4.50%	
2023 Compounded PCI	4.50%	
2024 Compounded PCI	4.50%	

2015 Compounded (1+PCI)	**104.50%**
2016 Compounded (1+PCI)	**109.20%**
2017 Compounded (1+PCI)	**114.12%**
2018 Compounded (1+PCI)	**119.25%**
2019 Compounded (1+PCI)	**124.62%**
2020 Compounded (1+PCI)	**130.23%**
2021 Compounded (1+PCI)	**136.09%**
2022 Compounded (1+PCI)	**142.21%**
2023 Compounded (1+PCI)	**148.61%**
2024 Compounded (1+PCI)	**155.30%**

Growth Factor Calculation

Revenues Based on 2022 Actual Distribution Demand	**$143,364,332**
Revenues Based on 2013 Board-Approved Distribution Demand	**$147,025,657**

2024 Growth Factor	**-0.28%**	g (*Note* 1)
Dead Band	**10%**	

Average Net Fixed Assets		
Gross Fixed Assets Opening	$ 554,341,087	
Add: CWIP Opening	$ 4,371,726	
Capital Additions	$ 46,257,875	
Capital Disposals	-$ 1,026,755	
Capital Retirements	-$ 2,063,957	
Deduct: CWIP Closing	-$ 4,371,726	
Gross Fixed Assets - Closing	$ 597,508,250	
Average Gross Fixed Assets	$ 575,924,669	
Accumulated Depreciation - Opening	$ 47,380,643	
Depreciation Expense	$ 25,461,389	
Disposals	-$ 2,063,957	
Retirements	-$ 1,026,755	
Accumulated Depreciation - Closing	$ 69,751,320	
Average Accumulated Depreciation	$ 58,565,982	
Average Net Fixed Assets	$ 517,358,687	

Working Capital Allowance		
Working Capital Allowance Base	$ 786,215,891	
Working Capital Allowance Rate	13.5%	
Working Capital Allowance	$ 106,139,145	
Rate Base	**$ 623,497,832**	RB
Depreciation	**$ 25,461,389**	d

Threshold Value (varies by Price Cap IR Year subsequent to CoS rebasing)

Price Cap IR Year 2014	**213%**
Price Cap IR Year 2015	**217%**
Price Cap IR Year 2016	**222%**
Price Cap IR Year 2017	**227%**
Price Cap IR Year 2018	**232%**
Price Cap IR Year 2019	**237%**
Price Cap IR Year 2020	**242%**
Price Cap IR Year 2021	**248%**
Price Cap IR Year 2022	**253%**
Price Cap IR Year 2023	**259%**
Price Cap IR Year 2024	**266%**

Threshold CAPEX

Price Cap IR Year 2014	**$ 54,262,104**	
Price Cap IR Year 2015	**$ 55,367,646**	
Price Cap IR Year 2016	**$ 56,519,740**	
Price Cap IR Year 2017	**$ 57,720,347**	
Price Cap IR Year 2018	**$ 58,971,510**	
Price Cap IR Year 2019	**$ 60,275,358**	
Price Cap IR Year 2020	**$ 61,634,109**	
Price Cap IR Year 2021	**$ 63,050,075**	
Price Cap IR Year 2022	**$ 64,525,665**	
Price Cap IR Year 2023	**$ 66,063,390**	
Price Cap IR Year 2024	**$ 67,665,866**	*Threshold Value* $\times d$

Ontario Energy Board

Capital Module
Applicable to ACM and ICM

Alectra Utilities Corporation - PowerStream RZ

Threshold Breakdown Calculation with 2024 OEB Approved IPI

$$\textbf{Threshold Value}\ (\%) = \mathbf{1} + \left[\left(\frac{RB}{d}\right) \times (g + PCI \times (\mathbf{1} + g))\right] \times ((\mathbf{1} + g) \times (\mathbf{1} + PCI))^{n-1} + \mathbf{10}\%$$

Cost of Service Rebasing Year	**2017**	
2018 Price Cap IR Year in which Application is made	**1**	
2019 Price Cap IR Year in which Application is made	**2**	
2020 Price Cap IR Year in which Application is made	**3**	
2021 Price Cap IR Year in which Application is made	**4**	
2022 Price Cap IR Year in which Application is made	**5**	n
2023 Price Cap IR Year in which Application is made	**6**	
2024 Price Cap IR Year in which Application is made	**7**	

2018 Price Cap Index	0.90%
2019 Price Cap Index	1.20%
2020 Price Cap Index	1.70%
2021 Price Cap Index	1.90%
2022 Price Cap Index	3.00%
2023 Price Cap Index	3.40%
2024 Price Cap Index	4.50%

2018 Compounded PCI	**4.50%**	
2019 Compounded PCI	**4.50%**	
2020 Compounded PCI	**4.50%**	
2021 Compounded PCI	**4.50%**	
2022 Compounded PCI	**4.50%**	
2023 Compounded PCI	**4.50%**	PCI
2024 Compounded PCI	**4.50%**	

2019 Compounded (1+PCI)	**104.50%**
2020 Compounded (1+PCI)	**109.20%**
2021 Compounded (1+PCI)	**114.12%**
2022 Compounded (1+PCI)	**119.25%**
2023 Compounded (1+PCI)	**124.62%**
2024 Compounded (1+PCI)	**130.23%**

Growth Factor Calculation

Revenues Based on 2022 Actual Distribution Demand	**$233,554,857**	
Revenues Based on 2017 Board-Approved Distribution Demand	**$227,841,740**	
Growth Factor	**0.50%**	g $(Note\ 1)$
Dead Band	**10%**	

Average Net Fixed Assets		
Gross Fixed Assets Opening	$ 1,183,508,940	
Add: CWIP Opening	$ 57,486,862	
Capital Additions	$ 114,494,289	
Capital Disposals	-$ 2,734,108	
Capital Retirements	$ -	
Deduct: CWIP Closing	-$ 39,959,632	
Gross Fixed Assets - Closing	$ 1,312,796,351	
Average Gross Fixed Assets	$ 1,248,152,646	
Accumulated Depreciation - Opening	$ 229,378,962	
Depreciation Expense	$ 52,272,173	
Disposals	-$ 717,703	
Retirements	$ -	
Accumulated Depreciation - Closing	$ 280,933,432	
Average Accumulated Depreciation	$ 255,156,197	
Average Net Fixed Assets	$ 992,996,449	

Working Capital Allowance		
Working Capital Allowance Base	$ 1,197,449,515	
Working Capital Allowance Rate	7.5%	
Working Capital Allowance	$ 89,808,714	
Rate Base	**$ 1,082,805,162**	RB
Depreciation	**$ 52,272,173**	d

Threshold Value (varies by Price Cap IR Year subsequent to CoS rebasing)

Price Cap IR Year 2018	**214%**
Price Cap IR Year 2019	**219%**
Price Cap IR Year 2020	**225%**
Price Cap IR Year 2021	**231%**
Price Cap IR Year 2022	**237%**
Price Cap IR Year 2023	**243%**
Price Cap IR Year 2024	**250%**

Threshold CAPEX

Price Cap IR Year 2018	**$ 111,900,238**	
Price Cap IR Year 2019	**$ 114,633,373**	
Price Cap IR Year 2020	**$ 117,503,822**	
Price Cap IR Year 2021	**$ 120,518,484**	
Price Cap IR Year 2022	**$ 123,684,605**	
Price Cap IR Year 2023	**$ 127,009,794**	
Price Cap IR Year 2024	**$ 130,502,043**	$Threshold\ Value \times d$

1-Staff-1

Attachment 2
2024 ICM Model PRZ - 4.8%

Ontario Energy Board

Capital Module
Applicable to ACM and ICM

Note: Depending on the selections made below, certain worksheets in this workbook will be hidden.

Version 1.0

Utility Name	Alectra Utilities Corporation-PowerStream Rate Zone
Assigned EB Number	EB-2023-0004
Name of Contact and Title	Natalie Yeates, Director, Regulatory Affairs and Reporting
Phone Number	905-798-2872
Email Address	natalie.yeates@alectrautilities.com
Is this Capital Module being filed in a CoS or Price-Cap IR Application?	**Price-Cap IR**
Rate Year	**2024**
Indicate the Price-Cap IR Year (1, 2, 3, 4, etc) in which Alectra Utilities Corporation-PowerStream Rate Zone is applying:	**7**
Next OEB Scheduled Rebasing Year	**2027**
Alectra Utilities Corporation-PowerStream Rate Zone is applying for:	**ICM Approval**
Last Rebasing Year:	**2017**
The most recent complete year for which actual billing and load data exists	**2022**
Current IPI	**4.80%**
Strech Factor Assigned to Middle Cohort*	**III**
Stretch Factor Value	**0.30%**
Price Cap Index	**4.50%**
Based on the inputs above, the growth factor utilized in the Materiality Threshold Calculation will be determined by:	**Revenues Based on 2022 Actual Distribution Demand** **Revenues Based on 2017 Board-Approved Distribution Demand**

Notes

Pale green cells represent input cells.

Pale blue cells represent drop-down lists. The applicant should select the appropriate item from the drop-down list.

White cells contain fixed values, automatically generated values or formulae.

While this model has been provided in Excel format and is required to be filed with the applications, the onus remains on the applicant to ensure the accuracy of the data and the results.

**As per ACM/ICM policy, the middle cohort stretch factor is applied to all ACM/ICM applications.*

OEB policies regarding rate-setting and rebasing following distributor consolidations could allow a distributor to not rebase rates for up to ten years. A distributor could also apply for and receive OEB approval to defer rebasing. If a distributor is under Price Cap IR for more than four years after rebasing and applies for an ICM, this spreadsheet will need to be adapted to accommodate those circumstances. The distributor should contact OEB staff to discuss the circumstances so that a customized model can be provided.

Ontario Energy Board

Capital Module
Applicable to ACM and ICM

Alectra Utilities Corporation-PowerStream Rate Zone

Select the appropriate rate classes as they appear on your most recent Board-Approved Tariff of Rates and Charges, excluding the MicroFit Class.

How many classes are on your most recent Board-Approved Tariff of Rates and Charges? **7**

Select Your Rate Classes from the **Blue Cells** below. Please ensure that a rate class is assigned to **each shaded cell.**

	Rate Class Classification
1	RESIDENTIAL
2	GENERAL SERVICE LESS THAN 50 kW
3	GENERAL SERVICE 50 TO 4,999 KW
4	LARGE USE
5	UNMETERED SCATTERED LOAD
6	SENTINEL LIGHTING
7	STREET LIGHTING

Ontario Energy Board

Capital Module
Applicable to ACM and ICM

Alectra Utilities Corporation-PowerStream Rate Zone

Input the billing determinants associated with Alectra Utilities Corporation-PowerStream Rate Zone's Revenues Based on 2022 Actual Distribution Demand.
Input the current approved distribution rates. Sheets 4 & 5 calculate the NUMERATOR portion of the growth factor calculation.

		2022 Actual Distribution Demand			Current Approved Distribution Rates		
Rate Class	**Units**	**Billed Customers or Connections**	**Billed kWh**	**Billed kW (if applicable)**	**Monthly Service Charge**	**Distribution Volumetric Rate kWh**	**Distribution Volumetric Rate kW**
RESIDENTIAL	$/kWh	346,125	2,933,738,041		30.85		
GENERAL SERVICE LESS THAN 50 kW	$/kWh	33,939	1,011,691,122		32.40	0.0207	
GENERAL SERVICE 50 TO 4,999 KW	$/kW	4,829	4,695,412,730	12,325,693	158.88		4.7375
LARGE USE	$/kW	2	121,322,389	191,317	6845.04		2.5268
UNMETERED SCATTERED LOAD	$/kWh	3,220	14,434,010		9.69	0.0219	
SENTINEL LIGHTING	$/kW	146	246,335	664	4.72		11.1227
STREET LIGHTING	$/kW	96,465	39,116,765	110,692	1.33		7.1250

Ontario Energy Board

Capital Module
Applicable to ACM and ICM

Alectra Utilities Corporation-PowerStream Rate Zone

Calculation of pro forma 2017 Revenues. No input required.

	2022 Actual Distribution Demand			Current Approved Distribution Rates										
Rate Class	Billed Customers or Connections	Billed kWh	Billed kW (if applicable)	Monthly Service Charge	Distribution Volumetric Rate kWh	Distribution Volumetric Rate kW	Service Charge Revenue	Distribution Volumetric Rate Revenue kWh	Distribution Volumetric Rate Revenue kW	Revenues from Rates	Service Charge % Revenue	Distribution Volumetric Rate % Revenue kWh	Distribution Volumetric Rate % Revenue kW	Total % Revenue
	A	B	C	D	E	F	G	H	I	J	K = G / J	L = H / J	M = I / J	N
RESIDENTIAL	346,125	2,933,738,041		30.85	0.0000	0.0000	128,135,475	0	0	128,135,475	100.0%	0.0%	0.0%	54.9%
GENERAL SERVICE LESS THAN 50 kW	33,939	1,011,691,122		32.40	0.0207	0.0000	13,195,483	20,942,006	0	34,137,489	38.7%	61.3%	0.0%	14.6%
GENERAL SERVICE 50 TO 4,999 KW	4,829	4,695,412,730	12,325,693	158.88	0.0000	4.7375	9,206,778	0	58,392,971	67,599,749	13.6%	0.0%	86.4%	28.9%
LARGE USE	2	121,322,389	191,317	6,845.04	0.0000	2.5268	164,281	0	483,420	647,701	25.4%	0.0%	74.6%	0.3%
UNMETERED SCATTERED LOAD	3,220	14,434,010		9.69	0.0219	0.0000	374,422	316,105	0	690,526	54.2%	45.8%	0.0%	0.3%
SENTINEL LIGHTING	146	246,335	664	4.72	0.0000	11.1227	8,269	0	7,385	15,655	52.8%	0.0%	47.2%	0.0%
STREET LIGHTING	96,465	39,116,765	110,692	1.33	0.0000	7.1250	1,539,581	0	788,681	2,328,262	66.1%	0.0%	33.9%	1.0%
Total	**484,726**	**8,815,961,392**	**12,628,366**				**152,624,290**	**21,258,111**	**59,672,456**	**233,554,857**				**100.0%**

Ontario Energy Board

Capital Module
Applicable to ACM and ICM

Alectra Utilities Corporation-PowerStream Rate Zone

Applicants Rate Base

Last COS Rebasing: 2017

Average Net Fixed Assets

Gross Fixed Assets - Re-based Opening	$	1,183,508,940	A			
Add: CWIP Re-based Opening	$	57,486,862	B			
Re-based Capital Additions	$	114,494,289	C			
Re-based Capital Disposals	-$	2,734,108	D			
Re-based Capital Retirements			E			
Deduct: CWIP Re-based Closing	-$	39,959,632	F			
Gross Fixed Assets - Re-based Closing	$	1,312,796,351	G			
Average Gross Fixed Assets				$	1,248,152,646	H = (A + G) / 2
Accumulated Depreciation - Re-based Opening	$	229,378,962	I			
Re-based Depreciation Expense	$	52,272,173	J			
Re-based Disposals	-$	717,703	K			
Re-based Retirements	$	-	L			
Accumulated Depreciation - Re-based Closing	$	280,933,432	M			
Average Accumulated Depreciation				$	255,156,197	N = (I + M) / 2
Average Net Fixed Assets				**$**	**992,996,449**	O = H - N

Working Capital Allowance

Working Capital Allowance Base	$	1,197,449,515	P			
Working Capital Allowance Rate		7.5%	Q			
Working Capital Allowance				**$**	**89,808,714**	R = P * Q
Rate Base				**$**	**1,082,805,162**	S = O + R

Return on Rate Base

Deemed ShortTerm Debt %		4.00%	T	$	43,312,206	W = S * T
Deemed Long Term Debt %		56.00%	U	$	606,370,891	X = S * U
Deemed Equity %		40.00%	V	$	433,122,065	Y = S * V
Short Term Interest		1.76%	Z	$	762,295	AC = W * Z
Long Term Interest		3.88%	AA	$	23,542,372	AD = X * AA
Return on Equity		8.78%	AB	$	38,028,117	AE = Y * AB
Return on Rate Base				**$**	**62,332,784**	AF = AC + AD + AE

Distribution Expenses

OM&A Expenses	$	96,167,243	AG			
Amortization	$	50,974,104	AH			
Ontario Capital Tax			AI			
Grossed Up Taxes/PILs	$	2,745,639	AJ			
Low Voltage			AK			
Transformer Allowance			AL			
			AM			
			AN			
			AO			
				$	**149,886,987**	AP = SUM (AG : AO)

Revenue Offsets

Specific Service Charges	-$	3,474,784	AQ			
Late Payment Charges	-$	2,076,532	AR			
Other Distribution Income	-$	2,025,296	AS			
Other Income and Deductions	-$	5,141,699	AT	**-$**	**12,718,312**	AU = SUM (AQ : AT)
Revenue Requirement from Distribution Rates				**$**	**199,501,459**	AV = AF + AP + AU

Rate Classes Revenue

Rate Classes Revenue - Total (Sheet 4)				$	233,554,857	AW

Ontario Energy Board

Capital Module
Applicable to ACM and ICM

Alectra Utilities Corporation-PowerStream Rate Zone

Input the billing determinants associated with Alectra Utilities Corporation-PowerStream Rate Zone's Revenues Based on 2017 Board-Approved Distribution Demand. This sheet calculates the DENOMINATOR portion of the growth factor calculation.
Pro forma Revenue Calculation.

	2017 Board-Approved Distribution Demand			Current Approved Distribution Rates										
Rate Class	Billed Customers or Connections	Billed kWh	Billed kW	Monthly Service Charge	Distribution Volumetric Rate kWh	Distribution Volumetric Rate kW	Service Charge Revenue	Distribution Volumetric Rate Revenue kWh	Distribution Volumetric Rate Revenue kW	Total Revenue By Rate Class	Service Charge % Revenue	Distribution Volumetric Rate % Revenue kWh	Distribution Volumetric Rate % Revenue kW	Total % Revenue
	A	B	C	D	E	F	G	H	I	J	K = G / J_{total}	L = H / J_{total}	M = I / J_{total}	N
RESIDENTIAL	331,465	2,689,802,037		30.85	0.0000	0.0000	122,708,343	0	0	122,708,343	53.9%	0.0%	0.0%	53.9%
GENERAL SERVICE LESS THAN 50 kW	32,776	1,031,991,524		32.40	0.0207	0.0000	12,743,309	21,362,225	0	34,105,533	5.6%	9.4%	0.0%	15.0%
GENERAL SERVICE 50 TO 4,999 KW	5,081	4,566,530,904	12,192,632	158.88	0.0000	4.7375	9,687,231	0	57,762,592	67,449,823	4.3%	0.0%	25.4%	29.6%
LARGE USE	2	75,964,677	149,679	6,845.04	0.0000	2.5268	164,281	0	378,209	542,490	0.1%	0.0%	0.2%	0.2%
UNMETERED SCATTERED LOAD	3,044	14,542,413		9.69	0.0219	0.0000	353,956	318,479	0	672,435	0.2%	0.1%	0.0%	0.3%
SENTINEL LIGHTING	207	377,900	975	4.72	0.0000	11.1227	11,724	0	10,842	22,567	0.0%	0.0%	0.0%	0.0%
STREET LIGHTING	89,730	45,603,291	127,503	1.33	0.0000	7.1250	1,432,091	0	908,458	2,340,549	0.6%	0.0%	0.4%	1.0%
Total	**462,305**	**8,424,812,745**	**12,470,788**				**147,100,936**	**21,680,703**	**59,060,101**	**227,841,740**				**100.0%**

Ontario Energy Board

Capital Module
Applicable to ACM and ICM

Alectra Utilities Corporation-PowerStream Rate Zone

Current Revenue from Rates

This sheet is used to determine the applicant's most current allocation of revenues (after the most recent revenue to cost ratio adjustment, if applicable) to appropriately allocate the incremental revenue requirement to the classes.

	Current OEB-Approved Base Rates			2022 Actual Distribution Demand										
Rate Class	Monthly Service Charge	Distribution Volumetric Rate kWh	Distribution Volumetric Rate kW	Re-based Billed Customers or Connections	Re-based Billed kWh	Re-based Billed kW	Current Base Service Charge Revenue	Current Base Distribution Volumetric Rate kWh Revenue	Current Base Distribution Volumetric Rate kW Revenue	Total Current Base Revenue	Service Charge % Total Revenue	Distribution Volumetric Rate % Total Revenue	Distribution Volumetric Rate % Total Revenue	Total % Revenue
	A	B	C	D	E	F	G	H	I	J	L = G / J_{total}	M = H / J_{total}	N = I / J_{total}	O
RESIDENTIAL	30.85	0	0	346,125	2,933,738,041	0	128,135,475	0	0	128,135,475	54.86%	0.00%	0.00%	54.9%
GENERAL SERVICE LESS THAN 50 kW	32.40	0.0207	0	33,939	1,011,691,122	0	13,195,483	20,942,006	0	34,137,489	5.65%	8.97%	0.00%	14.6%
GENERAL SERVICE 50 TO 4,999 KW	158.88	0	4.7375	4,829	4,695,412,730	12,325,693	9,206,778	0	58,392,971	67,599,749	3.94%	0.00%	25.00%	28.9%
LARGE USE	6845.04	0	2.5268	2	121,322,389	191,317	164,281	0	483,420	647,701	0.07%	0.00%	0.21%	0.3%
UNMETERED SCATTERED LOAD	9.69	0.0219	0	3,220	14,434,010	0	374,422	316,105	0	690,526	0.16%	0.14%	0.00%	0.3%
SENTINEL LIGHTING	4.72	0	11.1227	146	246,335	664	8,269	0	7,385	15,655	0.00%	0.00%	0.00%	0.0%
STREET LIGHTING	1.33	0	7.125	96,465	39,116,765	110,692	1,539,581	0	788,681	2,328,262	0.66%	0.00%	0.34%	1.0%
Total							**152,624,290**	**21,258,111**	**59,672,456**	**233,554,857**				**100.0%**

Ontario Energy Board

Capital Module
Applicable to ACM and ICM

Alectra Utilities Corporation-PowerStream Rate Zone

No Input Required.

Final Materiality Threshold Calculation

$$Threshold\ Value\ (\%) = 1 + \left|\left(\frac{RB}{d}\right) \times (g + PCI \times (1 + g))\right| \times \left((1 + g) \times (1 + PCI)\right)^{n-1} + 10\%$$

Cost of Service Rebasing Year		**2017**	
Price Cap IR Year in which Application is made		**7**	n
Price Cap Index		**4.50%**	PCI
Growth Factor Calculation			
Revenues Based on 2022 Actual Distribution Demand		**$233,554,857**	
Revenues Based on 2017 Board-Approved Distribution Demand		**$227,841,740**	
Growth Factor		**0.50%**	$g\ (Note\ 1)$
Dead Band		**10%**	
Average Net Fixed Assets			
Gross Fixed Assets Opening	$	1,183,508,940	
Add: CWIP Opening	$	57,486,862	
Capital Additions	$	114,494,289	
Capital Disposals	-$	2,734,108	
Capital Retirements	$	-	
Deduct: CWIP Closing	-$	39,959,632	
Gross Fixed Assets - Closing	$	1,312,796,351	
Average Gross Fixed Assets	$	1,248,152,646	
Accumulated Depreciation - Opening	$	229,378,962	
Depreciation Expense	$	52,272,173	
Disposals	-$	717,703	
Retirements	$	-	
Accumulated Depreciation - Closing	$	280,933,432	
Average Accumulated Depreciation	$	255,156,197	
Average Net Fixed Assets	$	992,996,449	
Working Capital Allowance			
Working Capital Allowance Base	$	1,197,449,515	
Working Capital Allowance Rate		8%	
Working Capital Allowance	$	89,808,714	
Rate Base	**$**	**1,082,805,162**	RB
Depreciation	**$**	**52,272,173**	d

Threshold Value (varies by Price Cap IR Year subsequent to CoS rebasing)

Price Cap IR Year 2018	**214%**
Price Cap IR Year 2019	**219%**
Price Cap IR Year 2020	**225%**
Price Cap IR Year 2021	**231%**
Price Cap IR Year 2022	**237%**
Price Cap IR Year 2023	**243%**
Price Cap IR Year 2024	**250%**
Price Cap IR Year 2025	**257%**
Price Cap IR Year 2026	**264%**
Price Cap IR Year 2027	**272%**

Threshold CAPEX $Threshold\ Value\ \times d$

Price Cap IR Year 2018	**$ 111,900,238**
Price Cap IR Year 2019	**$ 114,633,373**
Price Cap IR Year 2020	**$ 117,503,822**
Price Cap IR Year 2021	**$ 120,518,484**
Price Cap IR Year 2022	**$ 123,684,605**
Price Cap IR Year 2023	**$ 127,009,794**
Price Cap IR Year 2024	**$ 130,502,043**
Price Cap IR Year 2025	**$ 134,169,744**
Price Cap IR Year 2026	**$ 138,021,714**
Price Cap IR Year 2027	**$ 142,067,209**

Note 1: The growth factor g is annualized, depending on the number of years between the numerator and denominator for the calculation. Typically, for ACM review in a cost of service and in the fourth year of Price Cap IR, the ratio is divided by 2 to annualize it. No division is normally required for the first three years under Price Cap IR.

Ontario Energy Board

Capital Module
Applicable to ACM and ICM

Alectra Utilities Corporation-PowerStream Rate Zone

Identify ALL Proposed ACM and ICM projects and related CAPEX costs in the relevant years

	Cost of Service	*Price Cap IR*	*Price Cap IR*	*Price Cap IR*	*Price Cap IR*
	Test Year 2017	Year 1 2018	Year 2 2019	Year 3 2020	Year 4 2021
CAPEX[1]					$ 53,980,407
Materiality Threshold		$ 111,900,238	$ 114,633,373	$ 117,503,822	$ 120,518,484
Maximum Eligible Incremental Capital (Forecasted Capex less Threshold)		$ -	$ -	$ -	$ -

		Test Year	Year 1 2018			Year 2 2019			Year 3 2020			Year 4 2021		
Project Descriptions:	Type		Proposed ACM/ICM	Amortization Expense	CCA	Proposed ACM/ICM	Amortization Expense	CCA	Proposed ACM/ICM	Amortization Expense	CCA	Proposed ACM/ICM	Amortization Expense	CCA
Total Cost of ACM/ICM Projects			$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Maximum Allowed Incremental Capital			$ -			$ -			$ -			$ -		

	Price Cap IR (Deferred Rebasing) (if necessary)	*Price Cap IR (Deferred Rebasing) (if necessary)*	*Price Cap IR (Deferred Rebasing) (if necessary)*
	Price Cap IR	*Price Cap IR*	*Price Cap IR*
	Year 5 2022	Year 6 2023	Year 7 2024
Distribution System Plan CAPEX			$ 117,556,163
Materiality Threshold	$ 123,684,605	$ 127,009,794	$ 130,502,043
Maximum Eligible Incremental Capital (Forecasted Capex less Threshold)	$ -	$ -	$ -

		Year 5 2022			Year 6 2023			Year 7 2024		
Project Descriptions:	Type	Proposed ACM/ICM	Amortization Expense	CCA	Proposed ACM/ICM	Amortization Expense	CCA	Proposed ACM/ICM	Amortization Expense	CCA
Cable Injection and Cable Replacement								$ 17,273,508	$ 383,856	$ 1,381,881
Total Cost of ACM/ICM Projects		$ -	$ -	$ -	$ -	$ -	$ -	$ 17,273,508	$ 383,856	$ 1,381,881
Maximum Allowed Incremental Capital		$ -			$ -			$ -		

1. For the Cost of Service Test Year, CAPEX refers to the CAPEX approved in the DSP. For subsequent Price CAP IR years, the CAPEX to be entered is the actual CAPEX. For the current Price Cap IR year, the CAPEX to be entered is the proposed CAPEX including any ICM/updated ACM project CAPEX for the year.

Ontario Energy Board

Capital Module
Applicable to ACM and ICM

Alectra Utilities Corporation-PowerStream Rate Zone

Incremental Capital Adjustment **Rate Year:** 2024

Current Revenue Requirement

Current Revenue Requirement - Total	$ 199,501,459	A

Eligible Incremental Capital for ACM/ICM Recovery

	Total Claim	Eligible for ACM/ICM (Full Year Prorated Amount) *(from Sheet 10b)*	
Amount of Capital Projects Claimed	$ 17,273,508	$ -	B
Depreciation Expense	$ 383,856	$ -	C
CCA	$ 1,381,881	$ -	V

ACM/ICM Incremental Revenue Requirement Based on Eligible Amount in Rate Year

Return on Rate Base

Incremental Capital			$ -	B
Depreciation Expense (prorated to Eligible Incremental Capital)			$ -	C
Incremental Capital to be included in Rate Base (average NBV in year)			$ -	D = B - C/2
	% of capital structure			
Deemed Short-Term Debt	4.0%	E	$ -	G = D * E
Deemed Long-Term Debt	56.0%	F	$ -	H = D * F
	Rate (%)			
Short-Term Interest	1.76%	I	$ -	K = G * I
Long-Term Interest	3.88%	J	$ -	L = H * J
Return on Rate Base - Interest			$ -	M = K + L
	% of capital structure			
Deemed Equity %	40.00%	N	$ -	P = D * N
	Rate (%)			
Return on Rate Base -Equity	8.78%	O	$ -	Q = P * O
Return on Rate Base - Total			$ -	R = M + Q

Amortization Expense

Amortization Expense - Incremental		C	$ -	S

Grossed up Taxes/PILs

Regulatory Taxable Income		O	$ -	T
Add Back Amortization Expense (Prorated to Eligible Incremental Capital)		S	$ -	U
Deduct CCA (Prorated to Eligible Incremental Capital)			$ -	V
Incremental Taxable Income			$ -	W = T + U - V
Current Tax Rate	26.5%	X		
Taxes/PILs Before Gross Up			$ -	Y = W * X
Grossed-Up Taxes/PILs			$ -	Z = Y / (1 - X)

Incremental Revenue Requirement

Return on Rate Base - Total		Q	$ -	AA
Amortization Expense - Total		S	$ -	AB
Grossed-Up Taxes/PILs		Z	$ -	AC
Incremental Revenue Requirement			$ -	AD = AA + AB + AC

Ontario Energy Board

Capital Module
Applicable to ACM and ICM

Alectra Utilities Corporation-PowerStream Rate Zone

Calculation of incremental rate rider. Choose one of the 3 options: Fixed and Variable Rate Riders

Rate Class	Service Charge % Revenue	Distribution Volumetric Rate % Revenue kWh	Distribution Volumetric Rate % Revenue kW	Service Charge Revenue	Distribution Volumetric Rate Revenue kWh	Distribution Volumetric Rate Revenue kW	Total Revenue by Rate Class	Billed Customers or Connections	Billed kWh	Billed kW	Service Charge Rate Rider	Distribution Volumetric Rate kWh Rate Rider	Distribution Volumetric Rate kW Rate Rider
	From Sheet 7	*From Sheet 7*	*From Sheet 7*	Col C * Col I_{total}	Col D* Col I_{total}	Col E* Col I_{total}	*Col I total*	*From Sheet 4*	*From Sheet 4*	*From Sheet 4*	Col F / Col K / 12	Col G / Col L	Col H / Col M
RESIDENTIAL	54.86%	0.00%	0.00%	0	0	0	0	346,125	2,933,738,041		0.00	0.0000	0.0000
GENERAL SERVICE LESS THAN 50 kW	5.65%	8.97%	0.00%	0	0	0	0	33,939	1,011,691,122		0.00	0.0000	0.0000
GENERAL SERVICE 50 TO 4,999 KW	3.94%	0.00%	25.00%	0	0	0	0	4,829	4,695,412,730	12,325,693	0.00	0.0000	0.0000
LARGE USE	0.07%	0.00%	0.21%	0	0	0	0	2	121,322,389	191,317	0.00	0.0000	0.0000
UNMETERED SCATTERED LOAD	0.16%	0.14%	0.00%	0	0	0	0	3,220	14,434,010		0.00	0.0000	0.0000
SENTINEL LIGHTING	0.00%	0.00%	0.00%	0	0	0	0	146	246,335	664	0.00	0.0000	0.0000
STREET LIGHTING	0.66%	0.00%	0.34%	0	0	0	0	96,465	39,116,765	110,692	0.00	0.0000	0.0000
Total	**65.35%**	**9.10%**	**25.55%**	**0**	**0**	**0**	**0**	**484,726**	**8,815,961,392**	**12,628,366**			

From Sheet 11, E93

1-Staff-1

Attachment 3
2024 ICM Model ERZ - 4.8%

Ontario Energy Board

Capital Module
Applicable to ACM and ICM

Note: Depending on the selections made below, certain worksheets in this workbook will be hidden.

Version 1.0

Utility Name	Alectra Utilities - Enersource Rate Zone
Assigned EB Number	EB-2023-0004
Name of Contact and Title	Natalie Yeates, Director, Regulatory Affairs and Reporting
Phone Number	905-798-2872
Email Address	natalie.yeates@alectrautilities.com

Is this Capital Module being filed in a CoS or Price-Cap IR Application?	**Price-Cap IR**	**Rate Year**	**2024**
Indicate the Price-Cap IR Year (1, 2, 3, 4, etc) in which Alectra Utilities - Enersource Rate Zone is	**11**	**Next OEB Scheduled Rebasing Year**	**2027**
lectra Utilities - Enersource Rate Zone is applying for:	**ICM Approval**		
Last Rebasing Year:	**2013**		
The most recent complete year for which actual billing and load data exists	**2022**		
Current IPI	**4.80%**		
Strech Factor Assigned to Middle Cohort	**III**		
Stretch Factor Value	**0.30%**		
Price Cap Index	**4.50%**		

Based on the inputs above, the growth factor utilized in the Materiality Threshold Calculation will be determined by:

Revenues Based on 2022 Actual Distribution Demand

Revenues Based on 2013 Board-Approved Distribution Demand

Notes

Pale green cells represent input cells.

Pale blue cells represent drop-down lists. The applicant should select the appropriate item from the drop-down list.

White cells contain fixed values, automatically generated values or formulae.

While this model has been provided in Excel format and is required to be filed with the applications, the onus remains on the applicant to ensure the accuracy of the data and the results.

**As per ACM/ICM policy, the middle cohort stretch factor is applied to all ACM/ICM applications.*

OEB policies regarding rate-setting and rebasing following distributor consolidations could allow a distributor to not rebase rates for up to ten years. A distributor could also apply for and receive OEB approval to defer rebasing. If a distributor is under Price Cap IR for more than four years after rebasing and applies for an ICM, this spreadsheet will need to be adapted to accommodate those circumstances. The distributor should contact OEB staff to discuss the circumstances so that a customized model can be provided.

Ontario Energy Board

Capital Module
Applicable to ACM and ICM

Alectra Utilities Corporation - Enersource Hydro Mississauga Inc.

Select the appropriate rate classes as they appear on your most recent Board-Approved Tariff of Rates and Charges, excluding the

How many classes are on your most recent Board-Approved Tariff of Rates and Charges? **7**

Select Your Rate Classes from the **Blue Cells** below. Please ensure that a rate class is assigned to **each shaded cell.**

	Rate Class Classification
1	RESIDENTIAL
2	GENERAL SERVICE LESS THAN 50 KW
3	GENERAL SERVICE 50 TO 499 KW
4	GENERAL SERVICE 500 TO 4,999 KW
5	LARGE USE
6	UNMETERED SCATTERED LOAD
7	STREET LIGHTING

Ontario Energy Board

Capital Module
Applicable to ACM and ICM

Alectra Utilities Corporation - Enersource Hydro Mississauga Inc.

Input the billing determinants associated with Alectra Utilities - Enersource Rate Zone's 2022. Input the current approved distribution rates. Sheets 4

		2022 Actual Distribution Demand			Current Approved Distribution Rates		
Rate Class	**Units**	**Billed Customers or Connections**	**Billed kWh**	**Billed kW (if applicable)**	**Monthly Service Charge**	**Distribution Volumetric Rate kWh**	**Distribution Volumetric Rate kW**
RESIDENTIAL	$/kWh	185,254	1,599,146,375		26.76		
GENERAL SERVICE LESS THAN 50 KW	$/kWh	19,579	696,191,917		49.14	0.0144	
GENERAL SERVICE 50 TO 499 KW	$/kW	3,396	1,863,077,828	5,327,788	86.55		5.2083
GENERAL SERVICE 500 TO 4,999 KW	$/kW	416	1,865,649,100	4,396,114	1970.76		2.6800
LARGE USE	$/kW	9	991,422,381	1,690,526	15538.69		3.3264
UNMETERED SCATTERED LOAD	$/kWh	3,106	11,275,180		10.15	0.0184	
STREET LIGHTING	$/kW	50,812	13,531,876	36,860	1.71		13.0129

Ontario Energy Board

Capital Module
Applicable to ACM and ICM

Alectra Utilities Corporation - Enersource Hydro Mississauga Inc.

Calculation of pro forma 2013 Revenues. No input required.

	2022 Actual Distribution Demand			Current Approved Distribution Rates										
Rate Class	Billed Customers or Connections	Billed kWh	Billed kW (if applicable)	Monthly Service Charge	Distribution Volumetric Rate kWh	Distribution Volumetric Rate kW	Service Charge Revenue	Distribution Volumetric Rate Revenue kWh	Distribution Volumetric Rate Revenue kW	Revenue Requirement from Rates	Service Charge % Revenue	Distribution Volumetric Rate % Revenue kWh	Distribution Volumetric Rate % Revenue kW	Total % Revenue
	A	B	C	D	E	F	G = A * D *12	H = B * E	I = C * F	J = G + H + I	K = G / J	L = H / J	M = I / J	N = J / R
RESIDENTIAL	185,254	1,599,146,375		26.76	0.0000	0.0000	59,488,764	0	0	59,488,764	100.0%	0.0%	0.0%	41.5%
GENERAL SERVICE LESS THAN 50 KW	19,579	696,191,917		49.14	0.0144	0.0000	11,545,345	10,025,164	0	21,570,508	53.5%	46.5%	0.0%	15.0%
GENERAL SERVICE 50 TO 999 KW	3,396	1,863,077,828	5,327,788	86.55	0.0000	5.2083	3,527,086	0	27,748,718	31,275,804	11.3%	0.0%	88.7%	21.8%
GENERAL SERVICE 500 TO 4,999 KW	416	1,865,649,100	4,396,114	1,970.76	0.0000	2.6800	9,838,034	0	11,781,586	21,619,619	45.5%	0.0%	54.5%	15.1%
LARGE USE	9	991,422,381	1,690,526	15,538.69	0.0000	3.3264	1,678,179	0	5,623,366	7,301,544	23.0%	0.0%	77.0%	5.1%
UNMETERED SCATTERED LOAD	3,106	11,275,180		10.15	0.0184	0.0000	378,311	207,463	0	585,774	64.6%	35.4%	0.0%	0.4%
STREET LIGHTING	50,812	13,531,876	36,860	1.71	0.0000	13.0129	1,042,662	0	479,655	1,522,318	68.5%	0.0%	31.5%	1.1%
Total	**262,572**	**7,040,294,657**	**11,451,288**				**87,498,380**	**10,232,627**	**45,633,325**	**143,364,332**				**100.0%**

Ontario Energy Board

Capital Module
Applicable to ACM and ICM

Applicants Rate Base

Last COS Rebasing: 2013

Average Net Fixed Assets

Gross Fixed Assets - Re-based Opening	$	554,341,087	A			
Add: CWIP Re-based Opening	$	4,371,726	B			
Re-based Capital Additions	$	46,257,875	C			
Re-based Capital Disposals	-$	1,026,755	D			
Re-based Capital Retirements	-$	2,063,957	E			
Deduct: CWIP Re-based Closing	-$	4,371,726	F			
Gross Fixed Assets - Re-based Closing	$	597,508,250	G			
Average Gross Fixed Assets				$	575,924,669	H = (A + G) / 2
Accumulated Depreciation - Re-based Opening	$	47,380,643	I			
Re-based Depreciation Expense	$	25,461,389	J			
Re-based Disposals	-$	2,063,957	K			
Re-based Retirements	-$	1,026,755	L			
Accumulated Depreciation - Re-based Closing	$	69,751,320	M			
Average Accumulated Depreciation				$	58,565,982	N = (I + M) / 2
Average Net Fixed Assets				**$**	**517,358,687**	O = H - N

Working Capital Allowance

Working Capital Allowance Base	$	786,215,891	P			
Working Capital Allowance Rate		13.5%	Q			
Working Capital Allowance				**$**	**106,139,145**	R = P * Q
Rate Base				**$**	**623,497,832**	S = O + R

Return on Rate Base

Deemed ShortTerm Debt %		4.00%	T	$	24,939,913	W = S * T
Deemed Long Term Debt %		56.00%	U	$	349,158,786	X = S * U
Deemed Equity %		40.00%	V	$	249,399,133	Y = S * V
Short Term Interest		2.08%	Z	$	518,750	AC = W * Z
Long Term Interest		5.09%	AA	$	17,777,070	AD = X * AA
Return on Equity		8.93%	AB	$	22,271,343	AE = Y * AB
Return on Rate Base				**$**	**40,567,163**	AF = AC + AD + AE

Distribution Expenses

OM&A Expenses	$	51,364,731	AG			
Amortization	$	25,461,389	AH			
Ontario Capital Tax			AI			
Grossed Up PILs	$	3,079,932	AJ			
Low Voltage			AK			
Transformer Allowance			AL			
	$	3,200,167	AM			
	-$	848,514	AN			
			AO			
				$	**82,257,705**	AP = SUM (AG : AO)

Revenue Offsets

Specific Service Charges	-$	1,236,975	AQ			
Late Payment Charges	-$	1,800,000	AR			
Other Distribution Income	-$	1,260,695	AS			
Other Income and Deductions	-$	532,207	AT	**-$**	**4,829,877**	AU = SUM (AQ : AT)
Revenue Requirement from Distribution Rates				**$**	**117,994,991**	AV = AF + AP + AU

Rate Classes Revenue

Rate Classes Revenue - Total (Sheet 4)				$	143,364,332	AW

Ontario Energy Board

Capital Module
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Input the billing determinants associated with Alectra Utilities Corporation - Enersource Hydro Mississauga Inc. 2013 Board-Approved Distribution Revenues. This sheet calculates the DENOMINATOR portion of the growth factor calculation. Pseudo Revenue Requirement Calculation.

	2013 Board-Approved Distribution Demand			Current Approved Distribution Rates										
Rate Class	Billed Customers or Connections	Billed kWh	Billed kW	Monthly Service Charge	Distribution Volumetric Rate kWh	Distribution Volumetric Rate kW	Service Charge Revenue	Distribution Volumetric Rate Revenue kWh	Distribution Volumetric Rate Revenue kW	Total Revenue By Rate Class	Service Charge % Revenue	Distribution Volumetric Rate % Revenue kWh	Distribution Volumetric Rate % Revenue kW	Total % Revenue
	A	B	C	D	E	F	G = A * D *12	H = B * E	I = C * F	J = G + H + I	K = G / J_{total}	L = H / J_{total}	M = I / J_{total}	N = J / J_{total}
RESIDENTIAL	176,865	1,423,857,475		26.76	0.0000	0.0000	56,794,889	0	0	56,794,889	38.6%	0.0%	0.0%	38.6%
GENERAL SERVICE LESS THAN 50 KW	17,702	612,188,101		49.14	0.0144	0.0000	10,438,515	8,815,509	0	19,254,024	7.1%	6.0%	0.0%	13.1%
GENERAL SERVICE 50 TO 999 KW	3,950		6,222,022	86.55	0.0000	5.2083	4,102,470	0	32,406,157	36,508,627	2.8%	0.0%	22.0%	24.8%
GENERAL SERVICE 500 TO 4,999 KW	464		5,154,338	1,970.76	0.0000	2.6800	10,973,192	0	13,813,626	24,786,818	7.5%	0.0%	9.4%	16.9%
LARGE USE	9		1,737,267	15,538.69	0.0000	3.3264	1,678,179	0	5,778,845	7,457,023	1.1%	0.0%	3.9%	5.1%
UNMETERED SCATTERED LOAD	2,942	10,383,027		10.15	0.0184	0.0000	358,336	191,048	0	549,383	0.2%	0.1%	0.0%	0.4%
STREET LIGHTING	49,985		49,889	1.71	0.0000	13.0129	1,025,692	0	649,201	1,674,893	0.7%	0.0%	0.4%	1.1%
Total	**251,917**	**2,046,428,603**	**13,163,516**				**85,371,272**	**9,006,556**	**52,647,829**	**147,025,657**				**100.0%**

Ontario Energy Board

Capital Module
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Current Revenue from Rates

This sheet is used to determine the applicant's most current allocation of revenues (after the most recent revenue to cost ratio adjustment, if applicable) to appropriately allocate the incremental revenue requirement to the classes.

	Current Approved Distribution Rates			2022 Actual Distribution Demand										
Rate Class	Monthly Service Charge	Distribution Volumetric Rate kWh	Distribution Volumetric Rate kW	Re-based Billed Customers or Connections	Re-based Billed kWh	Re-based Billed kW	Current Base Service Charge Revenue	Current Base Distribution Volumetric Rate kWh Revenue	Current Base Distribution Volumetric Rate kW Revenue	Total Current Base Revenue	Service Charge % Total Revenue	Distribution Volumetric Rate % Total Revenue	Distribution Volumetric Rate % Total Revenue	Total % Revenue
	A	B	C	D	E	F	G = A * D *12	H = B * E	I = C * F	J = G + H + I	L = G / J_{total}	M = H / J_{total}	N = I / J_{total}	O = J / J_{total}
RESIDENTIAL	26.76	0.0000	0.0000	185,254	1,599,146,375		59,488,764	0	0	59,488,764	41.49%	0.00%	0.00%	41.5%
GENERAL SERVICE LESS THAN 50 KW	49.14	0.0144	0.0000	19,579	696,191,917		11,545,345	10,025,164	0	21,570,508	8.05%	6.99%	0.00%	15.0%
GENERAL SERVICE 50 TO 999 KW	86.55	0.0000	5.2083	3,396	1,863,077,828	5,327,788	3,527,086	0	27,748,718	31,275,804	2.46%	0.00%	19.36%	21.8%
GENERAL SERVICE 500 TO 4,999 KW	1970.76	0.0000	2.6800	416	1,865,649,100	4,396,114	9,838,034	0	11,781,586	21,619,619	6.86%	0.00%	8.22%	15.1%
LARGE USE	15538.69	0.0000	3.3264	9	991,422,381	1,690,526	1,678,179	0	5,623,366	7,301,544	1.17%	0.00%	3.92%	5.1%
UNMETERED SCATTERED LOAD	10.15	0.0184	0.0000	3,106	11,275,180		378,311	207,463	0	585,774	0.26%	0.14%	0.00%	0.4%
STREET LIGHTING	1.71	0.0000	13.0129	50,812	13,531,876	36,860	1,042,662	0	479,655	1,522,318	0.73%	0.00%	0.33%	1.1%
Total							**87,498,380**	**10,232,627**	**45,633,325**	**143,364,332**				**100.0%**

Ontario Energy Board

Capital Module
Applicable to ACM and ICM

Alectra Utilities Corporation - Enersource Hydro Mississauga Inc.

No Input Required.

Final Threshold Calculation

$$Threshold\ Value\ (\%) = 1 + \left|\left(\frac{RB}{d}\right) \times (g + PCI \times (1+g))\right| \times ((1+g) \times (1+PCI))^{n-1} + 10\%$$

Year		**2013**	
Year in which Applicant is applying		**11**	n
Price Cap Index		**4.50%**	PCI
Growth Factor Calculation			
Revenues Based on 2022 Actual Distribution Demand		**$143,364,332**	
Revenues Based on 2013 Board-Approved Distribution Demand		**$147,025,657**	
Growth Factor		**-0.28%**	$g\ (Note\ 1)$
Dead Band		**10%**	
Average Net Fixed Assets			
Gross Fixed Assets Opening	$	554,341,087	
Add: CWIP Opening	$	4,371,726	
Capital Additions	$	46,257,875	
Capital Disposals	-$	1,026,755	
Capital Retirements	-$	2,063,957	
Deduct: CWIP Closing	-$	4,371,726	
Gross Fixed Assets - Closing	$	597,508,250	
Average Gross Fixed Assets	$	575,924,669	
Accumulated Depreciation - Opening	$	47,380,643	
Depreciation Expense	$	25,461,389	
Disposals	-$	2,063,957	
Retirements	-$	1,026,755	
Accumulated Depreciation - Closing	$	69,751,320	
Average Accumulated Depreciation	$	58,565,982	
Average Net Fixed Assets	$	517,358,687	
Working Capital Allowance			
Working Capital Allowance Base	$	786,215,891	
Working Capital Allowance Rate		13.5%	
Working Capital Allowance	$	106,139,145	
Rate Base	**$**	**623,497,832**	RB
Depreciation	**$**	**25,461,389**	d

Threshold Value (varies by Price Cap IR Year subsequent to CoS rebasing)	
Price Cap IR Year 2014	**213.1%**
Price Cap IR Year 2015	**217.5%**
Price Cap IR Year 2016	**222.0%**
Price Cap IR Year 2017	**226.7%**
Price Cap IR Year 2018	**231.6%**
Price Cap IR Year 2019	**236.7%**
Price Cap IR Year 2020	**242.1%**
Price Cap IR Year 2021	**247.6%**
Price Cap IR Year 2022	**253.4%**
Price Cap IR Year 2023	**259.5%**
Price Cap IR Year 2024	**265.8%**

Threshold CAPEX		$Threshold\ Value\ \times d$
Price Cap IR Year 2014	**$ 54,262,104**	
Price Cap IR Year 2015	**$ 55,367,646**	
Price Cap IR Year 2016	**$ 56,519,740**	
Price Cap IR Year 2017	**$ 57,720,347**	
Price Cap IR Year 2018	**$ 58,971,510**	
Price Cap IR Year 2019	**$ 60,275,358**	
Price Cap IR Year 2020	**$ 61,634,109**	
Price Cap IR Year 2021	**$ 63,050,075**	
Price Cap IR Year 2022	**$ 64,525,665**	
Price Cap IR Year 2023	**$ 66,063,390**	
Price Cap IR Year 2024	**$ 67,665,866**	

Note 1: The growth factor g is annualized, depending on the number of years between the numerator and denominator for the calculation. Typically, for ACM review in a cost of service and in the fourth year of Price Cap IR, the ratio is divided by 2 to annualize it. No division is normally required for the first three years under Price Cap IR.

Ontario Energy Board

Capital Module
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Identify ALL Proposed ACM and ICM projects and related CAPEX costs in the relevant years

		Cost of Service Test Year 2013	*Price Cap IR* Year 1 2014	*Price Cap IR* Year 2 2015	*Price Cap IR* Year 3 2016	*Price Cap IR* Year 4 2017
CAPEX[1]						
Materiality Threshold			$ 54,262,104	$ 55,367,646	$ 56,519,740	$ 57,720,347
Maximum Eligible Incremental Capital (Forecasted Capex less Threshold)			$ -	$ -	$ -	$ -

		Test Year 2013	Year 1 2014			Year 2 2015			Year 3 2016			Year 4 2017		
Project Descriptions:	**Type**		**Proposed ACM/ICM**	**Amortization Expense**	**CCA**	**Proposed ACM/ICM**	**Amortization Expense**	**CCA**	**Proposed ACM/ICM**	**Amortization Expense**	**CCA**	**Proposed ACM/ICM**	**Amortization Expense**	**CCA**
Total Cost of ACM/ICM Projects			$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Maximum Allowed Incremental Capital			$ -			$ -			$ -			$ -		

Price Cap IR (Deferred Rebasing) (if necessary) | *Price Cap IR (Deferred Rebasing) (if necessary)* | *Price Cap IR (Deferred Rebasing) (if necessary)* | *Price Cap IR (Deferred Rebasing) (if necessary)*

1. For the Cost of Service Test Year, CAPEX refers to the CAPEX approved in the DSP. For subsequent Price CAP IR years, the CAPEX to be entered is the actual CAPEX. For the current Price Cap IR year, the CAPEX to be entered is the proposed CAPEX including any ICM/updated ACM project CAPEX for the year.

		Price Cap IR Year 5 2018	*Price Cap IR* Year 6 2019	*Price Cap IR* Year 7 2020	*Price Cap IR* Year 8 2021
Distribution System Plan CAPEX					
Materiality Threshold		$ 58,971,510	$ 60,275,358	$ 61,634,109	$ 63,050,075
Maximum Eligible Incremental Capital (Forecasted Capex less Threshold)		$ -	$ -	$ -	$ -

		Year 5 2018			Year 6 2019			Year 7 2020			Year 8 2021		
Project Descriptions:	**Type**	**Proposed ACM/ICM**	**Amortization Expense**	**CCA**	**Proposed ACM/ICM**	**Amortization Expense**	**CCA**	**Proposed ACM/ICM**	**Amortization Expense**	**CCA**	**Proposed ACM/ICM**	**Amortization Expense**	**CCA**
Total Cost of ACM/ICM Projects		$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Maximum Allowed Incremental Capital		$ -			$ -			$ -			$ -		

Price Cap IR (Deferred Rebasing) (if necessary) | *Price Cap IR (Deferred Rebasing) (if necessary)* | *Price Cap IR (Deferred Rebasing) (if necessary)*

1. For the Cost of Service Test Year, CAPEX refers to the CAPEX approved in the DSP. For subsequent Price CAP IR years, the CAPEX to be entered is the actual CAPEX. For the current Price Cap IR year, the CAPEX to be entered is the proposed CAPEX including any ICM/updated ACM project CAPEX for the year.

		Price Cap IR Year 9 2022	*Price Cap IR* Year 10 2023	*Price Cap IR* Year 10 2024
Distribution System Plan CAPEX				$ 56,233,618
Materiality Threshold		$ 64,525,665	$ 66,063,390	$ 67,665,866
Maximum Eligible Incremental Capital (Forecasted Capex less Threshold)		$ -	$ -	$ -

		Year 9 2022			Year 10 2023			Year 10 2024		
Project Descriptions:	**Type**	**Proposed ACM/ICM**	**Amortization Expense**	**CCA**	**Proposed ACM/ICM**	**Amortization Expense**	**CCA**	**Proposed ACM/ICM**	**Amortization Expense**	**CCA**
Cable Injection and Cable Replacement								$ 7,865,203	$ 174,782	$ 629,216
Total Cost of ACM/ICM Projects		$ -	$ -	$ -	$ -	$ -	$ -	$ 7,865,203	$ 174,782	$ 629,216
Maximum Allowed Incremental Capital		$ -			$ -			$ -		

1. For the Cost of Service Test Year, CAPEX refers to the CAPEX approved in the DSP. For subsequent Price CAP IR years, the CAPEX to be entered is the actual CAPEX. For the current Price Cap IR year, the CAPEX to be entered is the proposed CAPEX including any ICM/updated ACM project CAPEX for the year.

Ontario Energy Board

Capital Module
Applicable to ACM and ICM
0

Incremental Capital Adjustment **Rate Year:** 2024

Current Revenue Requirement

Current Revenue Requirement - Total	$ 117,994,991	A

Eligible Incremental Capital for ACM/ICM Recovery

	Total Claim	Eligible for ACM/ICM (Full Year Prorated Amount) *(from Sheet 10b)*	
Amount of Capital Projects Claimed	$ 7,865,203	$ -	B
Depreciation Expense	$ 174,782	$ -	C
CCA	$ 629,216	$ -	V

ACM/ICM Incremental Revenue Requirement Based on Eligible Amount in Rate Year

Return on Rate Base

Incremental Capital			$ -	B
Depreciation Expense (prorated to Eligible Incremental Capital)			$ -	C
Incremental Capital to be included in Rate Base (average NBV in year)			$ -	D = B - C/2
	% of capital structure			
Deemed Short-Term Debt	4.0%	E	$ -	G = D * E
Deemed Long-Term Debt	56.0%	F	$ -	H = D * F
	Rate (%)			
Short-Term Interest	2.08%	I	$ -	K = G * I
Long-Term Interest	5.09%	J	$ -	L = H * J
Return on Rate Base - Interest			$ -	M = K + L
	% of capital structure			
Deemed Equity %	40.00%	N	$ -	P = D * N
	Rate (%)			
Return on Rate Base -Equity	8.93%	O	$ -	Q = P * O
Return on Rate Base - Total			$ -	R = M + Q

Amortization Expense

Amortization Expense - Incremental		C	$ -	S

Grossed up Taxes/PILs

Regulatory Taxable Income		O	$ -	T
Add Back Amortization Expense (Prorated to Eligible Incremental Capital)		S	$ -	U
Deduct CCA (Prorated to Eligible Incremental Capital)			$ -	V
Incremental Taxable Income			$ -	W = T + U - V
Current Tax Rate	26.5%	X		
Taxes/PILs Before Gross Up			$ -	Y = W * X
Grossed-Up Taxes/PILs			$ -	Z = Y / (1 - X)

Incremental Revenue Requirement

Return on Rate Base - Total		Q	$ -	AA
Amortization Expense - Total		S	$ -	AB
Grossed-Up Taxes/PILs		Z	$ -	AC
Incremental Revenue Requirement			$ -	AD = AA + AB + AC

Applicable to ACM and ICM

0

Calculation of incremental rate rider. Choose one of the 3 options: Fixed and Variable Rate Riders

Rate Class	Service Charge % Revenue	Distribution Volumetric Rate % Revenue kWh	Distribution Volumetric Rate % Revenue kW	Service Charge Revenue	Distribution Volumetric Rate Revenue kWh	Distribution Volumetric Rate Revenue kW	Total Revenue by Rate Class	Billed Customers or Connections	Billed kWh	Billed kW	Service Charge Rate Rider	Distribution Volumetric Rate kWh Rate Rider	Distribution Volumetric Rate kW Rate Rider
	From Sheet 8	*From Sheet 8*	*From Sheet 8*	Col C * Col I_{total}	Col D* Col I_{total}	Col E* Col I_{total}		*From Sheet 4*	*From Sheet 4*	*From Sheet 4*	Col F / Col K / 12	Col G / Col L	Col H / Col M
RESIDENTIAL	41.49%	0.00%	0.00%	0	0	0	0	185,254	1,599,146,375		0.00	0.0000	0.0000
GENERAL SERVICE LESS THAN 50 KW	8.05%	6.99%	0.00%	0	0	0	0	19,579	696,191,917		0.00	0.0000	0.0000
GENERAL SERVICE 50 TO 999 KW	2.46%	0.00%	19.36%	0	0	0	0	3,396	1,863,077,828	5,327,788	0.00	0.0000	0.0000
GENERAL SERVICE 500 TO 4,999 KW	6.86%	0.00%	8.22%	0	0	0	0	416	1,865,649,100	4,396,114	0.00	0.0000	0.0000
LARGE USE	1.17%	0.00%	3.92%	0	0	0	0	9	991,422,381	1,690,526	0.00	0.0000	0.0000
UNMETERED SCATTERED LOAD	0.26%	0.14%	0.00%	0	0	0	0	3,106	11,275,180		0.00	0.0000	0.0000
STREET LIGHTING	0.73%	0.00%	0.33%	0	0	0	0	50,812	13,531,876	36,860	0.00	0.0000	0.0000
Total	**61.03%**	**7.14%**	**31.83%**	**0**	**0**	**0**	**0**	**262,572**	**7,040,294,657**	**11,451,288**			

1-Staff-2

Timing of Policy Change

Reference 1: EB-2022-0013 OEB Staff Submission, page 6
Reference 2: EB-2022-0013 Alectra Utilities Reply Submission, page 11
Reference 3: EB-2022-0013 Decision and Order, page 9

In the EB-2022-0013 proceeding, OEB staff submitted that the 2023 inflation factor be used for Alectra Utilities' 2023 ICM request but did provide recommendations for the materiality of the 2024 ACM request:

> **OEB staff recommends that the OEB consider allowing Alectra Utilities to file evidence on the potential use of an alternate calculation if the forecasted IPI for 2024 rates is expected to remain much higher than historical values, as part of the 2024 rate implementation application for any approved amounts.**

Alectra Utilities stated in its reply submission that it took no position on OEB staff's recommendation other than to say that it believed that amendments to policy should be considered through a policy review process rather than the EB-2022-0013 proceeding.

In the EB-2022-0013 Decision and Order, the OEB stated the following:

> **The OEB will not change the inflationary input to the ICM calculations as outlined by OEB staff. OEB staff's suggestion could be considered as part of a review of the OEB's ICM policy but should not be considered in this proceeding given that it was only raised by OEB staff in its submission and calculations were not provided to the other parties to allow for a thorough consideration of this issue.**

a) **Does Alectra Utilities intend to use the amendment to the materiality threshold calculation for all ICM applications, only for this application, only during extended deferred rebasing periods, or during times of high inflation? Please provide reasonings for your response.**
b) **If an alternative materiality threshold calculation is approved, would Alectra Utilities use a consistent approach for future ICMs until its next rebasing or until a generic hearing takes place that concerns the ICM policy (including times when inflation decreases)?**

Response:

a) and b)

Since Alectra Utilities' 2023 ICM application, the OEB has chosen not to commence a proceeding to review its ICM Policy. In light of the continued variability in the inflation rate, Alectra Utilities included a proposal in this application to use a rate zone specific geometric mean to determine

the inflation factor value for the materiality threshold calculation. As provided in Exhibit 2, Tab 1, Schedule 1, p.5, the OEB-approved inflation factor values did not exhibit material differences relative to the geometric mean over the 2013 to 2021 period. However, from 2022 to 2024, the differences range from 1.4% to 2.6%. As a result, the use of the most recent inflation factor will not accurately represent the historical effect of inflation on depreciation.

In its Decision on Alectra Utilities' 2023 ICM application, the OEB stated that it would not change the inflationary input to the ICM calculations as outlined by OEB staff. The OEB stated in its decision on the point that the issue of an alternate method of calculating the inflation factor had been raised by OEB staff in its submission. As a result, parties were not provided with the calculations to thoroughly consider the issue.

Alectra Utilities has provided its justification for its proposal in Exhibit 2, Tab 1, schedule 1 as well as its calculation of the geometric mean in Attachment 7 in its pre-filed evidence for consideration in this proceeding.

If the OEB approves Alectra Utilities' proposal in this application, Alectra Utilities will use this approach for any future ICM applications until its next rebasing (including in times when inflation decreases) or until a generic hearing on the ICM policy takes place.

1-Staff-3

Rate Zone 2024 Project Priority Lists

Reference 1: Attachment 4 - 2024 Project Listing PRZ
Reference 2: Attachment 6 - 2024 Project Listing ERZ

Alectra Utilities provided 2024 project listings with cost estimates for its PowerStream and Enersource RZs.

a) **Please provide 2023 and 2024 project listings in Excel format for the two RZs with an additional column outlining the priority score of each project.**
b) **Please explain what criteria are used to evaluate priority scores.**

Response:

a) & b) Alectra Utilities has provided an excel attachment which includes the 2023 (updated for most recent forecast) and 2024 project listing for the PowerStream and Enersource rate zones as Attachment 1. Alectra Utilities would like to clarify that there is no priority score, the term 'high priority projects' is in reference to the number of failures, clustering/density, and impact on customer reliability warranting the need for an investment.

Alectra Utilities utilizes CopperLeaf to optimize the capital investment portfolio on an annual basis. Through this optimization process, a project value is assigned to each capital project. Therefore, Alectra Utilities has included the project value in the attached excel file.

The Value Framework analyzes and scores each potential investment's benefits, costs and risk mitigation measures. Project benefits include financial (Capital, OM&A), reliability (customer outages), customer satisfaction, environmental, regulatory and innovation. Project risk mitigation measures include financial risk, reliability (capacity risk), compliance risk, reputation risk as well as environmental risk. Alectra Utilities compares all investments when developing a capital work plan portfolio based on the value the project provides to meet customer and organization needs, risk tolerances and timing requirements.

1-Staff-3

Attachment 1
Project Value

2023 Capital Project Listing - PowerStream Rate Zone

SYSTEM ACCESS	$MM	Alectra Value
New Residential Subdivision and Condo Tower Development - Alectra East	6.7	717
New Institutional/Commercial/Industrial Subdivision Development - Alectra East	2.7	717
Services (New and Upgrades) - Layouts - East South	2.2	(14,778)
Customer Initiated Distribution System Expansion Project (East) - Urbacon Data Center	1.7	14,843
New Services - Metering (East)	1.6	132
AMI 1.7 Metering Infrastructure Risk Mitigation	1.5	40,438
Road Authority Projects - East North	1.3	(19,549)
New Subdivision Development - Secondary Service Lateral - Alectra East	1.2	717
Road Authority O/H Line Relocation - Duckworth St (Bell Farm to St Vincent)	1.2	44,556
Sub-Total Material Projects	**20.1**	
Miscellaneous Projects (under materiality threshold)	7.3	
Total System Access	**27.4**	
SYSTEM RENEWAL	**$MM**	**Alectra Value**
Reactive Capital, Alectra East - Distribution Equipment	10.9	(27,022)
Pole Renewal - East	6.4	35,866
Transformer Renewal - East	3.7	7,791
Cable Injection Project - (R23) - Kersey Cr area of Richmond Hill	2.5	886
Cable Replacement Project – (V41) Stephanie Blvd., Vaughan	2.5	786
Cable Replacement Project – (V51) – Ashbridge Circle area in Vaughan	2.4	331
Switchgear Renewal - East	2.4	7,281
Cable Replacement Project - (A05) - Golf Links, Aurora	2.3	4,906
Storm Hardening - Four-Circuit Poles - Alectra East	2.0	13,821
Cable Injection Project - (M21) - Cairns Drive area of Markham	2.0	4,337
Cable Replacement Project - (A10) -Batson Dr, Aurora	1.9	1,859
Cable Replacement Project - East - Left Behind Cable	1.8	6,201
Joint Use Pole Removal - Alectra East	1.7	(6,918)
Underground Asset Renewal-Alectra Initiated Distribution System Projects-East	1.7	17,050
Cable Replacement Project - (BA22) - Sunnidale and Anne, Barrie	1.7	6,649
Cable Replacement Project - (V36) - Aviva Park, Vaughan	1.6	1,120
Switch Renewal - East	1.4	4,218
Reactive Capital, Alectra East - Recoverable Replacement	1.2	(2,534)
Cable Replacement Project - (M44) - Cochrane Dr (North) - Scolberg (South), Markham	1.2	2,947
230kV Trench Replacement Program	1.2	5,232
Cable Injection Project - (M19) - Markham - Steeles - McCowan - 14th, Markham	1.1	8,258
Cable Injection Project - (V23) - Hwy 7 - Keele - Langstaff - Jane, Vaughan	1.1	6,852
Cable Injection Project - (M25) - 14th - McCowan - Steeles - Old Kennedy, Markham	1.1	1,643
Overhead Asset Renewal-Alectra Initiated Distribution System Projects-East	1.1	6,758
Sub-Total Material Projects	**56.6**	
Miscellaneous Projects (under materiality threshold)	10.9	
Total System Renewal	**67.5**	
SYSTEM SERVICE	**$MM**	**Alectra Value**
Distribution Automation - East	2.5	38,693
Sub-Total Material Projects	**2.5**	
Miscellaneous Projects (under materiality threshold)	4.4	
Total System Service	**6.9**	
GENERAL PLANT		
PowerStream Rate Zone Allocation of General Plant	12.7	
2023 Budget	**114.5**	

GENERAL PLANT - ALECTRA UTILITIES		
Customer Service Strategy-CX Project	6.6	41,629
Meter-to-Cash CIS - CC&B V2.8 Upgrade	2.0	41,884
C55 Alectra: Optimization of Business Practices	1.6	40,157
Meter-to-Cash CIS CC&B Enhancements	1.5	8,546
IT End User - Client Computing	1.3	5,581
Facilities_Capital Replacement Investment Support	1.2	(5,293)
EV Charging Stations	1.2	2,464
Annual License Growth on meter to cash platforms	1.1	9,736
ERP Continuous Improvement	1.1	19,362
Sub-Total Material Projects	**17.6**	
Miscellaneous Projects (under materiality theshold)	17.1	
Total General Plant	**34.7**	

2024 Capital Project Listing - PowerStream Rate Zone

SYSTEM ACCESS	$MM	Alectra Value
New Residential Subdivision and Condo Tower Development - Alectra East	8.7	717
Road Authority Projects PS South	2.1	(7,970)
New Services - Metering (East)	1.9	132
Services (New and Upgrades) - Commercial, Industrial and Institutional (ICI) Projects - East South	1.8	(28,202)
Services (New and Upgrades) - Layouts - East South	1.7	(14,778)
Road Authority UG Relocation - Portage Pkwy	1.3	(2,656)
New Subdivision Development - Secondary Service Lateral - Alectra East	1.3	717
Road Authority Projects - East North	1.0	(19,549)
Sub-Total Material Projects	**19.9**	
Miscellaneous Projects (under materiality threshold)	6.3	
Total System Access	**26.1**	

SYSTEM RENEWAL	$MM	Alectra Value
Reactive Capital, Alectra East - Distribution Equipment	8.9	73,540
Pole Renewal - East	6.1	35,866
Transformer Renewal - East	3.2	7,791
Cable Replacement Project - East - Left Behind Cable	3.0	6,201
Switchgear Renewal - East	2.8	7,281
Cable Injection Project - (V17) - Langstaff - Keele - Rutherford - Dufferin, Vaughan	2.5	1,600
Storm Hardening - Four-Circuit Poles - Alectra East	2.3	13,821
Cable Injection Project - (V24) - Creditstone Rd area of Vaughan	2.2	1,834
Cable Replacement Project - (A05) - Golf Links, Aurora	2.1	4,906
Cable Replacement Project - (M44) - Cochrane Dr (North) - Scolberg (South), Markham	2.1	2,947
Cable Replacement Project - (BA22) - Sunnidale and Anne, Barrie	2.1	6,649
Joint Use Pole Removal - Alectra East	2.0	(6,918)
Underground Asset Renewal-Alectra Initiated Distribution System Projects-East	1.9	17,050
Cable Replacement Project - (M15) - Larkin Ave area of Markham	1.9	2,376
Cable Replacement Project - (V26) - St. Joan of Arc area of Vaughan	1.9	1,745
Cable Injection Project - (M39) - 16th - Warden - Hwy 7 - Woodbine, Markham	1.8	2,522
Cable Injection Project - (R23) - Bathurst - Weldrick - Yonge - Carville, Richmond Hill	1.8	1,731
Cable Injection Project - (M21) - Cairns Drive area of Markham	1.7	4,337
Cable Injection Project - (V26) - McNaughton Road area of Vaughan	1.7	1,145
Cable Replacement Project - (M21) - Raymerville Dr, Markham	1.6	4,728
Cable Replacement Project - (A09) - Hammond Dr area of Aurora	1.4	1,264
Cable Injection Project - (V50) - Sovereign Court area of Vaughan	1.3	1,067
Cable Replacement Project - (B23) - Cundles Rd and Janine St, Barrie	1.3	2,477
Cable Injection Project - (M31) - 14th - Old Kennedy - Steeles - Warden, Markham	1.2	3,716
230kV Trench Replacement Program	1.2	5,232
Overhead Asset Renewal-Alectra Initiated Distribution System Projects-East	1.0	6,758
Cable Injection Project - (BR5) - 8th Line and Highway 11, Bradford	1.0	230
Reactive Capital, Alectra East - Storm Damage	1.0	(3,484)
Sub-Total Material Projects	**63.0**	
Miscellaneous Projects (under materiality threshold)	6.3	
Total System Renewal	**69.3**	

SYSTEM SERVICE	$MM	Alectra Value
Vaughan TS#4 Feeder Integration - Part 3	3.6	23,628
Distribution Automation - East	1.8	38,693
Sub-Total Material Projects	**5.4**	
Miscellaneous Projects (under materiality threshold)	3.4	
Total System Service	**8.8**	

GENERAL PLANT		
PowerStream Rate Zone Allocation of General Plant	13.4	
2024 Budget	**117.6**	

GENERAL PLANT - ALECTRA UTILITIES		
Work Force Management / Mobile Dispatch	2.3	53,231
Meter-to-Cash CIS CC&B Enhancements	1.9	8,546
ERP Continuous Improvement	1.9	19,362
Customer Service Strategy-CX Project	1.9	41,629
Meter-to-Cash - CIS CC&B Modifications(Regulatory Enhancements)	1.8	10,471
Human Capital Management(HCM) System	1.7	21,779
Derry Generator Replacement	1.7	(452)
IT End User - Client Computing	1.6	5,581
Facilities_Replacement_Patterson Road Roof	1.3	168
Cyber Security - Enterprise Information Protection	1.1	18,542
Facilities_Capital Replacement Investment Support	1.0	(5,293)
Sub-Total Material Projects	**18.1**	
Miscellaneous Projects (under materiality theshold)	18.6	
Total General Plant	**36.8**	

2023 Capital Project Listing - Enersource Rate Zone

SYSTEM ACCESS	$MM	Alectra Value
Services (New and Upgrades) - Layouts – Central South	1.9	(10,058)
Customer Initiated Distribution System Expansion Projects - Central South	1.4	110
New Services - Metering (Mississauga)	1.3	132
Service (new and upgrades) - Commercial, Industrial and Institutional (ICI) Projects - Central South	1.3	(25,137)
New Residential Subdivision and Condo Tower Development - Alectra Central South	1.2	717
Sub-Total Material Projects	**7.1**	
Miscellaneous Projects (under materiality threshold)	2.8	
Total System Access	**9.9**	

SYSTEM RENEWAL	$MM	Alectra Value
Lines Central-South - Reactive Renewal	4.2	(4,051)
Cable Replacement Project - (AREA46)- Millcreek Dr & Erin Mills Pkway, Mississauga	3.5	2,859
Pole Renewal - Central South	3.1	5,235
Cable and Transformer Replacement Project - (AREA24) - Burnhamthorpe & Miss. Road, Mississauga	2.4	739
Cable Replacement and Switchgear Removal - (AREA19) - Fieldgate and Ponytrail Dr, Mississauga	2.0	3,594
Cable Injection - (AREA46) - Glen Erin & Aquitane, Mississauga	1.5	2,025
Transformer Renewal - Central South	1.3	11,067
Cable Replacement Project - (AREA24) - Sir John's Homestead & Redstart Dr, Mississauga	1.3	2,568
Underground Asset Renewal-Alectra Initiated Distribution System Projects-Central South	1.1	3,012
Cable Replacement Project - (AREA16) - Hemus Square, Mississauga	1.1	275
Cable and Transformer Replacement Project - (AREA21) - Miss. Valley & Bloor, Mississauga	1.1	2,024.9
Sub-Total Material Projects	**22.6**	
Miscellaneous Projects (under materiality threshold)	7.1	
Total System Renewal	**29.8**	

SYSTEM SERVICE	$MM	Alectra Value
Distribution Automation - Central South	1.2	5,614
Sub-Total Material Projects	**1.2**	
Miscellaneous Projects (under materiality threshold)	0.4	
Total System Service	**1.7**	

GENERAL PLANT		
Enersource Rate Zone Allocation of General Plant	9.3	
2023 Budget	**50.6**	

GENERAL PLANT - ALECTRA UTILITIES		
Customer Service Strategy-CX Project	6.6	41,629
Meter-to-Cash CIS - CC&B V2.8 Upgrade	2.0	41,884
C55 Alectra: Optimization of Business Practices	1.6	40,157
Meter-to-Cash CIS CC&B Enhancements	1.5	8,546
IT End User - Client Computing	1.3	5,581
Facilities_Capital Replacement Investment Support	1.2	(5,293)
EV Charging Stations	1.2	2,464
Annual License Growth on meter to cash platforms	1.1	9,736
ERP Continuous Improvement	1.1	19,362
Sub-Total Material Projects	**17.6**	
Miscellaneous Projects (under materiality theshold)	17.1	
Total General Plant	**34.7**	

2024 Capital Project Listing - Enersource Rate Zone

SYSTEM ACCESS	$MM	Alectra Value
New Residential Subdivision and Condo Tower Development - Alectra Central South	1.7	717
Service (new and upgrades) - Commercial, Industrial and Institutional (ICI) Projects - Central South	1.6	(25,137)
Road Authority Projects - Central South	1.4	(4,627)
New Services - Metering (Mississauga)	1.4	132
Services (New and Upgrades) - Layouts – Central South	1.1	(10,058)
Customer Initiated Distribution System Expansion Projects - Central South	1.0	110
Sub-Total Material Projects	**8.2**	
Miscellaneous Projects (under materiality threshold)	1.8	
Total System Access	**10.0**	

SYSTEM RENEWAL	$MM	Alectra Value
Lines Central-South - Reactive Renewal	3.9	(4,051)
Pole Renewal - Central South	3.4	5,235
Cable and Transformer Replacement Project - (AREA21) - Miss. Valley & Bloor, Mississauga	3.3	2,024.9
Cable Replacement Project - (AREA54) - Copenhagen Rd, Mississauga	2.5	571
Cable and Transformer Replacement Project - (AREA25) - Glen Erin & Burnhamthorpe, Mississauga	2.4	2,006
Cable and Transformer Replacement Project - (AREA24) - Burnhamthorpe & Miss. Road, Mississauga	1.8	739
Cable Replacement Project - (AREA46) - Montevideo & Battleford, Mississauga	1.6	1,801
Cable Injection - (AREA56) - Derry Rd W & Ninth Line, Mississauga	1.5	4,100
Joint Use Pole Removal - Central South	1.4	(3,898)
Cable Injection - (AREA 39) - Glen Erin Dr and and Bell Harbour Dr, Mississauga	1.3	1,517
Switchgear Renewal - Central South	1.2	1,745
Underground Asset Renewal-Alectra Initiated Distribution System Projects-Central South	1.2	3,012
Cable Replacement Project - (AREA25) - South Millway, Mississauga	1.1	1,510
Cable Injection - (AREA 39) - Erin Mills Pkwy & Thomas St, Mississauga	1.1	3,713
Sub-Total Material Projects	**27.5**	
Miscellaneous Projects (under materiality threshold)	6.8	
Total System Renewal	**34.3**	

SYSTEM SERVICE	$MM	Alectra Value
Distribution Automation - Central South	1.5	29,704
Sub-Total Material Projects	**1.5**	
Miscellaneous Projects (under materiality threshold)	0.6	
Total System Service	**2.1**	

GENERAL PLANT		
Enersource Rate Zone Allocation of General Plant	9.8	
2024 Budget	**56.2**	

GENERAL PLANT - ALECTRA UTILITIES		
Work Force Management / Mobile Dispatch	2.3	53,231
Meter-to-Cash CIS CC&B Enhancements	1.9	8,546
ERP Continuous Improvement	1.9	19,362
Customer Service Strategy-CX Project	1.9	41,629
Meter-to-Cash - CIS CC&B Modifications(Regulatory Enhancements)	1.8	10,471
Human Capital Management(HCM) System	1.7	21,779
Derry Generator Replacement	1.7	(452)
IT End User - Client Computing	1.6	5,581
Facilities_Replacement_Patterson Road Roof	1.3	168
Cyber Security - Enterprise Information Protection	1.1	18,542
Facilities_Capital Replacement Investment Support	1.0	(5,293)
Sub-Total Material Projects	**18.1**	
Miscellaneous Projects (under materiality theshold)	18.6	
Total General Plant	**36.8**	

1-Staff-4

Beyond the Normal Level of Capital Expenditures Expected in Base Rates

Reference 1: EB-2022-0013 Decision and Order, pages 14-15
Reference 2: Exhibit 3, Tab 1, Schedule 2, page 11, Table 21
Reference 3: Exhibit 2, Tab 1, Schedule 1, pages 7-8
Reference 4: EB-2022-0013 Responses to OEB Panel Information Request, Table 6

In the EB-2022-0013 Decision and Order, the OEB found that the capital expenditures in the 2023 ICM request for the Enersource RZ were not beyond the normal level of capital expenditures expected to be funded by existing rates. The OEB found that Alectra Utilities had budgeted less for cable renewal in 2023 in base rates compared to what it had spent historically for the Enersource RZ.

Alectra Utilities has since updated its cable renewal budgets to include actual spending for 2022, and new budgets for 2023 (presented in the table below).

Table 1 – Alectra Utilities Underground Cable Renewal Investments ($ millions)

Investment	Actual 2018	Actual 2019	Actual 2020	Actual 2021	Actual 2022	Forecast 2023	Total
Cable Renewal-Replacement	$37.2	$31.2	$35.4	$25.3	$20.1	$36.1	$185.3
Cable Renewal- Injection	$3.6	$4.9	$11.5	$13.7	$12.8	$19.1	$65.6
Emerging underground Projects	$2.3	$5.9	$8.0	$10.1	$6.1	$6.3	$38.7
Total	**$43.1**	**$42.0**	**$54.9**	**$49.1**	**$39.0**	**$61.5**	**$289.6**

a) **Please provide tables for the PowerStream and Enersource RZs separately outlining cable renewal spending/forecasts from 2017-2024. Please follow a similar table structure to Reference 4: EB-2022-0013 Responses to OEB Panel Information Request, Table 6.**
b) **Please explain any actual/budget variances between Reference 4 and the table produced in part A of this question for 2022-2024.**
c) **How does Alectra Utilities determine how much to budget in 'Emerging Underground Projects' in each RZ?**

As part of this proceeding in Reference 2, Alectra Utilities submitted that it does not agree with the test the OEB used to determine if the 2023 ICM request was beyond the normal level of capital expenditures expected to be funded by existing rates.

d) **Given that Alectra Utilities does not believe it is correct to compare historical cable renewal spending in base rates with that which is budgeted in the forecasted period…**
    i. **how did Alectra Utilities prioritize which cable renewal projects to include in the base rate budget versus the ICM budget?**

ii. how did Alectra Utilities determine how much cable renewal spending is appropriate to include in the 2023 and 2024 base rate budget?

iii. how did Alectra Utilities determine how much total cable renewal was appropriate for 2023 and 2024?

iv. why could Alectra Utilities not achieve a similar amount of cable renewal spending through base rates in 2023 compared to what it had historically (in the Enersource RZ)?

Response:

a) Alectra Utilities has included an excel file with the requested data for the PRZ and ERZ in the format of Reference 4, as 1-Staff-4_Attach 1_Cable Renewal Spending PRZ ERZ 2017-2024 as Attachment 1.

b) Alectra Utilities provides Tables 1 through 6 which outline the actual/budget variances for 2022 through 2024.

Tables 1 and 2 provide the 2022 budget to actual variance comparison for underground renewal expenditures in PRZ and ERZ respectively. For 2022, Alectra Utilities completed $21.4MM of underground renewal against a budget of $25.7MM in PRZ and ERZ, which represents 83% of the budget amount. Persistence of supply chain and labour resources issues stemming from the COVID-19 Pandemic impacted availability of materials and labour resources. Alectra Utilities' injection contractor experienced interruptions and availability challenges in 2022 leading to a lower volume of cable injection work completed.

Table 1: 2022 Underground Renewal Expenditures vs. Budget for PRZ

PowerStream Rate Zone	Budget	Actual	Variance
Funded through distribution rates	**2022**	**2022**	**2022**
Cable Replacement	$ 7.1	$ 6.5	$ (0.6)
Cable Injection	$ 8.8	$ 6.3	$ (2.5)
Emerging Underground Projects	$ 1.7	$ 0.4	$ (1.3)
Total	$ 17.6	$ 13.2	$ (4.4)
Funded through ICM rate riders			
Cable Replacement	$ -	$ -	$ -
Cable Injection	$ -	$ -	$ -
Emerging Underground Projects	$ -	$ -	$ -
Total	$ -	$ -	$ -

Furthermore, material delivery for underground cable and accessories required Alectra Utilities to reschedule and defer underground cable replacement work into 2023 and onward in the PRZ and ERZ.

Table 2: 2022 Underground Renewal Expenditures vs. Budget for ERZ

Enersource Rate Zone	Budget	Actual	Variance
Funded through distribution rates	**2022**	**2022**	**2022**
Cable Replacement	$ 5.6	$ 6.8	$ 1.2
Cable Injection	$ 1.5	$ 0.9	$ (0.6)
Emerging Underground Projects	$ 1.0	$ 0.4	$ (0.6)
Total	$ 8.1	$ 8.2	$ 0.0
Funded through ICM rate riders			
Cable Replacement	$ -	$ -	$ -
Cable Injection	$ -	$ -	$ -
Emerging Underground Projects	$ -	$ -	$ -
Total	$ -	$ -	$ -

Tables 3 and 4 provide the 2023 budget to forecast variance comparison for underground renewal expenditures in PRZ and ERZ respectively. For 2023, Alectra Utilities forecasts to complete $45.7MM of underground renewal against a budget of $45.4MM in PRZ and ERZ, which is within 1% of the budget amount.

Table 3: 2023 Underground Renewal Forecast Expenditures vs. Budget for PRZ

PowerStream-Rate Zone	Budget	Forecast	Variance
Funded through distribution rates	**2023**	**2023**	**2023**
Cable Replacement	$ 6.6	$ 8.5	$ 1.8
Cable Injection	$ 7.6	$ 6.0	$ (1.6)
Emerging Underground Projects	$ 1.9	$ 1.7	$ (0.2)
Total	$ 16.1	$ 16.2	$ 0.1
Funded through ICM rate riders			
Cable Replacement	$ 10.3	$ 8.0	$ (2.3)
Cable Injection	$ 5.9	$ 5.8	$ (0.1)
Emerging Underground Projects	$ -	$ -	$ -
Total	$ 16.2	$ 13.9	$ (2.4)

Table 4: 2023 Underground Renewal Forecast Expenditures vs. Budget for ERZ

Enersource Rate Zone	Budget	Forecast	Variance
Funded through distribution rates	**2023**	**2023**	**2023**
Cable Replacement	$ 7.2	$ 10.3	$ 3.0
Cable Injection	$ 2.8	$ 2.0	$ (0.8)
Emerging Underground Projects	$ 1.1	$ 1.1	$ -
Total	$ 11.2	$ 13.4	$ 2.2
Funded through ICM rate riders			
Cable Replacement	$ 1.9	$ 2.2	$ 0.3
Cable Injection	$ -	$ -	$ -
Emerging Underground Projects	$ -	$ -	$ -
Total	$ 1.9	$ 2.2	$ 0.3

Tables 5 and 6 provide the 2024 plan to previous 2024 plan as submitted in EB-2022-0013 for underground renewal expenditures in PRZ and ERZ respectively. For 2024, Alectra Utilities plans to complete $55.8MM of underground renewal against a previous 2024 plan of $53.1MM in PRZ and ERZ, which represents a 5% increase mostly driven by higher planned underground renewal funded through distribution rates offset by lower request of incremental funding for 2024 underground renewal projects.

Table 5: 2024 Underground Renewal Expenditures Proposed in EB-2022-0013 vs. Current Plan for PRZ

PowerStream-Rate Zone	Proposed in EB-2022-0013	Plan	Variance
Funded through distribution rates	**2024**	**2024**	**2024**
Cable Replacement	$ 8.7	$ 9.0	$ 0.3
Cable Injection	$ 8.3	$ 8.3	$ (0.1)
Emerging Underground Projects	$ 1.1	$ 1.9	$ 0.8
Total	$ 18.1	$ 19.1	$ 1.0
Funded through ICM rate riders			
Cable Replacement	$ 8.8	$ 8.8	$ 0.0
Cable Injection	$ 9.4	$ 8.5	$ (0.9)
Emerging Underground Projects	$ -	$ -	$ -
Total	$ 18.2	$ 17.3	$ (0.9)

Table 6: 2024 Underground Renewal Expenditures Proposed in EB-2022-0013 vs. Current Plan for ERZ

Enersource Rate Zone	Proposed in EB-2022-0013	Plan	Variance
Funded through distribution rates	**2024**	**2024**	**2024**
Cable Replacement	$ 5.3	$ 7.6	$ 2.3
Cable Injection	$ 1.7	$ 2.7	$ 1.0
Emerging Underground Projects	$ 1.1	$ 1.2	$ 0.1
Total	$ 8.1	$ 11.5	$ 3.4
Funded through ICM rate riders			
Cable Replacement	$ 5.2	$ 5.1	$ (0.1)
Cable Injection	$ 3.5	$ 2.8	$ (0.7)
Emerging Underground Projects	$ -	$ -	$ -
Total	$ 8.7	$ 7.9	$ (0.8)

c) Capital projects that are captured under Emerging Underground Projects include smaller unanticipated capital underground renewal work, identified during the budget year, which introduce a significant risk, imminent failure or hazard that requires immediate resolution, and could not be deferred into the next budget year. Alectra Utilities allocates budget for these unanticipated underground capital work through the investments in Emerging Underground

Projects. Setting budget and preparing for such unanticipated urgent work enables Alectra Utilities to ensure that funding and resources for larger planned underground renewal work such as Cable Replacement and Cable Injection, can proceed without interruption or deferral. Alectra Utilities uses a combination of historical expenditure trends together with identified projects, which due to timing were not completed in the given year, to develop the emerging budget for the next year.

d) i)

As described in Alectra Utilities' 2020-2024 DSP[1], Alectra Utilities develops a business case for each cable renewal project and scores each project value based on the Value Framework. The Value Framework analyzes and scores each potential investment's benefits, costs and risk mitigation measures. Project benefits include financial (Capital, OM&A), reliability (customer outages), customer satisfaction, environmental, regulatory and innovation. Project risk mitigation measures include financial risk, reliability (capacity risk), compliance risk, reputation risk as well as environmental risk. Alectra Utilities compares all investments when developing a capital work plan portfolio based on the value the project provides to meet customer and organization needs, risk tolerances and timing requirements. The base cable renewal projects were identified through the optimization process as projects that reflected the most urgent need of renewal and yielded the highest expected value.

d) ii)

As provided in Exhibit 3, Tab 1, Schedule 1, Page 9, Lines 9-15, Alectra Utilities' investment portfolio optimization process is an iterative process that makes use of the capital investment portfolio optimization capability of Copperleaf together with reviews by the Capital Investment Steering Committee and feedback from customer engagement. Each potential capital investment is based on a business case, which is evaluated using the Copperleaf Value Framework. Potential capital investments fall within each of the investment categories – System Renewal, System Service, System Access and General Plant, and investments are necessary in each area for effective operation of the distribution system.

[1] EB-2019-0018, Exhibit 4, Tab 1, Schedule 1, pages 332-335

d) iii)

The recommendation on total funding (base + ICM) ultimately originated within Asset Management which pooled data from various sources (Asset Sustainment, Reliability, Capital Investment Planning) to determine the level of funding.

d) iv)

As provided in response to Please referrer to EB-2022-0013 interrogatory 1-Staff-17 (b) in Alectra Utilities' 2023 ICM Application (EB-2022-0013), notwithstanding the capital funding deficit, Alectra Utilities' capital expenditures for Underground Asset Renewal in 2020 and 2021 were higher than the pre-2020 levels. As explained on Page 5 of Exhibit 3, Tab 1, Schedule 1 of the 2023 ICM Application, Alectra Utilities was able to avoid greater deferral and reductions to investments in 2020 and 2021 System Renewal because of temporarily reduced investments in System Access resulting from the COVID-19 Pandemic.

Over the 2015-2019 period, Alectra Utilities and its predecessors invested $197MM to renew the deteriorating underground systems, resulting in an annual average capital expenditure of $39.4MM. As provided in Table 21 of the Application, Alectra Utilities executed $54.9MM and $49.1MM of underground cable renewal capital projects in 2020 and 2021, respectively.

However, in 2022 and onwards, the remaining investments in System Access, System Service and General Plant are either mandatory or are necessary to address the needs of the distribution system as well as the continued operation of critical business functions.

1-Staff-4

Attachment 1
Cable Renewal Spending PRZ ERZ 2017-2024

PowerStream-Rate Zone	Actual	Actual	Actual	Actual	Actual	Actual	Forecast	Plan	Average
Funded through distribution rates	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**	**2023**	**2024**	**2017-2023**
Cable Replacement	$ 8.3	$ 9.9	$ 6.7	$ 11.9	$ 6.3	$ 6.5	$ 8.5	$ 9.0	$ 8.3
Cable Injection	$ 3.7	$ 3.6	$ 3.8	$ 7.9	$ 7.4	$ 6.3	$ 6.0	$ 8.2	$ 5.5
Emerging Underground Projects	$ -	$ -	$ 1.9	$ 1.9	$ 3.0	$ 0.4	$ 1.7	$ 1.9	$ 1.3
Sub-Total	$ 12.0	$ 13.5	$ 12.4	$ 21.7	$ 16.7	$ 13.2	$ 16.2	$ 19.1	**$ 15.1**
Funded through ICM rate riders									
Cable Replacement	$ -	$ -	$ -	$ -	$ -	$ -	$ 8.0	$ 8.8	$ 1.1
Cable Injection	$ -	$ -	$ -	$ -	$ -	$ -	$ 5.8	$ 8.5	$ 0.8
Emerging Underground Projects	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Sub-Total	$ -	$ -	$ -	$ -	$ -	$ -	$ 13.9	$ 17.3	**$ 2.0**
Total PRZ	**$ 12.0**	**$ 13.5**	**$ 12.4**	**$ 21.7**	**$ 16.7**	**$ 13.2**	**$ 30.0**	**$ 36.4**	**$ 17.1**

Enersource-Rate Zone	Actual	Actual	Actual	Actual	Actual	Actual	Forecast	Plan	Average
Funded through distribution rates	**2017***	**2018***	**2019**	**2020**	**2021**	**2022**	**2023**	**2024**	**2017-2023**
Cable Replacement	$ 18.7	$ 16.1	$ 13.8	$ 15.2	$ 9.7	$ 6.8	$ 10.3	$ 7.6	$ 12.9
Cable Injection	$ -	$ -	$ 0.0	$ 0.0	$ 0.0	$ 0.9	$ 2.0	$ 2.7	$ 0.4
Emerging Underground Projects	$ -	$ -	$ 0.7	$ 1.0	$ 2.8	$ 0.4	$ 1.1	$ 1.2	$ 0.9
Sub-Total	$ 18.7	$ 16.1	$ 14.5	$ 16.2	$ 12.6	$ 8.2	$ 13.4	$ 11.5	**$ 14.2**
Funded through ICM rate riders									
Cable Replacement	$ -	$ -	$ -	$ -	$ -	$ -	$ 2.2	$ 5.1	$ 0.3
Cable Injection	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 2.8	$ -
Emerging Underground Projects	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Sub-Total	$ -	$ -	$ -	$ -	$ -	$ -	$ 2.2	$ 7.9	**$ 0.3**
Total ERZ	**$ 18.7**	**$ 16.1**	**$ 14.5**	**$ 16.2**	**$ 12.6**	**$ 8.2**	**$ 15.5**	**$ 19.3**	**$ 14.5**

* Information regarding capital expenditures for 2018 for the ERZ was based on the capital reporting practices of the legacy utility. For the ERZ, other underground asset renewal (e.g., cable, switchgear, civil structures, reactive replacements) was tracked under ‘cable replacement’. Alectra Utilities harmonized its capital reporting practices in 2019 with the development of the Alectra Distribution System Plan and separately tracks each category of underground asset renewal expenditure. For 2019 onwards, the reporting of underground asset renewal investments in the ERZ was aligned with Alectra’s practices.

1-Staff-5

Proposed 2024 ICM Projects Relative to the 2023 ICM Application

Reference: EB-2023-0004, Exhibit 1, Tab 1, Schedule 4, pages 1-10

Alectra Utilities proposes 16 ICM projects for 2024 totaling $25.1 million in the PowerStream and Enersource RZs. Eleven of the projects in the PowerStream RZ are repeated request from the 2024 ACM request made in the EB-2022-0013 proceeding. Five of the projects in the Enersource RZ are repeats from the EB-2022-0013 requests: four of which were 2023 ICM projects and one 2024 ACM project.

a) **Please provide a table for each of the Enersource and PowerStream RZs listing the 2023 and 2024 ICM projects that were included in the 2023 ICM application together with the following:**
   i. **the 2023 ICM application proposed capital cost for each proposed project for 2023 and 2024.**
   ii. **the installed or projected completed capital cost for 2023 projects.**
   iii. **any revision to 2024 capital cost for ICM projects proposed to be completed in 2024.**
   iv. **an explanation for any variance for cable replacement and cable injection projects to be completed in 2023 and proposed for 2024 relative to the budget proposed in the 2023 ICM application.**

b) **Given that cable health continues to worsen, please provide an explanation as to how Alectra Utilities has managed to decrease its incremental capital request by $1.8 million in 2024 compared to the ACM request in the 2023 Application.**

Response:

a)

i) ii) and iii) Alectra Utilities has provided tables as request in Tables 1 and 2 below.

Table 1 – ERZ ICM Project Cost Comparison

ERZ Rate Zone	2023			2024	
	EB-2022-0013	2023 Approved ICM	2023 Q3 Forecast	EB-2022-0013	EB-2023-0004
Cable Replacement Project - (AREA46) - Montevideo & Battleford, Mississauga	1.4	0.0	0.0	0.0	1.6
Cable and Transformer Replacement Project - (AREA25) - Glen Erin & Burnhamthorpe, M	2.2	0.0	0.0	2.3	2.4
Cable Injection - (AREA 39) - Glen Erin Dr and and Bell Harbour Dr, Mississauga	0.9	0.0	0.0	0.0	1.3
Cable Injection - Edwards Boulevard Area in Mississauga (Area 43 & 51)	0.0	0.0	0.0	1.3	0.0
Cable Injection - (AREA56) - Derry Rd W & Ninth Line, Mississauga	1.0	0.0	0.0	1.1	1.5
Cable Injection - (AREA58 & 59) - Winston Churchill & The Collegeway, Mississauga	1.0	0.0	0.0	1.1	0.0
Cable Replacement - Tomken Trail in Mississauga (Area 36)	0.0	0.0	0.0	2.0	0.0
Cable Replacement- Main Feeder Cable on Cantay Road, Mississauga (AREA 44)	0.9	0.8	0.8	0.0	0.0
Cable Replacement Project - (AREA16) - Hemus Square, Mississauga	0.7	1.1	1.1	0.0	0.0
Cable Replacement Project - (AREA19) - Dixie Rd and Winding Trail, Mississauga	0.6	0.0	0.3	0.0	0.0
Cable Replacement Project - (AREA25) - South Millway, Mississauga	0.0	0.0	0.0	1.0	1.1
ERZ Total	**8.7**	**1.9**	**2.2**	**8.7**	**7.9**

Table 2 – PRZ ICM Project Cost Comparison

PRZ Rate Zone	2023			2024	
	EB-2022-0013	2023 Approved ICM	2023 Q3 Forecast	EB-2022-0013	EB-2023-0004
Cable Replacement Project - (M21) - Raymerville Dr, Markham	1.5	1.5	1.0	1.6	1.6
Cable Injection Project - (M21) - Cairns Drive area of Markham	1.7	1.7	2.0	1.9	1.7
Cable Injection Project - (V26) - McNaughton Road area of Vaughan	0.0	0.0	0.0	1.9	1.7
Cable Injection Project - (V50) - Sovereign Court area of Vaughan	0.0	0.0	0.0	1.6	1.3
Cable Injection Project - (V24) - Creditstone Rd area of Vaughan	0.0	0.0	0.0	2.1	2.2
Cable Injection Project - (V17) - Jacob Keffer Parkway area of Vaughan	1.6	1.6	1.0	0.0	0.0
Cable Injection Project - (BR5) - 8th Line and Highway 11, Bradford	0.0	0.0	0.0	1.3	1.0
Cable Injection Project - (A09) - Willow Farm Lane of Aurora	1.1	1.1	1.1	0.0	0.0
Cable Replacement Project – (V51) – Ashbridge Circle area in Vaughan	2.6	2.6	2.4	0.0	0.0
Cable Replacement Project - (M44) - Cochrane Dr (North) - Scolberg (South), Markham	2.5	2.5	1.2	2.5	2.1
Cable Replacement Project - (V36) - Aviva Park, Vaughan	2.4	1.7	1.6	0.0	0.0
Cable Replacement Project - (M15) - Larkin Ave area of Markham	0.0	0.0	0.0	1.8	1.9
Cable Replacement Project - (V26) - St. Joan of Arc area of Vaughan	0.0	0.0	0.0	1.6	1.9
Cable Replacement Project - (A09) - Hammond Dr area of Aurora	0.0	0.0	0.0	1.3	1.4
Cable Replacement Project - (A10) -Batson Dr, Aurora	1.7	1.9	1.9	0.0	0.0
Cable Injection Project - (R23) - Kersey Cr area of Richmond Hill	1.5	1.5	1.8	0.0	0.0
Cable Injection Project - (V51) - Rainbridge Ave, Vaughan	0.0	0.0	0.0	0.6	0.6
PRZ Total	**16.6**	**16.2**	**13.9**	**18.2**	**17.3**

(iv) The reference provided lists the 2024 projects, as such, no 2024 projects were listed for execution in 2023. Relative to 2024, Alectra Utilities has performed an analysis by rate zone and discussed variances of +/- 10%:

For the PRZ, Table 3 highlights that approximately 50% of the projects have a variance of less than 10%. The majority of projects with a variance are cable injection projects with fewer injectable segments than originally planned within the project scope, thereby reducing the overall project costs. In total the request for ICM funding has a variance within 6%.

Table 3 – 2024 PRZ EB-2023-004 vs. EB-2022-0013 project forecast

PRZ Rate Zone	2024		Explanation
	EB-2022-0013	EB-2023-0004	
Cable Replacement Project - (M21) - Raymerville Dr, Markham	1.6	1.5	Within 10% Variance
Cable Injection Project - (M21) - Cairns Drive area of Markham	1.9	1.7	Projection of less injectable candidates based on updated information
Cable Injection Project - (V26) - McNaughton Road area of Vaughan	1.9	1.7	Projection of less injectable candidates based on updated information
Cable Injection Project - (V50) - Sovereign Court area of Vaughan	1.6	1.3	Projection of less injectable candidates based on updated information
Cable Injection Project - (V24) - Creditstone Rd area of Vaughan	2.1	2.2	Within 10% Variance
Cable Injection Project - (BR5) - 8th Line and Highway 11, Bradford	1.3	1.0	Projection of less injectable candidates based on updated information
Cable Replacement Project - (M44) - Cochrane Dr (North) - Scolberg (South), Markham	2.5	2.1	Favourable estimate/cost for civil work
Cable Replacement Project - (M15) - Larkin Ave area of Markham	1.8	1.9	Within 10% Variance
Cable Replacement Project - (V26) - St. Joan of Arc area of Vaughan	1.6	1.9	Higher estimated Civil contractor costs
Cable Replacement Project - (A09) - Hammond Dr area of Aurora	1.3	1.4	Within 10% Variance
Cable Injection Project - (V51) - Rainbridge Ave, Vaughan	0.6	0.6	Within 10% Variance
PRZ Total	**18.2**	**17.2**	

For the ERZ, Table 4 the lists some projects currently proposed for 2024, and which were previously proposed for 2023 incremental funding and not approved. For those projects Alectra

Utilities has assumed the 3.68% inflation and then compared updated project cost estimates against the previously proposed 2023 cost estimate.

The South Millway project is expected to be slightly more expensive due to a higher cost estimate from the civil contractor. The contractor has identified increased congestion of below ground infrastructure than originally planned.

As provided in EB-2017-0024 response to BOMA 100, ERZ has a large population of solid core XLPE type cable which cannot be injected. For this reason, Alectra Utilities has been focusing on greater capacity cable types which are historically stranded conductor construction. Solid core underground cables are not common in the BRZ or PRZ. As Alectra Utilities has begun injecting these greater capacity cables in ERZ, the actual costs are observed to be higher than originally estimated. This contributed to the updated forecasted injection cost estimates for 2024.

Table 4 – 2024 ERZ EB-2023-004 vs. EB-2022-0013 project forecast

Project Name	2023	2024		Explanation
	EB-2022-0013		EB-2023-0004	
Cable Replacement Project - (AREA46) - Montevideo & Battleford, Mississauga	1.4	0	1.6	Within 10% Variance
Cable and Transformer Replacement Project - (AREA25) - Glen Erin & Burnhamthorpe, Mississauga	2.2	0	2.4	Within 10% Variance
Cable Injection - (AREA 39) - Glen Erin Dr and and Bell Harbour Dr, Mississauga	0.9	0	1.3	Higher Injection Costs for Greater Capacity Cable
Cable Replacement Project - (AREA25) - South Millway, Mississauga	0	1.0	1.1	Higher estimated Civil contractor costs
Cable Injection - (AREA56) - Derry Rd W & Ninth Line, Mississauga	1.0	1.1	1.5	Higher Injection Costs for Greater Capacity Cable

b) Alectra Utilities examines its entire capital budget from a work execution standpoint, examining materials, resources (contractor and internal), perimetry, execution duration and has made the assessment that despite the need for renewal, the time notice to ramp up suppliers and contractors to complete additional capital projects in underground renewal is a constraint when scheduling capital work one year at a time based on available funding.

1-Staff-6

Deferred Cable Renewal Projects

Reference 1: EB-2022-0013 Decision and Order, page 2
Reference 2: Exhibit 1, Tab 1, Schedule 4, page 9

The OEB approved $1.9 million of the $8.7 million ICM request for the Enersource RZ on the basis that it did not believe the ICM request was beyond the normal level of capital expenditure expected in base rates. The OEB expected Alectra Utilities to fund the $6.8 million difference through its base rates.

Instead, Alectra Utilities only proceeded with three of the eight Enersource RZ projects identified in the 2023 ICM request. Alectra Utilities is now seeking ICM funding in 2024 for four of the projects it had deferred.

a) Why does Alectra Utilities believe the OEB should approve ICM funding for the four projects that it had deferred from 2023?
b) Would Alectra Utilities defer these projects again if the OEB does not approve these projects in this proceeding?
c) Does Alectra Utilities plan to complete all the remaining cable renewal projects that were deferred from the EB-2022-0013 request that were not included in this proceeding?
    i. If so, does Alectra Utilities believe that base funding is sufficient for the completion of these projects?
    ii. Has Alectra Utilities considered completing the deferred projects on a paced basis? If not, why not?

Response:

a) The OEB should consider Alectra Utilities' request in this application on its own merit. The OEB did not state in its Decision in Alectra's 2023 ICM Decision that Alectra Utilities could not seek funding for these projects in later years. The proposed ICM projects in the Enersource RZ are driven by specific reliability concerns identified in the respective neighbourhoods. These projects have been identified for ICM funding as the asset condition, reliability and quality of service in these areas create an urgent need for funding. Further, in Alectra Utilities' 2023 ICM Decision, the OEB found "…the 2023 cable programs in the PowerStream RZ and Enersource RZ to be prudent. The cable projects selected for remediation represent prudent investment in capital for cable injection and cable replacement based upon the current

condition of the cable assets in both RZs. The cable programs should help to ensure the reliability and quality of service."[1]

b) As provided in Exhibit 3, Tab 1, Schedule 4, p.8, without incremental capital funding to implement the proposed 16 urgent and necessary projects in the PowerStream and Enersource rate zones, Alectra Utilities would only be able to complete the projects funded by base rates. In the Enersource RZ, base rates support 7 cable renewal projects in 2024. With incremental capital funding, Alectra Utilities will be able to complete an additional 5 projects, for a total of 12 projects.

c) i and ii) If the ICM funding requested is approved, Alectra Utilities will be able to reduce the backlog of deteriorated assets and complete any deferred projects in subsequent years base funding.

[1] Ibid., p.16

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Alectra Utilities Historical Capital Spending

Reference 1: Exhibit 3, Tab 1, Schedule 1, Page 3, Table 18
Reference 2: EB-2022-0013 Exhibit 3, Tab 1, Schedule 1, page 1
Reference 3: EB-2022-0013 Interrogatory Responses 1-Staff-16

OEB staff compiled the following table based on the revised Adjusted Capital Plan in Reference 1 and the approved ICM amounts for 2021 and 2023 in Reference 3.

Table 2 – Alectra Utilities 2020-2024 Historical Spending/Forecast ($ millions)

	2020 Actuals	2021 Actuals	2022 Actuals	2023 Forecast	2024 Forecast	Total
Total CAPEX	$256.1	$261.9	$241.6	$282.6	$285.3	$1,327.5
ICM Funding	N/A	$10.7	N/A	$18.1	$25.1	$53.9
CAPEX w/o ICMs	$256.1	$251.2	$241.6	$264.5	$260.2	$1,273.6

a) Please confirm if the table above is correct or revise the table as applicable.

In Reference 2, noted in the EB-2022-0013 evidence, Alectra Utilities stated that base rates would support an annual average capital amount of $236 million over the 2020-2024 period.

b) Please state whether Alectra Utilities believes this to still be true.
  i. Please provide the calculations used to determine this figure and the assumptions made. Please provide a breakdown of the calculation for each year from 2020 to 2024.
  ii. Please provide similar calculations to the above for the PowerStream and Enersource RZs separately.

c) What is Alectra Utilities' expected 2024 ROE if the cable renewal projects are completed without ICM funding? What is the expected 2024 ROE if the ICM funding is approved?
  i. Please provide an explanation if the expected 2024 ROEs under both scenarios are outside of the 300 basis points.

Response:

a) Alectra Utilities has provided an updated version of Table 2 below.

Table 2 – Updated Alectra Utilities 2020-2024 Historical Spending/Forecast ($ millions)

Capital Expenditures	2020 Actual	2021 Actual	2022 Actual	2023 Forecast	2024 Budget	Total
Total CAPEX	256.1	261.9	241.6	281.6	285.3	1,326.5
ICM Funding (Approved/Requested)	-	10.7	-	18.1	25.1	53.9
CAPEX w/o ICMs	256.1	251.2	241.6	263.5	260.2	1,272.6

b) i) and ii)

The reference in the 2023 ICM application (EB-2022-0013, Exhibit 3, Tab 1, Schedule 1, p.1) to base rates funding of approximately $236MM over the 2020 to 2024 period, compared to an annual average capital expenditure in the DSP of $291MM was based on the materiality threshold calculations included in the pre-filed evidence in Alectra Utilities' 2020 EDR application (EB-2019-0018).

At Exhibit 2, Tab 1, Schedule 3, p.13 of EB-2019-0018, Alectra Utilities provided the following summary of the threshold calculation by rate zone for 2020 to 2024, which is reproduced below.

Table 3 below summarizes the calculation of the threshold capital expenditure amount using the Board's formula approved in the ACM Report. The threshold capital expenditure value over the 2020 to 2024 DSP period is $1.182B

Table 3 – Threshold Capital Expenditure Calculation ($MM)

Description	ERZ	BRZ	GRZ	PRZ	HRZ	ALECTRA
Inflation	1.50%	1.50%	1.50%	1.50%	1.50%	1.50%
Less: Productivity Factor	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Less: Stretch Factor	0.30%	0.30%	0.30%	0.30%	0.30%	0.30%
Price Cap Index	1.20%	1.20%	1.20%	1.20%	1.20%	1.20%
Growth Factor	-0.05%	1.84%	1.60%	2.31%	3.04%	
Rebasing Year	2013	2015	2016	2017	2019	
# Years since rebasing	7	5	4	3	1	
Price Cap Index	1.20%	1.20%	1.20%	1.20%	1.20%	
Growth Factor	-0.05%	1.84%	1.60%	2.31%	3.04%	
Dead Band	10%	10%	10%	10%	10%	
Rate Base	$610.5	$404.6	$151.4	$1,082.8	$555.7	$2,805.0
Depreciation	$28.7	$15.2	$6.3	$52.3	$23.9	$126.4
Threshold Capital Expenditure 2020	$39.1	$30.7	$11.6	$98.5	$50.0	**$230.0**
Threshold Capital Expenditure 2021	$39.2	$31.2	$11.7	$100.0	$51.1	**$233.1**
Threshold Capital Expenditure 2022	$39.3	$31.6	$11.8	$101.5	$52.1	**$236.3**
Threshold Capital Expenditure 2023	$39.4	$32.1	$12.0	$103.0	$53.2	**$239.7**
Threshold Capital Expenditure 2024	$39.4	$32.5	$12.1	$104.7	$54.4	**$243.1**
Threshold Capital Expenditure 2020-2024	**$196.3**	**$158.2**	**$59.2**	**$507.7**	**$260.9**	**$1,182.2**

The threshold calculation expenditure value over the 2020 to 2024 DSP period of $1.182B, corresponds to an annual average capital expenditure of $236MM. The calculation was consistent with the calculation of the threshold value in the OEB's ICM model. An excel version of the calculation is provided as 1-Staff-7_Attach 1_Threshold Calculation 2020 EDR.

An updated threshold calculation using the geometric means for each rate zones is summarized below. The threshold calculation expenditure over the corresponding 2020 to 2024 period is $1.046B or an average annual capital expenditure of $209MM. An excel version of the calculation is provided as 1-Staff-7_Attach 2_Threshold Calculation 2024 EDR.

c) Alectra Utilities' expected 2024 ROE is 7.62% if the cable renewal projects are completed without ICM funding. Alectra Utilities' expected 2024 ROE is 7.64% if ICM funding is approved.

1-Staff-7

Attachment 1
Threshold Calculation 2020 EDR

Alectra 2020 EDR Application
Threshold Capital Expenditure Calculation

Description	ERZ	BRZ	GRZ	PRZ	HRZ	ALECTRA
Inflation	1.50%	1.50%	1.50%	1.50%	1.50%	1.50%
Less: Productivity Factor	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Less: Stretch Factor	0.30%	0.30%	0.30%	0.30%	0.30%	0.30%
Price Cap Index	1.20%	1.20%	1.20%	1.20%	1.20%	1.20%
Growth Factor	-0.05%	1.84%	1.60%	2.31%	3.04%	
Rebasing Year	2013	2015	2016	2017	2019	
# Years since rebasing	7	5	4	3	1	
Price Cap Index	1.20%	1.20%	1.20%	1.20%	1.20%	
Growth Factor	-0.05%	1.84%	1.60%	2.31%	3.04%	
Dead Band	10%	10%	10%	10%	10%	
Rate Base	$610.5	$404.6	$151.4	$1,082.8	$555.7	$2,805.0
Depreciation	$28.7	$15.2	$6.3	$52.3	$23.9	$126.4
Threshold Capital Expenditure 2020	**$39.1**	**$30.7**	**$11.6**	**$98.5**	**$50.0**	**$230.0**
Threshold Capital Expenditure 2021	**$39.2**	**$31.2**	**$11.7**	**$100.0**	**$51.1**	**$233.1**
Threshold Capital Expenditure 2022	**$39.3**	**$31.6**	**$11.8**	**$101.5**	**$52.1**	**$236.3**
Threshold Capital Expenditure 2023	**$39.4**	**$32.1**	**$12.0**	**$103.0**	**$53.2**	**$239.7**
Threshold Capital Expenditure 2024	**$39.4**	**$32.5**	**$12.1**	**$104.7**	**$54.4**	**$243.1**
Threshold Capital Expenditure 2020-2024	**$196.3**	**$158.2**	**$59.2**	**$507.7**	**$260.9**	**$1,182.2**

Ontario Energy Board

Capital Module
Applicable to ACM and ICM

Alectra Utilities Corporation - Enersource Hydro Mississauga Inc.

No Input Required.

Final Threshold Calculation

$$\textbf{Threshold Value}\ (\%) = 1 + \left[\left(\frac{RB}{d}\right) \times (g + PCI \times (1 + g))\right] \times ((1 + g) \times (1 + PCI))^{n-1} + 10\%$$

Cost of Service Rebasing Year		**2013**	
Year in which Applicant is applying		**7**	n
Price Cap Index		**1.20%**	PCI
Growth Factor Calculation			
2017 Actual Distribution Revenues		**$132,834,896**	
2013 Board-Approved Distribution Revenues		**$133,185,702**	
Growth Factor		**-0.05%**	$g\ (Note\ 1)$
Dead Band		**10%**	
Average Net Fixed Assets			
Gross Fixed Assets Opening	$	541,300,088	
Add: CWIP Opening	$	4,371,726	
Capital Additions	$	46,257,875	
Capital Disposals	-$	1,026,755	
Capital Retirements	$	-	
Deduct: CWIP Closing	-$	4,371,726	
Gross Fixed Assets - Closing	$	586,531,208	
Average Gross Fixed Assets	$	563,915,648	
Accumulated Depreciation - Opening	$	45,750,490	
Depreciation Expense	$	28,721,695	
Disposals	$	-	
Retirements	-$	1,026,755	
Accumulated Depreciation - Closing	$	73,445,430	
Average Accumulated Depreciation	$	59,597,960	
Average Net Fixed Assets	$	504,317,688	
Working Capital Allowance			
Working Capital Allowance Base	$	786,215,891	
Working Capital Allowance Rate		13.5%	
Working Capital Allowance	$	106,139,145	
Rate Base	**$**	**610,456,833**	RB
Depreciation	**$**	**28,721,695**	d

Threshold Value (varies by Price Cap IR Year subsequent to CoS rebasing)

Price Cap IR Year 2014	**134.4%**	
Price Cap IR Year 2015	**134.7%**	
Price Cap IR Year 2016	**134.9%**	
Price Cap IR Year 2017	**135.2%**	
Price Cap IR Year 2018	**135.5%**	
Price Cap IR Year 2019	**135.8%**	
Price Cap IR Year 2020	**136.1%**	
Price Cap IR Year 2021	**136.4%**	$Threshold\ Value\ \times d$
Price Cap IR Year 2022	**136.7%**	
Price Cap IR Year 2023	**137.0%**	
Price Cap IR Year 2024	**137.3%**	

Threshold CAPEX

Price Cap IR Year 2014	**$**	**38,593,904**
Price Cap IR Year 2015	**$**	**38,674,173**
Price Cap IR Year 2016	**$**	**38,755,362**
Price Cap IR Year 2017	**$**	**38,837,482**
Price Cap IR Year 2018	**$**	**38,920,544**
Price Cap IR Year 2019	**$**	**39,004,558**
Price Cap IR Year 2020	**$**	**39,089,535**
Price Cap IR Year 2021	**$**	**39,175,487**
Price Cap IR Year 2022	**$**	**39,262,425**
Price Cap IR Year 2023	**$**	**39,350,359**
Price Cap IR Year 2024	**$**	**39,439,302**

Ontario Energy Board

Capital Module
Applicable to ACM and ICM

Alectra Utilities Corporation - PowerStream RZ

No Input Required.

Final Threshold Calculation

$$Threshold\ Value\ (\%) = 1 + \left|\left(\frac{RB}{d}\right) \times (g + PCI \times (1+g))\right| \times ((1+g) \times (1+PCI))^{n-1} + 10\%$$

Cost of Service Rebasing Year		**2017**	
Price Cap IR Year in which Application is made		**3**	n
Price Cap Index		**1.20%**	PCI
Growth Factor Calculation			
Revenues Based on 2018 Actual Distribution Demand		**$208,214,383**	
Revenues Based on 2017 Board-Approved Distribution Demand		**$203,517,916**	
Growth Factor		**2.31%**	g $(Note\ 1)$
Dead Band		**10%**	
Average Net Fixed Assets			
Gross Fixed Assets Opening	$	1,183,508,943	
Add: CWIP Opening	$	57,486,862	
Capital Additions	$	114,494,289	
Capital Disposals	-$	2,734,108	
Capital Retirements	$	-	
Deduct: CWIP Closing	-$	39,959,632	
Gross Fixed Assets - Closing	$	1,312,796,354	
Average Gross Fixed Assets	$	1,248,152,649	
Accumulated Depreciation - Opening	$	229,378,962	
Depreciation Expense	$	52,272,173	
Disposals	-$	717,703	
Retirements	$	-	
Accumulated Depreciation - Closing	$	280,933,432	
Average Accumulated Depreciation	$	255,156,197	
Average Net Fixed Assets	$	992,996,452	
Working Capital Allowance			
Working Capital Allowance Base	$	1,197,449,515	
Working Capital Allowance Rate		7.5%	
Working Capital Allowance	$	89,808,714	
Rate Base	**$**	**1,082,805,165**	RB
Depreciation	**$**	**52,272,173**	d

Threshold Value (varies by Price Cap IR Year subsequent to CoS rebasing)

Price Cap IR Year 2018	**183.2%**
Price Cap IR Year 2019	**185.8%**
Price Cap IR Year 2020	**188.5%**
Price Cap IR Year 2021	**191.3%**
Price Cap IR Year 2022	**194.2%**
Price Cap IR Year 2023	**197.1%**
Price Cap IR Year 2024	**200.2%**

$Threshold\ Value\ \times d$

Threshold CAPEX

Price Cap IR Year 2018	**$ 95,780,178**
Price Cap IR Year 2019	**$ 97,133,532**
Price Cap IR Year 2020	**$ 98,534,732**
Price Cap IR Year 2021	**$ 99,985,468**
Price Cap IR Year 2022	**$ 101,487,493**
Price Cap IR Year 2023	**$ 103,042,620**
Price Cap IR Year 2024	**$ 104,652,726**

Ontario Energy Board

Capital Module
Applicable to ACM and ICM

Alectra Utilities Corporation - Enersource Hydro Mississauga Inc.

No Input Required.

Final Threshold Calculation

$$\textbf{Threshold Value}\ (\%) = 1 + \left|\left(\frac{RB}{d}\right) \times (g + PCI \times (1 + g))\right| \times \left((1 + g) \times (1 + PCI)\right)^{n-1} + 10\%$$

Year		**2015**	
Year in which Applicant is applying		**5**	n
Price Cap Index		**1.20%**	PCI
Growth Factor Calculation			
2017 Actual Distribution Revenues		**$77,519,160**	
2013 Board-Approved Distribution Revenues		**$73,455,693**	
Growth Factor		**1.84%**	g $(Note\ 1)$
Dead Band		**10%**	
Average Net Fixed Assets			
Gross Fixed Assets Opening	$	627,821,483	
Add: CWIP Opening	$	-	
Capital Additions	$	32,518,047	
Capital Disposals	-$	2,963,781	
Capital Retirements	$	-	
Deduct: CWIP Closing	$	-	
Gross Fixed Assets - Closing	$	657,375,749	
Average Gross Fixed Assets	$	642,598,616	
Accumulated Depreciation - Opening	$	295,604,516	
Depreciation Expense	$	15,227,319	
Disposals	-$	2,191,181	
Retirements	$	-	
Accumulated Depreciation - Closing	$	308,640,654	
Average Accumulated Depreciation	$	302,122,585	
Average Net Fixed Assets	$	340,476,031	
Working Capital Allowance			
Working Capital Allowance Base	$	493,403,770	
Working Capital Allowance Rate		13.0%	
Working Capital Allowance	$	64,142,490	
Rate Base	**$**	**404,618,521**	RB
Depreciation	**$**	**15,227,319**	d

Threshold Value (varies by Price Cap IR Year subsequent to CoS rebasing)

Price Cap IR Year 2016	**191.5%**	
Price Cap IR Year 2017	**194.0%**	
Price Cap IR Year 2018	**196.5%**	
Price Cap IR Year 2019	**199.2%**	
Price Cap IR Year 2020	**201.9%**	
Price Cap IR Year 2021	**204.8%**	
Price Cap IR Year 2022	**207.7%**	
Price Cap IR Year 2023	**210.7%**	$Threshold\ Value\ \times d$
Price Cap IR Year 2024	**213.7%**	

Threshold CAPEX

Price Cap IR Year 2016	**$**	**29,155,984**
Price Cap IR Year 2017	**$**	**29,536,360**
Price Cap IR Year 2018	**$**	**29,928,399**
Price Cap IR Year 2019	**$**	**30,332,458**
Price Cap IR Year 2020	**$**	**30,748,905**
Price Cap IR Year 2021	**$**	**31,178,122**
Price Cap IR Year 2022	**$**	**31,620,498**
Price Cap IR Year 2023	**$**	**32,076,438**
Price Cap IR Year 2024	**$**	**32,546,358**

Ontario Energy Board

Capital Module
Applicable to ACM and ICM

Alectra Utilities Corporation - Enersource Hydro Mississauga Inc.

No Input Required.

Final Threshold Calculation

$$\textbf{Threshold Value}\ (\%) = 1 + \left|\left(\frac{RB}{d}\right) \times (g + PCI \times (1 + g))\right| \times \left((1 + g) \times (1 + PCI)\right)^{n-1} + 10\%$$

Year		**2019**	
Year in which Applicant is applying		**1**	n
Price Cap Index		**1.20%**	PCI
Growth Factor Calculation			
2017 Actual Distribution Revenues		**$118,939,797**	
2013 Board-Approved Distribution Revenues		**$115,426,603**	
Growth Factor		**3.04%**	$g\ (Note\ 1)$
Dead Band		**10%**	
Average Net Fixed Assets			
Gross Fixed Assets Opening	$	625,029,889	
Add: CWIP Opening	$	3,164,006	
Capital Additions	$	51,272,477	
Capital Disposals	-$	4,597,818	
Capital Retirements	$	-	
Deduct: CWIP Closing	-$	3,164,006	
Gross Fixed Assets - Closing	$	671,704,548	
Average Gross Fixed Assets	$	648,367,218	
Accumulated Depreciation - Opening	$	160,425,475	
Depreciation Expense	$	23,877,061	
Disposals	-$	1,426,748	
Retirements	$	-	
Accumulated Depreciation - Closing	$	182,875,788	
Average Accumulated Depreciation	$	171,650,631	
Average Net Fixed Assets	$	476,716,587	
Working Capital Allowance			
Working Capital Allowance Base	$	658,178,026	
Working Capital Allowance Rate		12.0%	
Working Capital Allowance	$	78,981,363	
Rate Base	**$**	**555,697,950**	RB
Depreciation	**$**	**23,877,061**	d

Threshold Value (varies by Price Cap IR Year subsequent to CoS rebasing)

		$Threshold\ Value \times d$
Price Cap IR Year 2020	**209.6%**	**$ 50,049,666**
Price Cap IR Year 2021	**213.9%**	**$ 51,067,703**
Price Cap IR Year 2022	**218.3%**	**$ 52,129,315**
Price Cap IR Year 2023	**223.0%**	**$ 53,236,365**
Price Cap IR Year 2024	**227.8%**	**$ 54,390,799**

Ontario Energy Board

Capital Module
Applicable to ACM and ICM

Alectra Utilities Corporation - Enersource Hydro Mississauga Inc.

No Input Required.

Final Threshold Calculation

$$\textbf{Threshold Value}\ (\%) = \mathbf{1} + \left[\left(\frac{RB}{d}\right) \times (g + PCI \times (\mathbf{1} + g))\right] \times \left((\mathbf{1} + g) \times (\mathbf{1} + PCI)\right)^{n-1} + \mathbf{10\%}$$

Year		**2016**	
Year in which Applicant is applying		**4**	n
Price Cap Index		**1.20%**	PCI
Growth Factor Calculation			
2017 Actual Distribution Revenues		**$30,566,888**	
2013 Board-Approved Distribution Revenues		**$29,619,525**	
Growth Factor		**1.60%**	g $(Note\ 1)$
Dead Band		**10%**	
Average Net Fixed Assets			
Gross Fixed Assets Opening	$	163,625,735	
Add: CWIP Opening	$	-	
Capital Additions	$	11,363,000	
Capital Disposals	$	-	
Capital Retirements	$	-	
Deduct: CWIP Closing	$	-	
Gross Fixed Assets - Closing	$	174,988,735	
Average Gross Fixed Assets	$	169,307,235	
Accumulated Depreciation - Opening	$	32,529,814	
Depreciation Expense	$	6,295,624	
Disposals	$	-	
Retirements	$	-	
Accumulated Depreciation - Closing	$	38,825,438	
Average Accumulated Depreciation	$	35,677,626	
Average Net Fixed Assets	$	133,629,609	
Working Capital Allowance			
Working Capital Allowance Base	$	236,828,275	
Working Capital Allowance Rate		7.5%	
Working Capital Allowance	$	17,762,121	
Rate Base	**$**	**151,391,730**	RB
Depreciation	**$**	**6,295,624**	d

Threshold Value (varies by Price Cap IR Year subsequent to CoS rebasing)

Price Cap IR Year 2017	**177.8%**	
Price Cap IR Year 2018	**179.7%**	
Price Cap IR Year 2019	**181.6%**	
Price Cap IR Year 2020	**183.7%**	
Price Cap IR Year 2021	**185.7%**	
Price Cap IR Year 2022	**187.9%**	
Price Cap IR Year 2023	**190.1%**	
Price Cap IR Year 2024	**192.3%**	$Threshold\ Value \times d$

Threshold CAPEX

Price Cap IR Year 2017	**$**	**11,192,026**
Price Cap IR Year 2018	**$**	**11,312,283**
Price Cap IR Year 2019	**$**	**11,435,929**
Price Cap IR Year 2020	**$**	**11,563,061**
Price Cap IR Year 2021	**$**	**11,693,775**
Price Cap IR Year 2022	**$**	**11,828,173**
Price Cap IR Year 2023	**$**	**11,966,360**
Price Cap IR Year 2024	**$**	**12,108,441**

1-Staff-7

Attachment 2
Threshold Calculation 2024 EDR

Alectra EDR Application
Threshold Capital Expenditure Calculation (2024 ICM IRR)

Description	ERZ	BRZ	GRZ	PRZ	HRZ	ALECTRA
Inflation	2.17%	2.31%	2.33%	2.40%	3.04%	
Less: Productivity Factor	0.00%	0.00%	0.00%	0.00%	0.00%	
Less: Stretch Factor	0.30%	0.30%	0.30%	0.30%	0.30%	0.30%
Price Cap Index	1.87%	2.01%	2.03%	2.10%	2.74%	
Growth Factor	-0.28%	1.02%	-0.13%	0.50%	-0.24%	
Rebasing Year	2013	2015	2016	2017	2019	
# Years since rebasing	11	9	8	7	5	
Price Cap Index	1.87%	2.01%	2.03%	2.10%	2.74%	
Growth Factor	-0.28%	1.02%	-0.13%	0.50%	-0.24%	
Dead Band	10%	10%	10%	10%	10%	
Rate Base	$623.5	$404.6	$151.4	$1,082.8	$555.7	$2,818
Depreciation	$25.5	$15.2	$6.3	$52.3	$2.3	$101.5
Threshold Capital Expenditure 2020	$38.9	$30.7	$10.0	$87.3	$38.8	$205.6
Threshold Capital Expenditure 2021	$39.1	$31.1	$10.0	$88.1	$39.2	$207.4
Threshold Capital Expenditure 2022	$39.2	$31.6	$10.1	$88.9	$39.5	$209.2
Threshold Capital Expenditure 2023	$39.4	$32.0	$10.1	$89.7	$39.9	$211.1
Threshold Capital Expenditure 2024	$39.6	$32.5	$10.2	$90.5	$40.3	$213.0
Threshold Capital Expenditure 2020-2024	**$196.2**	**$157.9**	**$50.4**	**$444.4**	**$197.6**	**$1,046.4**

Inflation Factor
Geometric Mean Calculation (2024 ICM)

Year	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
OEB-Approved Inflation Factor Values	1.70%	1.60%	2.10%	1.90%	1.20%	1.50%	2.00%	2.20%	3.30%	3.70%	4.80%
Enersource RZ Inflation Factor	**2.17%**										
PowerStream RZ Inflation Factor	**2.40%**										
Brampton RZ Inflation Factor	**2.31%**										
Guelph RZ Inflation Factor	**2.33%**										
Horizon RZ Inflation Factor	**3.04%**										

Note: The RZ specific inflation factor based on the geometric mean is calculated using the inflation factor values over the IRM period for each RZ (i.e., 2014-2024 for ERZ and 2018-2024 for PRZ)

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Ontario Energy Board

Capital Module
Applicable to ACM and ICM

Alectra Utilities Corporation - Enersource RZ

No Input Required.

Final Threshold Calculation

$$\textbf{Threshold Value}\ (\%) = \mathbf{1} + \left|\left(\frac{RB}{d}\right) \times (g + PCI \times (\mathbf{1} + g))\right| \times ((\mathbf{1} + g) \times (\mathbf{1} + PCI))^{n-1} + \mathbf{10}\%$$

Cost of Service Rebasing Year	**2013**		
Price Cap IR Year in which Application is made	**11**	n	
Price Cap Index	**1.87%**	PCI	
Growth Factor Calculation			
Revenues Based on 2022 Actual Distribution Demand	**$143,364,332**	The most recent complete year for which actual billing and load data exists	2022
Revenues Based on 2013 Board-Approved Distribution Demand	**$147,025,657**	Last Rebasing Year	2013
Growth Factor	**-0.28%**	$g\ (Note\ 1)$	
Dead Band	**10%**		

Average Net Fixed Assets		
Gross Fixed Assets Opening	$	554,341,087
Add: CWIP Opening	$	4,371,726
Capital Additions	$	46,257,875
Capital Disposals	-$	1,026,755
Capital Retirements	-$	2,063,957
Deduct: CWIP Closing	-$	4,371,726
Gross Fixed Assets - Closing	$	597,508,250
Average Gross Fixed Assets	$	575,924,669
Accumulated Depreciation - Opening	$	47,380,643
Depreciation Expense	$	25,461,389
Disposals	-$	2,063,957
Retirements	-$	1,026,755
Accumulated Depreciation - Closing	$	69,751,320
Average Accumulated Depreciation	$	58,565,982
Average Net Fixed Assets	$	517,358,687
Working Capital Allowance		
Working Capital Allowance Base	$	786,215,891
Working Capital Allowance Rate		13.5%
Working Capital Allowance	$	106,139,145
Rate Base	**$**	**623,497,832**
Depreciation	**$**	**25,461,389**

RB

d

Threshold Value (varies by Price Cap IR Year subsequent to CoS rebasing)

Price Cap IR Year 2014	**149%**
Price Cap IR Year 2015	**150%**
Price Cap IR Year 2016	**150%**
Price Cap IR Year 2017	**151%**
Price Cap IR Year 2018	**151%**
Price Cap IR Year 2019	**152%**
Price Cap IR Year 2020	**153%**
Price Cap IR Year 2021	**153%**
Price Cap IR Year 2022	**154%**
Price Cap IR Year 2023	**155%**
Price Cap IR Year 2024	**156%**
Price Cap IR Year 2025	**156%**

$Threshold\ Value \times d$

Threshold CAPEX

Price Cap IR Year 2014	**$ 37,909,484**
Price Cap IR Year 2015	**$ 38,066,740**
Price Cap IR Year 2016	**$ 38,226,493**
Price Cap IR Year 2017	**$ 38,388,783**
Price Cap IR Year 2018	**$ 38,553,651**
Price Cap IR Year 2019	**$ 38,721,137**
Price Cap IR Year 2020	**$ 38,891,283**
Price Cap IR Year 2021	**$ 39,064,132**
Price Cap IR Year 2022	**$ 39,239,725**
Price Cap IR Year 2023	**$ 39,418,107**
Price Cap IR Year 2024	**$ 39,599,322**
Price Cap IR Year 2025	**$ 39,783,414**

Ontario Energy Board

Capital Module
Applicable to ACM and ICM

Alectra Utilities Corporation - PowerStream RZ

No Input Required.

Final Threshold Calculation

$$\textit{Threshold Value}\ (\%) = 1 + \left|\left(\frac{RB}{d}\right) \times (g + PCI \times (1+g))\right| \times \left((1+g) \times (1+PCI)\right)^{n-1} + 10\%$$

Cost of Service Rebasing Year		**2017**	
Price Cap IR Year in which Application is made		**7**	n
Price Cap Index		**2.10%**	PCI
Growth Factor Calculation			
Revenues Based on 2022 Actual Distribution Demand		**$233,554,857**	
Revenues Based on 2017 Board-Approved Distribution Demand		**$227,841,740**	
Growth Factor		**0.50%**	g (Note 1)
Dead Band		**10%**	
Average Net Fixed Assets			
Gross Fixed Assets Opening	$	1,183,508,940	
Add: CWIP Opening	$	57,486,862	
Capital Additions	$	114,494,289	
Capital Disposals	-$	2,734,108	
Capital Retirements	$	-	
Deduct: CWIP Closing	-$	39,959,632	
Gross Fixed Assets - Closing	$	1,312,796,351	
Average Gross Fixed Assets	$	1,248,152,646	
Accumulated Depreciation - Opening	$	229,378,962	
Depreciation Expense	$	52,272,173	
Disposals	-$	717,703	
Retirements	$	-	
Accumulated Depreciation - Closing	$	280,933,432	
Average Accumulated Depreciation	$	255,156,197	
Average Net Fixed Assets	$	992,996,449	
Working Capital Allowance			
Working Capital Allowance Base	$	1,197,449,515	
Working Capital Allowance Rate		7.5%	
Working Capital Allowance	$	89,808,714	
Rate Base	**$**	**1,082,805,162**	RB
Depreciation	**$**	**52,272,173**	d

Threshold Value (varies by Price Cap IR Year subsequent to CoS rebasing)

Price Cap IR Year 2018	**164%**	
Price Cap IR Year 2019	**166%**	
Price Cap IR Year 2020	**167%**	
Price Cap IR Year 2021	**168%**	
Price Cap IR Year 2022	**170%**	
Price Cap IR Year 2023	**172%**	
Price Cap IR Year 2024	**173%**	
Price Cap IR Year 2025	**175%**	$\textit{Threshold Value} \times d$
Price Cap IR Year 2026	**177%**	
Price Cap IR Year 2027	**178%**	

Threshold CAPEX

Price Cap IR Year 2018	**$**	**85,782,588**
Price Cap IR Year 2019	**$**	**86,521,354**
Price Cap IR Year 2020	**$**	**87,279,416**
Price Cap IR Year 2021	**$**	**88,057,280**
Price Cap IR Year 2022	**$**	**88,855,461**
Price Cap IR Year 2023	**$**	**89,674,491**
Price Cap IR Year 2024	**$**	**90,514,914**
Price Cap IR Year 2025	**$**	**91,377,290**
Price Cap IR Year 2026	**$**	**92,262,191**
Price Cap IR Year 2027	**$**	**93,170,206**

Ontario Energy Board

Capital Module
Applicable to ACM and ICM

Alectra Utilities Corporation - Brampton RZ

No Input Required.

Final Threshold Calculation

$$\textbf{Threshold Value}\ (\%) = 1 + \left[\left(\frac{RB}{d}\right) \times (g + PCI \times (1 + g))\right] \times ((1 + g) \times (1 + PCI))^{n-1} + 10\%$$

Cost of Service Rebasing Year		**2015**	
Price Cap IR Year in which Application is made		**9**	n
Price Cap Index		**2.01%**	PCI
Growth Factor Calculation			
Revenues Based on 2022 Actual Distribution Deman		**$86,862,567**	
Revenues Based on 2015 Board-Approved Distributi		**$81,049,295**	
Growth Factor		**1.02%**	g $(Note\ 1)$
Dead Band		**10%**	
Average Net Fixed Assets			
Gross Fixed Assets Opening	$	627,821,483	
Add: CWIP Opening	$	-	
Capital Additions	$	32,518,047	
Capital Disposals	-$	2,963,781	
Capital Retirements	$	-	
Deduct: CWIP Closing	$	-	
Gross Fixed Assets - Closing	$	657,375,749	
Average Gross Fixed Assets	$	642,598,616	
Accumulated Depreciation - Opening	$	295,604,516	
Depreciation Expense	$	15,227,319	
Disposals	-$	2,191,181	
Retirements	$	-	
Accumulated Depreciation - Closing	$	308,640,653	
Average Accumulated Depreciation	$	302,122,584	
Average Net Fixed Assets	$	340,476,032	
Working Capital Allowance			
Working Capital Allowance Base	$	493,403,770	
Working Capital Allowance Rate		13.0%	
Working Capital Allowance	$	64,142,490	
Rate Base	**$**	**404,618,522**	RB
Depreciation	**$**	**15,227,319**	d

Threshold Value (varies by Price Cap IR Year subsequent to CoS rebasing)

		$Threshold\ Value \times d$
Price Cap IR Year 2016	**191%**	**$ 29,112,118**
Price Cap IR Year 2017	**194%**	**$ 29,489,809**
Price Cap IR Year 2018	**196%**	**$ 29,879,039**
Price Cap IR Year 2019	**199%**	**$ 30,280,161**
Price Cap IR Year 2020	**202%**	**$ 30,693,538**
Price Cap IR Year 2021	**204%**	**$ 31,119,546**
Price Cap IR Year 2022	**207%**	**$ 31,558,568**
Price Cap IR Year 2023	**210%**	**$ 32,011,004**
Price Cap IR Year 2024	**213%**	**$ 32,477,263**
Price Cap IR Year 2025	**216%**	**$ 32,957,767**
Price Cap IR Year 2026	**220%**	**$ 33,452,951**

Ontario Energy Board

Capital Module
Applicable to ACM and ICM

Alectra Utilities Corporation - Enersource Hydro Mississauga Inc.

No Input Required.

Final Threshold Calculation

$$\textbf{Threshold Value}\ (\%) = 1 + \left|\left(\frac{RB}{d}\right) \times (g + PCI \times (1+g))\right| \times \left((1+g) \times (1+PCI)\right)^{n-1} + 10\%$$

Cost of Service Rebasing Year		**2016**	
Price Cap IR Year in which Application is made		**8**	n
Price Cap Index		**2.03%**	PCI
Growth Factor Calculation			
Revenues Based on 2022 Actual Distribution Demand		**$33,584,963**	
Revenues Based on 2016 Board-Approved Distribution Demand		**$33,858,734**	
Growth Factor		**-0.13%**	$g\ (Note\ 1)$
Dead Band		**10%**	
Average Net Fixed Assets			
Gross Fixed Assets Opening	$	163,625,735	
Add: CWIP Opening	$	-	
Capital Additions	$	11,363,000	
Capital Disposals	$	-	
Capital Retirements	$	-	
Deduct: CWIP Closing	$	-	
Gross Fixed Assets - Closing	$	174,988,735	
Average Gross Fixed Assets	$	169,307,235	
Accumulated Depreciation - Opening	$	32,529,814	
Depreciation Expense	$	6,295,624	
Disposals	$	-	
Retirements	$	-	
Accumulated Depreciation - Closing	$	38,825,438	
Average Accumulated Depreciation	$	35,677,626	
Average Net Fixed Assets	$	133,629,609	
Working Capital Allowance			
Working Capital Allowance Base	$	236,828,275	
Working Capital Allowance Rate		7.5%	
Working Capital Allowance	$	17,762,121	
Rate Base	**$**	**151,391,730**	RB
Depreciation	**$**	**6,295,624**	d

Threshold Value (varies by Price Cap IR Year subsequent to CoS rebasing)

Price Cap IR Year 2017	**156%**	
Price Cap IR Year 2018	**156%**	
Price Cap IR Year 2019	**157%**	
Price Cap IR Year 2020	**158%**	
Price Cap IR Year 2021	**159%**	
Price Cap IR Year 2022	**160%**	
Price Cap IR Year 2023	**161%**	
Price Cap IR Year 2024	**162%**	$Threshold\ Value \times d$
Price Cap IR Year 2025	**163%**	
Price Cap IR Year 2026	**164%**	

Threshold CAPEX

Price Cap IR Year 2017	**$**	**9,790,279**
Price Cap IR Year 2018	**$**	**9,844,501**
Price Cap IR Year 2019	**$**	**9,899,749**
Price Cap IR Year 2020	**$**	**9,956,043**
Price Cap IR Year 2021	**$**	**10,013,402**
Price Cap IR Year 2022	**$**	**10,071,847**
Price Cap IR Year 2023	**$**	**10,131,397**
Price Cap IR Year 2024	**$**	**10,192,075**
Price Cap IR Year 2025	**$**	**10,253,901**
Price Cap IR Year 2026	**$**	**10,316,897**

Ontario Energy Board

Capital Module
Applicable to ACM and ICM

Alectra Utilities Corporation - Horizon RZ

No Input Required.

Final Threshold Calculation

$$\textit{Threshold Value}\ (\%) = 1 + \left|\left(\frac{RB}{d}\right) \times (g + PCI \times (1+g))\right| \times \left((1+g) \times (1+PCI)\right)^{n-1} + 10\%$$

Cost of Service Rebasing Year		**2019**	
Price Cap IR Year in which Application is made		**5**	n
Price Cap Index		**2.74%**	PCI
Growth Factor Calculation			
Revenues Based on 2022 Actual Distribution Demand		**$130,329,099**	
Revenues Based on 2019 Board-Approved Distribution Demand		**$131,257,156**	
Growth Factor		**-0.24%**	$g\ (Note\ 1)$
Dead Band		**10%**	
Average Net Fixed Assets			
Gross Fixed Assets Opening	$	625,929,889	
Add: CWIP Opening	$	3,164,006	
Capital Additions	$	49,472,477	
Capital Disposals	-$	4,597,818	
Capital Retirements	$	-	
Deduct: CWIP Closing	-$	3,164,006	
Gross Fixed Assets - Closing	$	670,804,548	
Average Gross Fixed Assets	$	648,367,219	
Accumulated Depreciation - Opening	$	161,031,595	
Depreciation Expense	$	22,664,822	
Disposals	-$	1,426,748	
Retirements	$	-	
Accumulated Depreciation - Closing	$	182,269,669	
Average Accumulated Depreciation	$	171,650,632	
Average Net Fixed Assets	$	476,716,587	
Working Capital Allowance			
Working Capital Allowance Base	$	658,178,026	
Working Capital Allowance Rate		12.0%	
Working Capital Allowance	$	78,981,363	
Rate Base	**$**	**555,697,950**	RB
Depreciation	**$**	**22,664,822**	d

Threshold Value (varies by Price Cap IR Year subsequent to CoS rebasing)		$\textit{Threshold Value} \times d$
Price Cap IR Year 2020	**171%**	
Price Cap IR Year 2021	**173%**	
Price Cap IR Year 2022	**174%**	
Price Cap IR Year 2023	**176%**	
Price Cap IR Year 2024	**178%**	
Price Cap IR Year 2025	**179%**	
Price Cap IR Year 2026	**181%**	
Price Cap IR Year 2027	**183%**	
Price Cap IR Year 2028	**185%**	
Price Cap IR Year 2029	**186%**	

Threshold CAPEX	
Price Cap IR Year 2020	**$ 38,811,850**
Price Cap IR Year 2021	**$ 39,158,566**
Price Cap IR Year 2022	**$ 39,513,943**
Price Cap IR Year 2023	**$ 39,878,197**
Price Cap IR Year 2024	**$ 40,251,549**
Price Cap IR Year 2025	**$ 40,634,227**
Price Cap IR Year 2026	**$ 41,026,463**
Price Cap IR Year 2027	**$ 41,428,498**
Price Cap IR Year 2028	**$ 41,840,574**
Price Cap IR Year 2029	**$ 42,262,944**

1-Staff-8

PowerStream and Enersource RZs Historical Capital Spending

Reference 1: Exhibit 2, Tab 1, Schedule 4, page 10, Table 5
Reference 2: Exhibit 2, Tab 1, Schedule 4, page 19, Table 12
Reference 3: EB-2022-0013 Interrogatory Responses 1-Staff-16

Alectra Utilities provided capital expenditure amounts from 2018 to 2024 for the PowerStream and Enersource RZs. OEB staff has compiled the following tables using the tables in Reference 1 and Reference 2 as well as the ICMs confirmed in Reference 3.

Table 3 – PowerStream RZ Historical Spending ($ millions)

	Actual 2018	Actual 2019	Actual 2020	Actual 2021	Actual 2022	Forecast 2023	Budget 2024
Total CAPEX	100.5	95	99.7	95.4	85.8	117.9	117.6
ICM Funding	11.2	18.8	0	2.9	0	16.2	17.3
CAPEX w/o ICMs	89.3	76.2	99.7	92.5	85.8	101.7	100.3

Table 4 – Enersource RZ Historical Spending ($ millions)

	Actual 2018	Actual 2019	Actual 2020	Actual 2021	Actual 2022	Forecast 2023	Budget 2024
Total CAPEX	59.4	49.8	52.3	55.2	41.3	49.7	56.2
ICM Funding	10.7	7.5	0	0	0	1.9	7.9
CAPEX w/o ICMs	48.7	42.3	52.3	55.2	41.3	47.8	48.3

a) Please confirm if the above tables are correct or revise the tables as applicable.

Response:

a) Alectra Utilities has updated versions of Table 3 and 4 below to include the latest 2023 forecast.

Table 3 – Updated PowerStream RZ Historical Spending ($ millions)

PRZ	Actual 2018	Actual 2019	Actual 2020	Actual 2021	Actual 2022	Forecast 2023	Budget 2024
Total CapEx	100.5	95	99.7	95.4	85.8	114.5	117.6
ICM Funding Approved/Requested	11.2	18.8	0	2.9	0	16.2	17.3
CAPEX w/o ICMs	89.3	76.2	99.7	92.5	85.8	98.3	100.3

Table 4 – Updated Enersource RZ Historical Spending ($ millions)

ERZ	Actual 2018	Actual 2019	Actual 2020	Actual 2021	Actual 2022	Forecast 2023	Budget 2024
Total CapEx	59.4	49.8	52.3	55.2	41.3	50.5	56.2
ICM Funding Approved/Requested	10.7	7.5	0	0	0	1.9	7.9
CAPEX w/o ICMs	48.7	42.3	52.3	55.2	41.3	48.6	48.3

1-Staff-9

Adjusted Capital Plan

Reference 1: EB-2022-0013, Exhibit 3, Tab 1, Schedule 1, pages 3-4, Tables 19-20
Reference 2: Exhibit 3, Tab 1, Schedule 1, page 3, Tables 19-20
Reference 3: EB-2022-0013 Decision and Order, page 21
Reference 4: EB-2022-0013 Exhibit 3, Tab 1, Schedule 2, page 13
Reference 5: Exhibit 3, Tab 1, Schedule 1, page 5

In April 2022, Alectra Utilities developed an Adjusted Capital Plan following the unfavourable outcome of the "M-factor" EB-2019-0018 Decision. The Adjusted Capital Plan, as presented in EB-2022-0013, is shown in the tables below. The tables compare the Adjusted Capital Plan to the budget presented in the 2020 Distribution System Plan (DSP) for the "M-factor" proceeding.

Table 5 – EB-2022-0013 Variance by Investment Category ($ millions)

Investment Category	Actual 2020	Actual 2021	Forecast 2022	Budget 2023	Budget 2024	Total
System Access	($3.5)	$0.5	$1.6	$2.1	($1.9)	($1.2)
System Renewal	($3.5)	($5.5)	($28.6)	($31.4)	($41.2)	($110.2)
System Service	($11.2)	($8.5)	($8.8)	($18.0)	($15.2)	($61.7)
General Plant	($8.6)	($4.8)	$6.8	$13.9	$15.6	$22.9
Total Reduction, before Proposed ICM	**($26.8)**	**($18.3)**	**($29.0)**	**($33.4)**	**($42.7)**	**($150.2)**
System Renewal-ICM	$0.0	$0.0	$0.0	$25.4	$26.9	$52.3
Total Net Reduction	**($26.8)**	**($18.3)**	**($29.0)**	**($8.0)**	**($15.8)**	**($97.9)**

Table 6 – EB-2022-0013 Adjusted Capital Plan – Material Changes ($ millions)

Summary of Material Changes	2020-2024 Variance
Underground Asset Renewal	($125.2)
Lines Capacity	($56.9)
Information Technology	$34.3
Other	($2.4)
Total Reduction, before Proposed ICM	**($150.2)**
Proposed ICM Investments	$52.3
Total Net Reduction	**($97.9)**

Alectra Utilities updated its Adjusted Capital Plan as part of this proceeding. The new capital plan variance to the 2020 DSP is presented below.

The updated Adjusted Capital Plan includes the 2024 ICM request and reflects a net reduction in investments of $129.0 million over the 2020 to 2024 period compared to the 2020 DSP. Alectra Utilities stated that its decision to reduce and defer significant investments was to align the level of investment with the funding in base rates. According

to Alectra Utilities, budgets have been updated to account for the impact of the global supply chain challenges as well as the effect of inflation.

Table 7 – EB-2023-0004 Variance by Investment Category ($ millions)

Investment Category	Actual 2020	Actual 2021	Actual 2022	Forecast 2023	Budget 2024	Total
System Access	($3.5)	$0.5	($15.9)	$5.9	($3.6)	($16.6)
System Renewal	($3.5)	($5.5)	($19.9)	($4.8)	($14.4)	($48.1)
System Service	($11.2)	($8.5)	($11.6)	($22.0)	($18.1)	($71.4)
General Plant	($8.6)	($4.8)	$0.7	$7.7	$12.1	$7.1
Total Variance	**($26.8)**	**($18.3)**	**($46.7)**	**($13.2)**	**($24.0)**	**($129.0)**

Table 8 – EB-2023-0004 Adjusted Capital Plan – Material Changes ($ millions)

Summary of Variances	2020-2024 Variance
Underground Asset Renewal	($91.4)
Lines Capacity	($71.7)
Information Technology	$24.2
Other	$9.9
Total	**($129.0)**

a) **Please provide a breakdown of Table 8 above, which shows the variance by year from 2020 to 2024. Please also subcategorize IT variances in the table by project type (i.e., customer experience, business process optimization, operational technology, grid modernization, etc).**
b) **Please provide a similar table to the above but instead of presenting the variance amount, please provide actual spending/budgets.**
c) **What inflation factor did Alectra Utilities use in its budgeting plan to account for the impact of the global supply chain and especially, the effect of inflation?**
d) **How did Alectra Utilities arrive at a decision to reduce and defer significant investments in System Renewal despite worsening cable reliability performance?**
e) **Please provide a breakdown of operational savings achieved due to each IT project type from 2020-2024. Please explain how Alectra Utilities quantified the savings achieved.**
f) **There is a difference of $17.7 million between the 2022 budget in the Adjusted Capital Plan (EB-2022-0013) and actual spending.**
    i. **Why was Alectra Utilities unable to meet its overall 2022 budget as developed in April 2022?**
    ii. **Were projects that were not completed in 2022 deferred to future years, especially in the System Access category? If yes, provide details.**
    iii. **Alectra Utilities spent $39 million in cable renewal in 2022 yet budgeted $47.3 million as per Reference 4 in the 2023 application. Please explain why Alectra Utilities was unable to meet its cable renewal budget in 2022.**
g) **Comparing the original Adjusted Capital Plan (EB-2022-0013) to the updated version as filed within this application, Alectra Utilities is deferring additional capital expenditures of $17.7 million in 2022, $5.2 million in 2023, and $8.2 million in 2024.**

i. How much of each year's deferred budget pertains to projects in the PowerStream RZ and Enersource RZ respectively?
ii. Please list which material projects were deferred from the original Adjusted Capital Plan for the two RZs, their capital expenditure amount, and why they were deferred.
iii. Why can Alectra Utilities not invest these deferred amounts to repair its deteriorating cable population considering it had planned to spend these amounts in base rates as part of the original Adjusted Capital Plan?

In the EB-2022-0013 Decision and Order, the OEB stressed that Alectra Utilities should take care of its cable population and prioritize cable health over some General Plant projects.

h) How has Alectra Utilities re- prioritized it's cable renewal program in comparison to other programs with multiple projects to address OEB's concern of cable renewal prioritization?
i) Did Alectra Utilities consider shifting parts of its planned spend to the cable renewal budget following the EB-2022-0013 Decision?
i. If so, which projects were deferred to prioritize cable renewal spending? Please specify in what years the projects were deferred from and to. What are the cost estimates of these projects? How much cable renewal spending was prioritized as a result of shifting these projects?

Response:

a) and b)

Alectra Utilities has provided a breakdown of the material changes in the capital plan relative to the DSP in Attachment 1. The attachment also includes a breakdown of IT variances by project type and the actual/budget spend by year. Table 1 below subcategorizes the IT variances by project type.

Table 1 – Summary of Material IT Changes ($MM)

Summary of Material Changes - IT	2020	2021	2022	2023	2024	Total
Implementation of Customer Experience applications and Processes	0.0	0.6	4.7	6.6	1.9	13.9
Business process and application optimization	(2.3)	(4.9)	0.0	3.7	4.3	0.7
Operational technology	0.1	(0.8)	0.4	(0.1)	0.6	0.2
Enhancements to Investment Planning and Predictive Analytics (Copperleaf)	(0.1)	1.2	2.0	1.4	0.5	5.0
IT Client Computing, Server and Network	1.3	(0.1)	0.2	(0.6)	0.5	1.3
Enhancements to security/data platforms and network architecture for Grid Modernization	(0.3)	(0.2)	0.5	0.9	0.3	1.2
Workforce Management System	0.0	0.0	(2.3)	(1.6)	2.3	(1.5)
Security cost increases	0.1	(0.2)	0.3	0.1	0.8	1.1
Total	**(1.3)**	**(4.4)**	**6.0**	**10.5**	**11.0**	**21.8**

c) Alectra Utilities has incorporated a 3.68% inflation factor for 2024 projects.

d) Alectra Utilities reviews its capital plan on an annual basis so as to address the evolving needs and priorities of the distribution system and Alectra Utilities' customers. As provided in response to 1-Staff-17 c) i) in the 2023 ICM Application, Alectra Utilities' decision to defer or reduce significant capital investment was necessary to align with the level of investment supported by funding in base rates. Prior to deferring needed investment in underground renewal, Alectra Utilities deferred or reduced capital investment in areas that would not expose Alectra Utilities and its customers to unacceptable safety risks and potential non-compliance related to its requirement to service customers.

As provided in Alectra Utilities' 2023 ICM Application (EB-2022-0013, Exhibit 3, Tab 1, Schedule 1, Pages 4-10), during 2020 and 2021, capital investments in IT and General Plant were reduced due to the pandemic which resulted in the reallocation of investment funding into Underground Asset Renewal. Furthermore, during the COVID Pandemic, investment in System Service for system expansion also slowed, reducing the pressure on Lines capacity for urgent investments.

However, in 2023 and onwards, mandatory investments in System Access and necessary investments needs in System Service and General Plant returned which required Alectra Utilities to return the reallocated funding back so as to address the needs of the distribution system and the continued operation of critical business functions.

Further, as part of the 2023 ICM application, Guidehouse undertook an assurance review which assessed the planning practices, including the optimization and prioritization of the capital expenditure plans against industry best practices and the rationale and justification for adjustments to the plan driving additional funding requirements. Guidehouse's independent review found that "Alectra's revised five-year investment plan is appropriate and justified based on the level of rigor applied in its capital planning process and rationale supporting each of the associated business cases in the DSP."[1] Furthermore, Guidehouse identified that "[t]he methods Alectra applies to identify required investment for System Renewal is based on a thorough and consistently applied condition assessment methodology and analytics that balances cost versus risk."[2]

e) Alectra Utilities develops business cases which estimate OM&A costs and savings related to capital projects. OM&A savings in the business cases entered into C55 consider cost saving benefits into three categories: avoided costs; efficiency savings; and reduction savings. Estimated avoided costs are reflected in capital investment that enable Alectra Utilities to avoid future cost increases. Estimated efficiency savings are reflected in investments which enable more efficient use of Alectra Utilities' employees' time, enabling them to work on other tasks. Table 2 below provides the recorded net OM&A savings from the proposed IT projects for 2020-2024.

[1] EB-2022-0013, Exhibit 4, Tab 1, Schedule 1, Attachment 12, p.2.
[2] Ibid., p.17.

IT Proposed Net OM&A Savings (2020-2024)

Project Name	2020	2021	2022	2023	2024
Business process and application optimization	-	0.50	0.35	1.78	2.50
Customer Experience*	-	-	(0.20)	(0.49)	(1.15)
Operational Technology	-	-	-	0.02	0.01
Total	**-**	**0.50**	**0.15**	**1.31**	**1.36**

**Delayed timelines and scope deferral affected the anticipated pace of benefit realization*

A summary of how Alectra Utilities quantified the savings for the three project types are provided below.

Business process and application optimization:

- Software asset management processes facilitate quantifying savings attributable to the repurposing or reduction of license requirements through license true-up optimization ahead of software license renewals.
- Contract management savings are quantified through robust practices managing IT contract renewals. Savings achieved are determined by comparing proposed contract terms to the revised terms through effective contract management, in addition to reviewing contracts ahead of expiry to determine future requirements.
- Savings achieved through revision of New Connections process to reduce processing time of ESA forms.
- Updates to IVR to reduce call handling time to reduce third party costs.

Customer Experience

- Savings are quantified in terms of the number of customers migrated to e-billing and consequential postage, handling and printing savings.
- 3rd party contract savings due to automation of various Contact Us forms

Operational Technology

- Migrating of a Rogers circuit off our core connections - and resulting elimination of line costs.

f) Alectra Utilities wishes to clarify that the referenced $17.7 million variance in the Adjusted Capital Plan (EB-2022-0013) and actual expenditures in 2022 is the variance between Q1 2022 Forecast and not the Budget set for 2022.

Relative to the 2022 Capital Budget of $247.2MM, Alectra Utilities completed $241.6MM of capital work which accounts for a variance of $5.6MM (2%) below budget.

The remainder of the response below provides explanation for the variances between the 2022 Q1 Forecast and the actual 2022 capital expenditures by OEB investment categories.

i) Alectra Utilities was unable to fully complete the 2022 capital work as set out in the 2022 Q1 Forecast due to the following main reasons:

- Delays from customers and municipal government driven work impacting customer connection, customer expansion and road authority projects; and
- Delays and deferrals in fleet expenditure due to lack of availability and supply chain issues.

Further Details are provided below by OEB category:

- Lower System Access expenditures (-$17.4MM) than forecasted due to delays with Road Authority project timing with municipalities, combined with delays from driven work for large Customer Expansion projects and Subdivisions;
- Higher System Renewal expenditures (+$8.9MM) due to increased Reactive expenditures combined with additional Pole Remediation work;
- Lower System Service expenditures (-$2.9MM) was lower due to supply chain issues affecting delivery of materials and shortage of resources for Capacity Lines projects combined with projects put on hold due to technology specifications with Contractors for Capacity Stations projects; and
- General Plant expenditures were lower (-$6.3MM) than forecast due to supply chain issues with delivery of Fleet vehicles and delays in IT Systems stemming from the shortage of materials and resources.

ii) System Access capital work experienced the largest impact in 2022 compared to forecast due to timeline changes from customers and municipal and regional governments. Impacts of customer driven work rescheduling has carried over into 2023 with delays in customer timing for large projects and timeline changes with Road Authority work. New connections and subdivision work increased in 2023 compared to prior years driven by the strong housing market demand.

iii) Reference 4 provided by OEB Staff of $47.3MM for Underground Cable Renewal investments reflects the Q1 Forecast and not the 2022 budget.

The actual expenditures in 2022 on Cable Renewal (Replacement and Injection) and Emerging Underground Cable expenditures for all RZs in Alectra Utilities was $39.0MM which was $1.0MM (3%) lower than the budget of $40.0MM.

Please refer to the response to 1-Staff-4 for the variance analysis of actual 2022 cable renewal expenditures against 2022 budget for each of the ERZ and PRZ.

In Q1 2022, Alectra Utilities attempted to increase investment in underground cable renewal from $40.0MM budget to forecast of $47.3MM. In 2022, Alectra Utilities experienced challenges with ordering additional materials and shortage of additional contract resources to complete the additional underground renewal work. Suppliers and contractors required more notice to deliver the materials and organize resources due to the persistence of supply chain issues. Increases in 2022 reactive work stemming from higher than expected equipment failures and significant storm damage compounded the challenges and shortage of resources to complete the additional work. For 2023 cable renewal work, Alectra Utilities procured the necessary materials and resources in the fall of 2022 so as to mitigate delays in material delivery and a shortage of resources to complete the work.

g) i) Alectra Utilities has provided Table 1 and 2 below outlining the variance by rate zone for 2022, 2023 and 2024 at the OEB investment level. Alectra Utilities allocates General Plant investments proportionally to each rate zone and hence has not provided a variance explanation for those investments here.

Table 1 – 2022-2024 PRZ Budget/Forecast Vs. Actual/Forecast Variance ($MM)

PRZ Variance	2022	2023	2024
System Access	($16.36)	($5.50)	$0.33
System Renewal	$3.93	$3.19	$1.28
System Service	($1.91)	($0.16)	($1.70)
General Plant (Allocation)	($1.92)	($1.16)	($1.30)
Total	($16.25)	($3.62)	($1.38)

Table 2 – 2022-2024 ERZ Budget/Forecast Vs. Actual/Forecast Variance ($MM)

ERZ Variance	2022	2023	2024
System Access	($5.71)	($0.14)	($5.36)
System Renewal	$1.77	$1.95	$2.06
System Service	$1.50	$0.05	($0.13)
General Plant (Allocation)	($1.40)	($0.85)	($0.95)
Total	($3.85)	$1.02	($4.38)

In 2022, both the PRZ and ERZ exceeded the budget on system renewal expenditures. The largest variance in both regions was driven by System Access. System Access Investments are driven by customers and are largely outside of the control of Alectra Utilities.

In 2023, both the ERZ and PRZ are forecast to exceed the plan in System Renewal. The PRZ was significantly impacted by persistence of customer and municipal and regional driven project work in System Access which resulted in a total forecasted underspend in 2023. The ERZ's largest forecasted reduction was the impact of the total allocation from General Plant relative to budget.

In 2024, both PRZ and ERZ capital investments in System Renewal are planned to exceed the previous plan. In the PRZ, System Service and allocated General Plant investments have reduced by $3MM from prior plan. In the ERZ, delays in System Access investments are expected to continue in 2024 and are $5.36MM lower than previous plan.
Further details at the project level can be found in response to g) ii).

ii) In 2022 per Table 3, System Access and in particular customer driven work projects listed below represent the material projects that result in the variance. Customer project timelines

are outside of the Alectra Utilities control, the Company utilizes the best and most recent information provided from customers on scheduling and budgeting the work.

Table 3 – 2022 Material Project Variance

Rate Zone	System Access	Variance
PRZ	New Residential Subdivision and Condo Tower Development - Alectra East	($4.9)
	Customer Initiated Distribution System Project - Urbacon Data Center Expansions	($2.8)
	Road Authority UG Relocation - Portage Pkwy	($2.3)
	Customer Initiated Distribution System Projects - PS South	($2.2)
	Road Authority O/H Line Relocation - Bethesda Sideroad	($1.4)
	Road Authority O/H Line Relocation - Duckworth St (Bell Farm to St Vincent)	($1.2)
	New Services - PowerStream RZ	($1.1)
	PRZ Total	**($15.9)**
ERZ	Customer Initiated Distribution System Projects - Central South	($2.6)
	New Residential Subdivision and Condo Tower Development - Alectra Central South	($2.4)
	ERZ Total	**($5.0)**

In 2023, only PRZ had significant reductions, once again Table 4 lists the project that account for 87% of the variance listed in Table 1.

Table 4 – 2023 Material Project Variance PRZ only

System Access	Variance
Customer Initiated Distribution System Expansion Projects (East) Project Rainbow, Site 1, Phase 2	($1.9)
Road Authority UG Relocation - Portage Pkwy	($1.5)
Road Authority O/H Line Relocation - Bayview Road	($1.4)
Total	($4.8)

Variances for 2024 are provided in Table 5. In 2024, PRZ had the largest variance in System Service, which was the deferral of the DERMS platform project. For ERZ the largest variance was in system access, the updates reflect revisions to customer timelines.

Table 5- 2024 Material Project Variance

Rate Zone	System Service	Variance
PRZ	Implementation of Enterprise DERMS Platform	($1.3)
	Total	($1.3)
	System Access	**Variance**
ERZ	Road Authority Projects - Central South	($2.6)
	New Residential Subdivision and Condo Tower Development - Alectra Central South	($1.5)
	Customer Initiated Distribution System Projects - Central South	($1.5)
	Total	($5.6)

giii) As provided in gi) and gii) above, variances in System Access expenditures are the largest contributor to lower expenditures for the PRZ and ERZ. While Alectra Utilities is unable to control customer driven work, efforts are made to mitigate the impact of schedule changes. If provided sufficient notice, Alectra Utilities attempts to reallocate available funding into other necessary work as long as sufficient time is available to order materials and arrange resources to complete the work. In some of these instances, Alectra Utilities has sufficient time to reallocate funding into System Renewal projects. Customers, developers and Road Authorities utilize 'Building More Homes Faster Act' and 'Building Transit Faster Act' to encourage Alectra Utilities to meet aggressive schedules with minimal notice times.

As stated in Exhibit 3, Tab 1, Schedule 2, Page 3, Lines 3-10, Alectra Utilities consistently utilizes every opportunity it can to reallocate funding as long as sufficient notice is provided to properly plan, procure materials and resources, attain permits and schedule the work for completion.

h) Alectra Utilities has re-prioritized investments for 2023 based on the OEB's decision and reduced the investment in General Plant by $6.2MM primarily by re-prioritizing and deferring Information Technology investments. The funds were redirected to distribution automation in an effort to reduce the number of customers impacted by an outage and restoration time for those customers impacted by both overhead and underground reliability issues. Alectra Utilities elected to invest in distribution automation instead of in cable renewal as automation has a wider beneficial impact for a higher number of customers and provides grid flexibility to expedite restoration for both overhead and underground systems. However, this is a temporary plan that provides short term relief to a long-term problem. As Guidehouse stated in the Assurance Review:

"However, the improvement in reliability achieved by automation does not diminish the need for renewal upgrades, as outages will continue to occur and increase more frequently as equipment further deteriorates."[3]

i) Alectra has considered shifting planned spend to cable renewal where possible however it is still necessary to address other issues such as capacity requirements or ensuring that systems such as OMS support the day-to-day operations. With the limited funding available it was felt that shifting the investment from General Plant to Automation would provide more of a benefit to the end customers.

[3] EB-2022-0013, Attachment 12,

1-Staff-9

Attachment 1
DSP Variances

	2020			2021			2022			2023			2024			Total Variance
Grouping	**DSP**	**Actual**	**Variance**	**DSP**	**Actual**	**Variance**	**DSP**	**Actual**	**Variance**	**DSP**	**Forecast**	**Variance**	**DSP**	**Budget**	**Variance**	
Underground Asset Renewal	**61.1**	**61.5**	**0.4**	**74.5**	**55.6**	**(18.9)**	**82.2**	**46.9**	**(35.3)**	**88.4**	**70.5**	**(17.9)**	**95.5**	**76.1**	**(19.4)**	**(91.1)**
Cable Remediation –Replacement	32.7	35.4	2.7	44.2	25.3	(18.9)	49.2	20.1	(29.1)	52.7	38.5	(14.2)	57.5	36.9	(20.6)	(80.1)
Cable Remediation – Injection	15.3	11.5	(3.8)	16.9	13.7	(3.2)	19.1	12.8	(6.3)	21.5	17.0	(4.5)	23.5	23.8	0.3	(17.5)
Switchgear Replacement	7.4	5.5	(1.9)	7.6	5.4	(2.2)	7.9	6.2	(1.7)	8.1	6.6	(1.5)	8.3	6.5	(1.8)	(9.1)
Alectra Initiated Near term projects (Underground)	4.9	8.0	3.1	5.0	10.1	5.1	5.2	6.1	0.9	5.3	6.3	1.0	5.3	6.7	1.4	11.5
Civil Structures	0.8	1.1	0.3	0.8	1.1	0.3	0.8	1.7	0.9	0.8	2.1	1.3	0.9	2.2	1.3	4.1
Lines Capacity	**21.1**	**11.2**	**(9.9)**	**24.0**	**7.0**	**(17.0)**	**23.9**	**8.9**	**(15.0)**	**26.4**	**7.3**	**(19.1)**	**14.8**	**4.9**	**(9.9)**	**(70.9)**
Capacity (Lines)	21.1	11.2	(9.9)	24.0	7.0	(17.0)	23.9	8.9	(15.0)	26.4	7.3	(19.1)	14.8	4.9	(9.9)	(70.9)
Information Technology	**15.1**	**13.8**	**(1.3)**	**18.2**	**13.8**	**(4.4)**	**19.8**	**25.0**	**6.0**	**12.3**	**22.8**	**10.5**	**8.4**	**19.5**	**11.0**	**21.8**
Implementation of Customer Experience applications	0.0	0.0	0.0	0.0	0.6	0.6	0.0	4.7	4.7	0.0	6.6	6.6	0.0	1.9	1.9	13.9
Business process and application optimization	10.5	8.2	(2.3)	12.1	7.1	(5.0)	12.7	12.8	0.0	5.6	9.3	3.7	5.9	10.1	4.3	0.7
Operational technology	0.7	0.8	0.1	2.0	1.3	(0.8)	1.2	1.6	0.4	1.3	1.2	(0.1)	0.5	1.1	0.6	0.2
Enhancements to Utility investment portfolio planning	0.5	0.4	(0.1)	0.6	1.8	1.2	0.2	2.2	2.0	0.2	1.6	1.4	0.1	0.6	0.5	5.0
IT Client Computing, Server and Network	2.4	3.7	1.3	2.4	2.3	(0.1)	2.9	3.2	0.2	1.9	1.3	(0.6)	1.1	1.6	0.5	1.3
Enhancements to security/data platforms and network	0.3	0.0	(0.3)	0.4	0.1	(0.2)	0.0	0.5	0.5	0.1	1.0	0.9	0.0	0.3	0.3	1.2
Workforce Management System	0.0	0.0	0.0	0.0	0.0	0.0	2.4	0.1	(2.3)	2.4	0.8	(1.6)	0.0	2.3	2.3	(1.5)
Security cost increases	0.6	0.7	0.1	0.8	0.6	(0.2)	0.4	0.0	0.3	0.9	1.0	0.1	0.9	1.7	0.8	1.1
Other	**185.7**	**169.7**	**(16.0)**	**163.5**	**185.5**	**22.0**	**162.4**	**160.0**	**(2.4)**	**168.7**	**180.9**	**12.2**	**190.6**	**184.9**	**(5.7)**	**10.1**
Overhead Asset Renewal	34.3	32.8	(1.5)	34.7	39.7	5.0	39.4	38.7	(0.7)	30.9	43.6	12.7	37.6	48.3	10.7	26.2
Customer Connections	29.2	25.9	(3.3)	30.6	27.6	(3.0)	32.2	24.9	(7.3)	33.6	28.8	(4.8)	34.8	31.3	(3.5)	(21.9)
Reactive Capital	18.9	22.5	3.6	19.2	26.9	7.7	19.6	34.3	14.7	20.0	31.1	11.1	20.4	23.6	3.2	40.3
Road Authority	19.7	12.0	(7.7)	17.3	14.2	(3.1)	18.2	5.8	(12.4)	19.2	8.4	(10.8)	20.3	14.4	(5.9)	(39.9)
Network Metering	14.8	17.0	2.2	14.3	14.3	0.0	10.2	14.0	3.8	11.6	13.8	2.2	12.2	11.8	(0.4)	7.8
Fleet Renewal	8.9	8.1	(0.8)	9.5	6.6	(2.9)	9.9	4.0	(5.9)	10.3	5.8	(4.5)	10.2	9.3	(0.9)	(15.0)
Transformer Renewal	5.5	5.8	0.3	6.3	6.9	0.6	7.0	6.7	(0.3)	7.4	9.2	1.8	7.8	9.2	1.4	3.8
Substation Renewal	12.8	10.5	(2.3)	4.4	7.3	2.9	2.8	6.5	3.7	3.2	7.0	3.8	5.5	5.7	0.2	8.3
System Control, Comm'ns & Performance	6.6	5.5	(1.1)	5.8	4.2	(1.6)	4.7	4.4	(0.3)	4.1	3.2	(0.9)	2.8	4.7	1.9	(2.0)
Rear Lot Conversion	4.8	2.4	(2.4)	1.2	0.1	(1.1)	1.2	1.0	(0.2)	4.2	0.2	(4.0)	8.5	0.0	(8.5)	(16.2)
Capacity (Stations)	0.8	0.7	(0.1)	0.8	5.3	4.5	0.8	0.1	(0.7)	5.2	0.3	(4.9)	12.0	1.5	(10.5)	(11.7)
SCADA and Automation	3.4	3.4	0.0	3.6	9.0	5.4	3.7	8.7	5.0	3.8	8.2	4.4	4.7	7.3	2.6	17.4
Facilities Management	4.2	7.4	3.2	2.6	2.6	0.0	2.9	3.9	1.0	4.6	4.5	(0.1)	3.5	5.9	2.4	6.5
Safety & Security	5.4	5.6	0.2	2.0	2.6	0.6	2.0	1.9	(0.1)	2.0	0.5	(1.5)	2.0	0.5	(1.5)	(2.3)
Customer Initiated Dist Sys Projects	2.3	7.9	5.6	2.5	11.8	9.3	2.6	2.6	0.0	2.8	14.2	11.4	2.9	8.8	5.9	32.2
Connection & Cost Recovery Agreements	8.7	0.0	(8.7)	1.6	5.5	3.9	0.0	0.7	0.7	0.5	0.0	(0.5)	0.0	0.0	0.0	(4.6)
Other System Renewal	1.7	0.0	(1.7)	1.7	0.0	(1.7)	1.8	0.0	(1.8)	1.9	0.0	(1.9)	1.9	0.0	(1.9)	(9.0)
Tools, Shop and garage Equipment	1.3	1.5	0.2	1.3	1.1	(0.2)	1.3	1.4	0.1	1.3	1.6	0.3	1.3	2.1	0.8	1.2
Other General Plant	1.1	0.0	(1.1)	1.2	0.0	(1.2)	1.2	0.0	(1.2)	1.2	0.0	(1.2)	1.3	0.0	(1.3)	(6.0)
Distributed Energy Resources (DER)	0.7	0.4	(0.3)	0.7	0.3	(0.4)	0.9	0.3	(0.6)	0.9	0.4	(0.5)	0.9	0.1	(0.8)	(2.6)
Transmitter Related Upgrades	0.6	(0.2)	(0.8)	2.2	0.2	(2.0)	0.0	0.0	0.0	0.0	0.6	0.6	0.0	0.4	0.4	(1.8)
Transit Projects	0.0	0.5	0.5	0.0	(0.7)	(0.7)	0.0	0.1	0.1	0.0	(0.5)	(0.5)	0.0	0.0	0.0	(0.6)
Grand Total	**283.0**	**256.2**	**(26.8)**	**280.2**	**261.9**	**(18.3)**	**288.3**	**240.8**	**(46.7)**	**295.8**	**281.5**	**(14.3)**	**309.3**	**285.4**	**(24.0)**	**(130.1)**