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File No. 17001.13

January 11, 2024

BY EMAIL & RESS
registrar@oeb.com

Ms. Nancy Marconi
Ontario Energy Board
2300 Yonge Street, 27th Floor
Toronto, ON M4P 1E4

Dear Ms. Marconi:

Re: E.L.K. Energy Inc. ("E.L.K.") Application for 2024 Rates (EB-2023-0013)
Interrogatory Responses

We have been retained in relation to the above-noted matter. Pursuant to Procedural Order No. 1 dated November 24, 2023, please find enclosed complete written responses to the interrogatories filed by Ontario Energy Board ("**OEB**") Staff and the Vulnerable Energy Consumers Coalition ("**VECC**").

E.L.K. is hereby requesting confidential treatment of the attachment to the response to interrogatory VECC-3(a), pursuant to sections 10.01 and 10.02 of the OEB's *Rules of Practice and Procedure* (revised July 13, 2023) and sections 5.1.1 and 5.1.2 of the OEB's *Practice Direction on Confidential Filings* (revised December 17, 2021) ("**Practice Direction**"). VECC has requested in this interrogatory that E.L.K. provide a copy of its Emergency Response Plan. E.L.K. is requesting confidential treatment as the Emergency Response Plan contains information that pertains to public security, particularly it provides a comprehensive listing of contact information (including personal information), names and locations of key infrastructure and facilities in and around the E.L.K. service area. E.L.K. is concerned that disclosure of this information could compromise public safety. A rogue actor could use this information as a road map to sabotage response efforts to an emergency or to coordinate an attack against critical infrastructure and facilities. The probative value of placing the Emergency Response Plan in the public domain does not outweigh the potentially serious risks to public health and safety.

Additionally, the Emergency Response Plan contains recorded information about an identifiable individual that is of a personal nature. In accordance with section 10.1.1(b) of the Practice Direction on Confidential Filings, all of the redactions made by E.L.K. qualify as "personal information" under the *Freedom of Information and Protection of Privacy Act* as the redacted information relates to: (a) employment history of the individual; (b) the address, home telephone or cell phone number of the individual; or (c) the individual's name where it appears with other personal information relating to the individual or where the disclosure of the name would reveal other personal information about the

individual. Accordingly, this personal information should not be placed on the public record or provided to any party in this proceeding.

Thus, E.L.K. is providing two confidential versions of the Emergency Response Plan:

1. A fully unredacted copy of the Emergency Response Plan including highlighted personal information that should not be provided to any party in this proceeding; and

2. A redacted copy of the Emergency Response Plan that does not include personal information and is only provided to parties in this proceeding who comply with section 6 of the Practice Direction.

For clarity, E.L.K. submits that the Emergency Response Plan filed as part of the response to VECC-3(a) is confidential and should not be placed on the public record.

Please contact the undersigned with any questions.

Yours truly,

BORDEN LADNER GERVAIS LLP

Colm Boyle

CB/JV

E.L.K. Energy

Answer to Interrogatory from

OEB STAFF

Interrogatory Staff -1

Reference: (i) Manager's Summary, Section 3.3, Pg. 10
(ii) Rate Generator Model, Tab 3, Continuity Schedule

ELK Energy has indicated its request to defer disposition of all Group 1 Deferral and Variance Accounts (DVA) while an external audit of accounts remains in progress. ELK Energy has also indicated internal staffing constraints as a cause for the delayed disposition of accounts.

Question(s):

a) Please provide the status of the external audit. If the audit is still in progress, please provide the anticipated date of completion.
b) Please explain what measures ELK Energy has taken to address staffing constraints in order to ensure timely disposition of the DVA balances in the future.
c) Please confirm that ELK Energy intends to dispose of all Group 1 DVA accounts in the 2025 IRM rate application and that all required adjustments as a result of the audit will be implemented.

Response:

(a) The work is in progress and the audit is anticipated to be completed by April 2024.
(b) Two additional experienced internal resources were added in the summer of 2023 to address the staffing constraints. The first resource is a CPA with 20+ years of accounting experience, who has been assigned fully to the project since the 2023 Q2. The second resource is a CPA who recently retired as the CFO from another Ontario LDC and who has 20+ years of direct industry experience with reviewing variance accounts and filing applications with the OEB and joined the project 2023 Q3. The work is being overseen by Management Services Agreement (MSA) leaders with significant regulatory and accounting experience.
(c) E.L.K. Energy is not currently aware of what adjustments, if any, will be required as a result of the in-progress audit. E.L.K. Energy confirms that it is currently its

intention to implement all required adjustments, if any, and apply for the following relief in its 2025 IRM rate application:

- Accounts 1588 and 1589 for the years of 2016 to 2021 are intended to be disposed on a final basis.
- Excluding Accounts 1588 and 1589, all other Group 1 DVA balances for 2021 are intended to be disposed on a final basis.
- Excluding Accounts 1588 and 1589, all other Group 1 DVAs for the years of 2020 and earlier were previously disposed of on a final basis as part of prior rate applications.

E.L.K. Energy

Answer to Interrogatory from

OEB STAFF

Interrogatory Staff -2

Reference: (i) Manager's Summary, Appendix A - Z-factor Application, Table 2, Pg 10

ELK Energy has indicated that the total ice storm costs and subsequent restoration related costs include $226,863 in operating and $60,389 in capital costs. The table below was provided to display a summary of costs related to the ice storm event.

Category	Operating $	Capital $	Total $
E.L.K. Staff	$66,582		$66,582
Work Order for Reconnect	$10,461		$10,461
Electrical Contractor	$112,503		$112,503
Distributor A	$34,664		$34,664
Distributor B	$2,653		$2,653
Electrical Contractor		$49,063	$49,063
Material		$11,326	$11,326
Total	**$226,863**	**$60,389**	**$287,252**

Question(s):

a) Please explain the distinction between capitalized "Electrical Contractor" costs and operating "Electrical Contractor" costs in the table above.
   i) Please explain why some electrical contractor costs are being capitalized and some electrical contractor costs are expensed.
   ii) Please confirm that $49,063 electrical contractor costs are being capitalized in accordance with ELK Energy's capitalization policy.

b) Please discuss in detail whether the total capital amount of $60,389 includes costs in addition to poles repairment/replacement.

c) Please summarize the physical damage to ELK Energy's distribution infrastructure from the ice storm by filling out the table below (i.e.: poles, cross arms, etc.)

d) Please confirm that ELK Energy has written off damaged assets from its books and that their depreciation expense will no longer be recognized during the course of their useful life listed in 2022 Cost of Service application.
e) Please confirm that the Z-factor claim does not include repair/upgrade cost of the current assets that are not impacted by the ice storm.
f) Please confirm if there are changes expected to ELK Energy's future investment plans as a result of replacing damaged assets caused by the storm event. If yes, please explain the changes. If no, please explain why not.

Response:

a) (i) Please see response to Staff-04 part a) for additional information on why E.L.K. Energy is capitalizing labour costs such as the "Electrical Contractor" costs that relate to the February ice storm. As part of the February storm restoration efforts, there were specific Electrical Contractor costs that led to the placement of capitalized assets in-service. E.L.K. Energy followed its capitalization policy and capitalized these Electrical Contractor costs which contributed to the asset being placed in-service. Additionally, there were Electrical Contractor costs that did not directly lead to the placement of assets in-service and are therefore expensed. The work that these Electrical Contractor costs related to included re-stringing overhead wire, replacing fuses, clearing trees and branches, attaching secondary services, guying poles, and temporary pole guying

(ii) Confirmed

b) The $60,389 being capitalized is specific to the replacement of poles.
c) Please see table below:

Asset / Equipment	Quantity	Repaired/ Replaced	Estimated Net Asset Value (CA$)[1]	Useful Life
Poles	10	Replace	Avg. $1180	40 years
Fuses	20	Replace	Avg. $266	
Insulator	30	Replace	Avg. $120	

d) E.L.K. Energy can confirm that it will write-off damaged assets from both the February ice storm and July thunderstorm during its year-end financial closing process. E.L.K. Energy's business practice is to perform write-offs once as part of its year-end financial closing process.
e) Confirmed.
f) E.L.K. Energy can confirm that there are expected to be changes to future planned investments. Given poles have been replaced over two storms, across multiple communities, it is expected that other system renewal projects will now receive a

[1] Net Asset Value is the remaining undepreciated value of these assets

higher order of priority. The additional system renewal projects will be consistent with the distribution system inspections that have taken place in 2022 and 2023.

E.L.K. Energy

Answer to Interrogatory from

OEB STAFF

Interrogatory Staff -3

Reference: (ii) Manager's Summary, Appendix A - Z-factor Application, Table 5, Pg 12

ELK Energy has mentioned that the total thunderstorm costs and subsequent restoration related costs include $177,538 in operating and $34,574 in capital costs. The table below was provided to display a summary of costs related to the ice storm event.

Category	Operating $	Capital $	Total $
E.L.K. Staff	$38,487		$38,487
Work Order for Reconnect	$8,007		$8,007
Electrical Contractor	$67,520		$67,520
Distributor A OM&A	$4,772		$4,772
Distributor B OM&A	$23,486		$23,486
Vegetation Management Contractor	$12,968		$12,968
Excavation Contractor	$5,100		$5,100
Distributor C OM&A	$17,199		$4,182
Hydro Vac Capital		$4,182	$17,199
Distributor B Capital		$10,907	$10,907
Distributor C Capital		$6,231	$6,231
Material		$13,253	$13,253
Total	**$177,538**	**$34,574**	**$212,112**

Question(s):
a) The total cost for the Distributor C OM&A and Hydro Vac Capital categories does not reconcile. Please confirm if the total cost categories were incorrectly switched. Please update the evidence as applicable.

b) Please explain the capitalized costs for the Hydro Vac in the table above.

c) Please discuss in detail whether the total capital amount of $34,574 includes costs in addition to poles repairment/replacement.

d) Please summarize the physical damage to ELK Energy's distribution infrastructure from the thunderstorm by filling out the table below (i.e.: poles, cross arms, etc.):

e) Please confirm that ELK Energy has written off damaged assets from its books and that their depreciation expense will no longer be recognized during the course of their useful life listed in 2022 Cost of Service application.

f) Please confirm that the thunderstorm event claim does not include repair/upgrade cost of the current assets that are not impacted by the storm.

g) Please confirm if there are changes expected to ELK Energy's future investment plans as a result of replacing damaged assets caused by the thunderstorm event. If yes, please explain the changes. If no, please explain why not.

Response:

a) There was a transposition error between the "Distributor C OM&A" line and the "Hydro Vac Capital" line. This does not impact the overall chart totals. Please see the Revised Table 5 – Thunderstorm Costs below:

Category	Operating $	Capital $	Total $
E.L.K. Staff	$38,487		$38,487
Work Order for Reconnect	$8,007		$8,007
Electrical Contractor	$67,520		$67,520
Distributor A OM&A	$4,772		$4,772
Distributor B OM&A	$23,486		$23,486
Vegetation Management Contractor	$12,968		$12,968
Excavation Contractor	$5,100		$5,100
Distributor C OM&A	$17,199		$17,199
Hydro Vac Capital		$4,182	$4,182
Distributor B Capital		$10,907	$10,907
Distributor C Capital		$6,231	$6,231
Material		$13,253	$13,253
Total	**$177,538**	**$34,574**	**$212,112**

b) The capitalized cost for Hydro Vac is related to extraction of soil and other material required to safely create holes for the installation of replacement poles.

c) The total capital amount of $34,574 relates solely to E.L.K. Energy's replacement of poles.

d) Please see table below:

Asset/ Equipment	Quantity	Repaired/ Replaced	Estimated Net Asset Value (CA$)	Useful Life
Poles	6	Replaced	Avg. $1180	40 years
Cross Arm	1	Replaced	$598	40 years
Fuses	15	Replaced	$266	
Insulators	18	Replaced	$120	

e) Confirmed. For additional detail please see response to Staff-02 part d.

f) Confirmed

g) E.L.K. Energy confirms it expects changes to its future investment plans. For additional detail please see response to Staff-02 part f,

E.L.K. Energy

Answer to Interrogatory from

OEB STAFF

Interrogatory Staff -4

Reference: (i) Manager's Summary, Appendix A - Z-factor Application, Pg. 15

Question(s):
a) Please discuss ELK Energy's policy for capitalization of labour charges and how the capitalized labour cost is directly related to the restoration work.
b) Please indicate the cost categories and dollar amounts that have not been audited in relation to the restoration of power after both storms. Also, please indicate when these costs will be audited.

Response:

a) E.L.K. Energy's capitalization policy can be found in EB-2021-0016, Exhibit 2, Tab 5, Page 51 to 53. E.L.K. Energy capitalizes the cost of constructed assets, which includes contracted services, materials and transportation costs, direct labour, overhead costs, borrowing costs and any other costs directly attributable to bringing the asset to a working condition for its intended use.
b) The cost categories and dollar amounts related to E.L.K. Energy's Z-Factor claims have yet to be audited. The financial audit of E.L.K. Energy's 2023 financials will be completed in Q2 of 2024.

E.L.K. Energy

Answer to Interrogatory from

OEB STAFF

Interrogatory Staff -5

Reference: (i) Manager's Summary, Appendix A - Z Factor, Pg 14.

ELK Energy has mentioned that at the time of the Ice Storm Event, ELK Energy was not part of any third-party mutual assistance agreement with other utilities. However, neighboring utilities were able to send crews to assist with the restoration efforts.

Question(s):
a) Since both storm events, has ELK Energy entered into any mutual assistance agreements with third-party utilities to enhance its preparedness and collaborative response for future similar events?

Response:

Following the first Ice Storm Event in February 2023, E.L.K. Energy entered into a mutual assistance agreement with the Ontario Mutual Assistance Group (OnMAG) in May 2023. OnMAG assisted with mutual aid after the July 2023 Thunderstorm Event. The OnMAG assistance enhanced the July 2023 storm response.

E.L.K. Energy

Answer to Interrogatory from

OEB STAFF

Interrogatory Staff -6

Reference: (i) Manager's Summary, Appendix A-1 - Ice Storm and Thunderstorm Events Additional Information, Pg.8

ELK Energy has indicated that it has a 3-year inspection cycle in it's Distribution System Inspection and Maintenance Program (DSP). In addition, ELK Energy has identified the vegetation control program as an area for continuous improvement.

Question(s):
a) Please discuss in detail the budget reserved for vegetation management programs.

b) Please provide the 2022 budget and actual amounts for capital and O&M expenses related to vegetation management and system renewals. Discuss any budget versus actual variances.

c) Please explain how storm restoration or other emergency response/maintenance costs are normally considered in ELK Energy's budgeting process.

Response:

(a) E.L.K. Energy committed to annual expenditures of at least $80K on vegetation management in its 2022 Cost of Service Settlement Agreement[1] ("Settlement"). E.L.K. Energy has placed an emphasis on its vegetation management and implemented a plan where all the primary and secondary circuits (along with secondary service) are cleared of nearby vegetation. E.L.K. Energy's vegetation management consists of vegetation clearance of 1/3rd of the system every year. This equates to 2 out of 6 communities every year. E.L.K Energy's actual

[1] EB-2021-0016 Settlement Agreement Page 50 of 129

expenditure since 2022 have been greater than the amount committed to in its Settlement.

(b) E.LK. Energy's vegetation management has been recorded as operating expense. Please see the table below for the budget versus actual vegetation management expenditures:

Year	Budget	Actual
2022	$61,625	$260,269
2023	$200,000	$263,147

Note: The 2022 budget was set prior to E.L.K. Energy's OEB approved Settlement Agreement in EB-2021-0016 where in E.L.K. Energy committed to spend a minimum of $80K per year on vegetation management.

With respect to variances in each of the years 2022 and 2023 between actual and budget, for 2022, the initial budget was $61k and as noted above, E..L.K. Energy made a commitment to spend at least $80k in vegetation management as part of its Settlement. As part of its commitment, E.L.K. Energy conducted a thorough system inspection and clearing in 2022 of the vegetation for its primary and secondary circuits along with service wires for entire 1/3rd of the system. This approach resulted in substantively greater expenditures.

In 2023, E.L.K. Energy's overspending was a result of unplanned additional vegetation management in its Kingsville community. E.L.K Energy's vegetation management planning cycle identified Belle River and Comber as communities it would address in 2023. However, vegetation overgrowth was observed during backyard construction in Kingsville which was subsequently addressed in 2023 and resulted in the approximate $63K overspend.

(c) E.L.K. Energy's annual budgeting process does not set out segregated amounts for expenditures related to storm restoration or emergency response ("Storm Response") since these are unforeseen events that are outside the control of a distributor's ability to manage. The budgeting process sets out amounts for distribution service functions that cover both operating and capital programs and projects. ("Budget Line Items"). For storms and emergencies that are not Z-factor events, E.L.K. Energy allocates Storm Response costs to its Budget Line Items as they are incurred during the fiscal year.

E.L.K. Energy

Answer to Interrogatory from

OEB STAFF

Interrogatory Staff -7

Reference: (i) Manager's Summary, Appendix B - ICM Application, Section 8.3, Pg. 32 , (ii) 2024 IRM Rate Generator, Tab 19

In the Manager's Summary, ELK Energy has proposed Incremental Capital Module (ICM) rate riders effective May 1, 2024 to May 1, 2027. However, in the generator model, ELK Energy is proposing rate riders effective from 2024 to 2026.

Question(s):
a) Please confirm the correct effective dates of the rate riders.

Response:

The ICM rate rider effective dates provided in the IRM Rate Generator model filed October 11, 2023 were entered in error. The correct effective dates for the ICM rate riders are May 1, 2024 through April 30, 2027. E.L.K. proposes to file an updated ICM/ACM excel model that reflects the correct effective dates with its Draft Rate Order in this proceeding.

For clarity, the ICM rate riders are proposed to continue up to E.L.K. Energy's next rebasing application, in accordance with the OEB's policies with respect to ICM rate riders, and the effective date of E.L.K. Energy's next Cost of Service application is anticipated to be May 1, 2027. To the degree E.L.K. Energy were to rebase with a later effective date, the ICM rate riders would persist up to that date.

E.L.K. Energy

Answer to Interrogatory from

OEB STAFF

Interrogatory Staff -8

Reference: (ii) Report of the Board: New Policy Options for the Funding of Capital Investments: The Advanced Capital Module, Page 24, (iii) 2024 IRM Application, Appendix B - ICM Application, Page 31

According to Reference 1, the OEB provides policy related to the taxes/PILs section in the revenue requirement calculation. Section 7.1.4 states that "a distributor filing for ACM or ICM rate riders should apply the current tax rates for calculating the revenue requirement associated with the incremental funding."

ELK Energy states in Reference 2 that it has set the current tax rate in Tab 10 of the ICM Model to 0% to generate an incremental revenue requirement value that recovers Return on Rate Base and Amortization Expense without any positive or negative adjustment for PILs.

Question(s):
a) What is ELK Energy's actual effective tax rate in the most recent tax return filing?
b) Please recalculate the ICM model using the current actual effective tax rate as provided in the response to the previous question.
c) Please compare the recalculated incremental revenue requirement with the existing request.

Response:

a) E.L.K. Energy posted a significant tax loss of nearly $1 million for the year ended on December 31, 2022, and anticipates further tax losses in excess of $4 million from 2023 through 2026.

   It is in light of these tax losses (past, present and future) that E.L.K. Energy entered an effective tax rate of 0% in the OEB's ICM model to negate the impact of PILs on ICM funding. E.L.K. Energy notes that in a Cost of Service application the OEB's PILs model cannot generate PILs adjustments in rates that are below a value of $0, even where taxable income is below a value of $0. The reason for this appropriate treatment, is that negative taxable utility income will not generate a cost savings for

the utility within the Test Year. Rather, negative net income will accrue a tax loss carry-forward which, depending on the amount, will offset PILs in subsequent years.

Unlike the OEB's Cost of Service PILs model, the ICM model allows for negative taxable income to yield a negative PILs value; reducing ICM funding, even though E.L.K. Energy does not have any cash in-hand from the tax loss carry forward. In E.L.K. Energy's assessment, this divergence from the PILs model is based on the logic that utilities applying for ICM funding are incurring PILs costs. To the degree the CCA associated with ICM capital expenditures drives negative taxable income on the ICM revenue requirement, this negative income would reduce the utility's existing actual PILs costs, and the reduced cost should be reflected in a reduction to ICM funding.

As noted above, E.L.K. Energy does not incur PILs costs and is expected to continue to accrue tax losses through the foreseeable future. As such, there is no reduction to PILs costs brought about by the ICM projects; only an increase to the size of tax loss accrued. The result of implementing an effective tax rate of 26.5% in the ICM model would be to significantly reduce E.L.K. Energy's requested ICM funding without any commensurate reductions to actual costs incurred by E.L.K. Energy; implementing ICM rate riders which fail to recover the actual cost of depreciation, deemed interest and return on equity associated with the ICM projects.

All of the above represents a unique situation which, to E.L.K. Energy's knowledge, has not been encountered in any ICM application to date. It is E.L.K. Energy's understanding that the OEB's ICM/ACM policy may be evaluated in the near future, and the utility anticipates this issue may be considered within that context. In the meantime, E.L.K. Energy has requested one-off approval of the use of a 0% effective tax rate in the ICM model to address its unique circumstance, consistent with the OEB's PILs model in Cost of Service Applications when presented with similar circumstances.

b) Please find attached to this interrogatory response a version of the OEB's ICM/ACM model which incorporates a 26.5% corporate tax rate, as opposed to an entered tax rate of 0%. The effect of this change is to reduce incremental revenue requirement by 51%; from $138,591 to $71,193. Under this scenario, actual depreciation, deemed interest and return on equity associated with the ICM projects will continue to total $138,591 regardless of ICM funding approved, with no offsetting reduction to PILs costs as articulated in a) above. This would result in an unjust and unreasonable arbitrary reduction in ICM funding that would seriously undermine the financial viability of E.L.K. Energy, which as noted is already operating at a loss.

c) Please see b) above.

STAFF-08 b) Attachment 1

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	E.L.K. Energy Inc.
Assigned EB Number	EB-2023-0013 (STAFF-08 RESPONSE)
Name of Contact and Title	
Phone Number	
Email Address	
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 E.L.K. Energy Inc. is applying:	2
Next OEB Scheduled Rebasing Year	2027
E.L.K. Energy Inc. is applying for:	ICM Rate Rider Approval
Last Rebasing Year:	2022
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:

$$\frac{\text{Revenues Based on 2022 Board-Approved Distribution Demand}}{\text{Revenues Based on 2021 Actual Distribution Demand}}$$

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

E.L.K. Energy Inc.

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	UNMETERED SCATTERED LOAD
5	SENTINEL LIGHTING
6	STREET LIGHTING
7	EMBEDDED DISTRIBUTOR

Ontario Energy Board

Capital Module
Applicable to ACM and ICM

E.L.K. Energy Inc.

Input the billing determinants associated with E.L.K. Energy Inc.'s Revenues Based on 2022 Board-Approved Distribution Demand. Input the current approved distribution rates. Sheets 4 & 5 calculate the NUMERATOR portion of the growth factor calculation.

			2022 Board-Approved 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	11,107	104,794,356		18.83		
GENERAL SERVICE LESS THAN 50 kW	$/kWh	1,201	27,600,721		18.43	0.0063	
GENERAL SERVICE 50 TO 4,999 KW	$/kW	102	59,877,627	220,809	186.47		1.6691
UNMETERED SCATTERED LOAD	$/kWh	31	248,173		7.49	0.0021	
SENTINEL LIGHTING	$/kW	17	137,713	360	3.52		6.6141
STREET LIGHTING	$/kW	3,127	1,279,183	3,620	1.21		11.7807
EMBEDDED DISTRIBUTOR	$/kW	6	50,859,469	122,199	1474.78		

Ontario Energy Board

Capital Module
Applicable to ACM and ICM

E.L.K. Energy Inc.

Calculation of pro forma 2022 Revenues. No input required.

		2022 Board-Approved 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		11,107	104,794,356		18.83	0.0000	0.0000	2,509,738	0	0	2,509,738	100.0%	0.0%	0.0%	67.0%
GENERAL SERVICE LESS THAN 50 kW		1,201	27,600,721		18.43	0.0063	0.0000	265,613	173,885	0	439,498	60.4%	39.6%	0.0%	11.7%
GENERAL SERVICE 50 TO 4,999 KW		102	59,877,627	220,809	186.47	0.0000	1.6691	228,239	0	368,552	596,792	38.2%	0.0%	61.8%	15.9%
UNMETERED SCATTERED LOAD		31	248,173		7.49	0.0021	0.0000	2,786	521	0	3,307	84.2%	15.8%	0.0%	0.1%
SENTINEL LIGHTING		17	137,713	360	3.52	0.0000	6.6141	718	0	2,381	3,099	23.2%	0.0%	76.8%	0.1%
STREET LIGHTING		3,127	1,279,183	3,620	1.21	0.0000	11.7807	45,404	0	42,646	88,050	51.6%	0.0%	48.4%	2.4%
EMBEDDED DISTRIBUTOR		6	50,859,469	122,199	1,474.78	0.0000	0.0000	106,184	0	0	106,184	100.0%	0.0%	0.0%	2.8%
Total		**15,591**	**244,797,242**	**346,988**				**3,158,683**	**174,406**	**413,580**	**3,746,668**				**100.0%**

Ontario Energy Board

Capital Module
Applicable to ACM and ICM

E.L.K. Energy Inc.

Applicants Rate Base

Last COS Rebasing: 2022

Average Net Fixed Assets

Gross Fixed Assets - Re-based Opening	$ 28,165,993	A			
Add: CWIP Re-based Opening		B			
Re-based Capital Additions	$ 611,109	C			
Re-based Capital Disposals		D			
Re-based Capital Retirements		E			
Deduct: CWIP Re-based Closing		F			
Gross Fixed Assets - Re-based Closing	$ 28,777,102	G			
Average Gross Fixed Assets			$	28,471,548	H = (A + G) / 2
Accumulated Depreciation - Re-based Opening	$ 16,982,005	I			
Re-based Depreciation Expense	$ 325,859	J			
Re-based Disposals		K			
Re-based Retirements		L			
Accumulated Depreciation - Re-based Closing	$ 17,307,864	M			
Average Accumulated Depreciation			$	17,144,935	N = (I + M) / 2
Average Net Fixed Assets			**$**	**11,326,613**	O = H - N

Working Capital Allowance

Working Capital Allowance Base	$ 30,756,995	P			
Working Capital Allowance Rate	7.5%	Q			
Working Capital Allowance			**$**	**2,306,775**	R = P * Q
Rate Base			**$**	**13,633,388**	S = O + R

Return on Rate Base

Deemed ShortTerm Debt %	4.00%	T	$	545,336	W = S * T
Deemed Long Term Debt %	56.00%	U	$	7,634,697	X = S * U
Deemed Equity %	40.00%	V	$	5,453,355	Y = S * V
Short Term Interest	1.17%	Z	$	6,380	AC = W * Z
Long Term Interest	2.76%	AA	$	210,718	AD = X * AA
Return on Equity	8.66%	AB	$	472,261	AE = Y * AB
Return on Rate Base			**$**	**689,359**	AF = AC + AD + AE

Distribution Expenses

OM&A Expenses	$ 3,288,539	AG			
Amortization	$ 255,733	AH			
Ontario Capital Tax		AI			
Grossed Up Taxes/PILs	$ -	AJ			
Low Voltage		AK			
Transformer Allowance		AL			
Property Tax	$ 20,000	AM			
		AN			
		AO			
			$	**3,564,272**	AP = SUM (AG : AO)

Revenue Offsets

Specific Service Charges	-$ 172,365	AQ			
Late Payment Charges	-$ 100,165	AR			
Other Distribution Income	-$ 50,933	AS			
Other Income and Deductions	-$ 335,131	AT	**-$**	**658,594**	AU = SUM (AQ : AT)
Revenue Requirement from Distribution Rates			**$**	**3,595,037**	AV = AF + AP + AU

Rate Classes Revenue

Rate Classes Revenue - Total (Sheet 4)			$	3,746,668	AW

Ontario Energy Board

Capital Module
Applicable to ACM and ICM

E.L.K. Energy Inc.

Input the billing determinants associated with E.L.K. Energy Inc.'s Revenues Based on 2021 Actual Distribution Demand. This sheet calculates the DENOMINATOR portion of the growth factor calculation.
Pro forma Revenue Calculation.

		2021 Actual 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		10,917	106,359,838		18.83	0.0000	0.0000	2,466,805	0	0	2,466,805	66.4%	0.0%	0.0%	66.4%
GENERAL SERVICE LESS THAN 50 kW		1,202	27,377,213		18.43	0.0063	0.0000	265,834	172,476	0	438,311	7.2%	4.6%	0.0%	11.8%
GENERAL SERVICE 50 TO 4,999 KW		101	56,544,701	231,007	186.47	0.0000	1.6691	226,002	0	385,574	611,575	6.1%	0.0%	10.4%	16.5%
UNMETERED SCATTERED LOAD		31	248,173		7.49	0.0021	0.0000	2,786	521	0	3,307	0.1%	0.0%	0.0%	0.1%
SENTINEL LIGHTING		17	137,713	357	3.52	0.0000	6.6141	718	0	2,361	3,079	0.0%	0.0%	0.1%	0.1%
STREET LIGHTING		3,092	1,265,084	3,399	1.21	0.0000	11.7807	44,896	0	40,043	84,938	1.2%	0.0%	1.1%	2.3%
EMBEDDED DISTRIBUTOR		6	50,859,469	115,598	1,474.78	0.0000	0.0000	106,184	0	0	106,184	2.9%	0.0%	0.0%	2.9%
Total		**15,366**	**242,792,191**	**350,361**				**3,113,226**	**172,998**	**427,978**	**3,714,201**				**100.0%**

Ontario Energy Board

Capital Module
Applicable to ACM and ICM

E.L.K. Energy Inc.

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 Board-Approved 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		18.83	0	0	11,107	104,794,356	0	2,509,738	0	0	2,509,738	66.99%	0.00%	0.00%	67.0%
GENERAL SERVICE LESS THAN 50 kW		18.43	0.0063	0	1,201	27,600,721	0	265,613	173,885	0	439,498	7.09%	4.64%	0.00%	11.7%
GENERAL SERVICE 50 TO 4,999 KW		186.47	0	1.6691	102	59,877,627	220,809	228,239	0	368,552	596,792	6.09%	0.00%	9.84%	15.9%
UNMETERED SCATTERED LOAD		7.49	0.0021	0	31	248,173	0	2,786	521	0	3,307	0.07%	0.01%	0.00%	0.1%
SENTINEL LIGHTING		3.52	0	6.6141	17	137,713	360	718	0	2,381	3,099	0.02%	0.00%	0.06%	0.1%
STREET LIGHTING		1.21	0	11.7807	3,127	1,279,183	3,620	45,404	0	42,646	88,050	1.21%	0.00%	1.14%	2.4%
EMBEDDED DISTRIBUTOR		1474.78	0	0	6	50,859,469	122,199	106,184	0	0	106,184	2.83%	0.00%	0.00%	2.8%
Total								**3,158,683**	**174,406**	**413,580**	**3,746,668**				**100.0%**

Ontario Energy Board

Capital Module
Applicable to ACM and ICM

E.L.K. Energy Inc.

No Input Required.

Final Materiality 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		**2022**	
Price Cap IR Year in which Application is made		**2**	n
Price Cap Index		**4.50%**	PCI
Growth Factor Calculation			
Revenues Based on 2022 Board-Approved Distribution Demand		**$3,746,668**	
Revenues Based on 2021 Actual Distribution Demand		**$3,714,201**	
Growth Factor		**0.87%**	$g\ (Note\ 1)$
Dead Band		**10%**	
Average Net Fixed Assets			
Gross Fixed Assets Opening	$	28,165,993	
Add: CWIP Opening	$	-	
Capital Additions	$	611,109	
Capital Disposals	$	-	
Capital Retirements	$	-	
Deduct: CWIP Closing	$	-	
Gross Fixed Assets - Closing	$	28,777,102	
Average Gross Fixed Assets	$	28,471,548	
Accumulated Depreciation - Opening	$	16,982,005	
Depreciation Expense	$	325,859	
Disposals	$	-	
Retirements	$	-	
Accumulated Depreciation - Closing	$	17,307,864	
Average Accumulated Depreciation	$	17,144,935	
Average Net Fixed Assets	$	11,326,613	
Working Capital Allowance			
Working Capital Allowance Base	$	30,756,995	
Working Capital Allowance Rate		8%	
Working Capital Allowance	$	2,306,775	
Rate Base	**$**	**13,633,388**	RB
Depreciation	**$**	**325,859**	d

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

Price Cap IR Year 2023	**336%**
Price Cap IR Year 2024	**349%**
Price Cap IR Year 2025	**362%**
Price Cap IR Year 2026	**375%**
Price Cap IR Year 2027	**390%**
Price Cap IR Year 2028	**405%**
Price Cap IR Year 2029	**421%**
Price Cap IR Year 2030	**438%**
Price Cap IR Year 2031	**455%**
Price Cap IR Year 2032	**474%**

Threshold CAPEX		$Threshold\ Value \times d$
Price Cap IR Year 2023	**$ 1,096,484**	
Price Cap IR Year 2024	**$ 1,136,438**	
Price Cap IR Year 2025	**$ 1,178,554**	
Price Cap IR Year 2026	**$ 1,222,950**	
Price Cap IR Year 2027	**$ 1,269,750**	
Price Cap IR Year 2028	**$ 1,319,083**	
Price Cap IR Year 2029	**$ 1,371,087**	
Price Cap IR Year 2030	**$ 1,425,906**	
Price Cap IR Year 2031	**$ 1,483,693**	
Price Cap IR Year 2032	**$ 1,544,608**	

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

E.L.K. Energy Inc.

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

	Cost of Service Test Year 2022	*Price Cap IR* Year 1 2023	*Price Cap IR* Year 2 2024
CAPEX[1]	$ 809,166	$ 1,809,350	$ 3,008,522
Materiality Threshold		$ 1,096,484	$ 1,136,438
Maximum Eligible Incremental Capital (Forecasted Capex less Threshold)		$ 712,866	$ 1,872,084

		Test Year 2022	Year 1 2023			Year 2 2024		
Project Descriptions:	**Type**		**Proposed ACM/ICM**	**Amortization Expense**	**CCA**	**Proposed ACM/ICM**	**Amortization Expense**	**CCA**
300-42' Bucket Truck (CCA 10)	**New ICM**					$ 406,191	$ 27,079	$ 121,857
400-46 Bucket Truck (CCA 10)	**New ICM**					$ 478,716	$ 31,914	$ 143,615
6x Reclosing Switches (CCA 47)	**New ICM**					$ 485,024	$ 12,126	$ 38,802
Total Cost of ACM/ICM Projects			$ -	$ -	$ -	$ 1,369,931	$ 71,119	$ 304,274
Maximum Allowed Incremental Capital			$ -			$ 1,369,931		

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

E.L.K. Energy Inc.

Incremental Capital Adjustment **Rate Year:** 2024

Current Revenue Requirement

Current Revenue Requirement - Total	$ 3,595,037	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	$ 1,369,931	$ 1,369,931	B
Depreciation Expense	$ 71,119	$ 71,119	C
CCA	$ 304,274	$ 304,274	V

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

Return on Rate Base

Incremental Capital			$ 1,369,931	B
Depreciation Expense (prorated to Eligible Incremental Capital)			$ 71,119	C
Incremental Capital to be included in Rate Base (average NBV in year)			$ 1,334,371	D = B - C/2
	% of capital structure			
Deemed Short-Term Debt	4.0%	E	$ 53,375	G = D * E
Deemed Long-Term Debt	56.0%	F	$ 747,248	H = D * F
	Rate (%)			
Short-Term Interest	1.17%	I	$ 624	K = G * I
Long-Term Interest	2.76%	J	$ 20,624	L = H * J
Return on Rate Base - Interest			$ 21,249	M = K + L
	% of capital structure			
Deemed Equity %	40.00%	N	$ 533,748	P = D * N
	Rate (%)			
Return on Rate Base -Equity	8.66%	O	$ 46,223	Q = P * O
Return on Rate Base - Total			$ 67,471	R = M + Q

Amortization Expense

Amortization Expense - Incremental		C	$ 71,119	S

Grossed up Taxes/PILs

Regulatory Taxable Income		O	$ 46,223	T
Add Back Amortization Expense (Prorated to Eligible Incremental Capital)		S	$ 71,119	U
Deduct CCA (Prorated to Eligible Incremental Capital)			$ 304,274	V
Incremental Taxable Income			-$ 186,932	W = T + U - V
Current Tax Rate	26.5%	X		
Taxes/PILs Before Gross Up			-$ 49,537	Y = W * X
Grossed-Up Taxes/PILs			-$ 67,397	Z = Y / (1 - X)

Incremental Revenue Requirement

Return on Rate Base - Total		Q	$ 67,471	AA
Amortization Expense - Total		S	$ 71,119	AB
Grossed-Up Taxes/PILs		Z	-$ 67,397	AC
Incremental Revenue Requirement			$ 71,193	AD = AA + AB + AC

Ontario Energy Board

Capital Module
Applicable to ACM and ICM

E.L.K. Energy Inc.

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	66.99%	0.00%	0.00%	47,689	0	0	47,689	11,107	104,794,356		0.36	0.0000	0.0000	*Note: As per the OEB's letter issued July 16, 2015 (EB-2012-0410), Residential Rates will be applied on a fixed basis only.*
GENERAL SERVICE LESS THAN 50 kW	7.09%	4.64%	0.00%	5,047	3,304	0	8,351	1,201	27,600,721		0.35	0.0001	0.0000	
GENERAL SERVICE 50 TO 4,999 KW	6.09%	0.00%	9.84%	4,337	0	7,003	11,340	102	59,877,627	220,809	3.54	0.0000	0.0317	
UNMETERED SCATTERED LOAD	0.07%	0.01%	0.00%	53	10	0	63	31	248,173		0.14	0.0000	0.0000	
SENTINEL LIGHTING	0.02%	0.00%	0.06%	14	0	45	59	17	137,713	360	0.07	0.0000	0.1257	
STREET LIGHTING	1.21%	0.00%	1.14%	863	0	810	1,673	3,127	1,279,183	3,620	0.02	0.0000	0.2239	
EMBEDDED DISTRIBUTOR	2.83%	0.00%	0.00%	2,018	0	0	2,018	6	50,859,469	122,199	28.02	0.0000	0.0000	
Total	**84.31%**	**4.65%**	**11.04%**	**60,021**	**3,314**	**7,859**	**71,193**	**15,591**	**244,797,242**	**346,988**				
							71,193							
							From Sheet 11, E93							

E.L.K. Energy

Answer to Interrogatory from

OEB STAFF

Interrogatory Staff -9

Reference: (i) Manager's Summary, Appendix B - ICM Application, Pg 19.

ELK Energy has requested ICM funding for the purchase of six recloser switches and two fleet vehicles. The fleet vehicles were first proposed in ELK Energy's 2022 Cost of Service application. The request was withdrawn over the course of the proceeding due to supply chain related issues.

Question(s):
a) Please confirm if there are any anticipated delays in the delivery of the recloser switches and fleet vehicles that would prevent an in-service date of early 2024. If so, please provide the updated in-service dates.

Response:

a) In the Application at Appendix B, page 7, paragraph 16, E.L.K. Energy noted that the switches and two bucket trucks are expected to be in-service in 2024. Please see response to VECC-8 for information on the expected delivery dates. Based on these delivery dates, E.L.K. Energy continues to expect that the switches and two bucket trucks will be in-service in 2024.

E.L.K. Energy

Answer to Interrogatory from

OEB STAFF

Interrogatory Staff -10

Reference: (i) Manager's Summary, Appendix B-ICM Application, Pg. 19

ELK Energy has requested a total of six recloser switches for use in two of the six communities it serves. At present, the switches are proposed for installation in the communities of Harrow and Essex. ELK Energy states that this decision is based on two primary considerations. Firstly, installing three or more switches is deemed a system, yielding greater benefits in mitigating the loss of supply. Secondly, the deployment of switches necessitates an area with dual supply points, of which Harrow and Essex have. ELK Energy also states that the four other communities do not currently have the system configuration required for the installation of the switches.

Question(s):
a) Please explain how ELK Energy plans to address the supply configuration requirements in the remaining four communities.

Response:

a) In Ontario, regional system planning meetings between local distributors, transmitters and the IESO are used to ensure reliable supply within Ontario's electricity planning regions. Regional planning is a continual process, with electricity reliability evaluated at minimum every five years in each region. As a distributor and participant in the Windsor-Essex regional planning process, E.L.K. Energy plans to raise reliability and delivery performance issues in its service area.

   For the time being, E.L.K. Energy has begun preliminary discussions with the host distributor, Hydro One Networks, in order to assess the feasibility of adding dual supply points in the four remaining communities of Belle River, Kingsville, Cottam and Comber. Dual supply points are necessary to achieve a 3-switch automated load restoration scheme similar to what is being done in Essex and Harrow. E.L.K. Energy anticipates it will perform engineering studies and develop a system plan in coordination with Hydro One Networks to determine the priority, timing and

costing for the additional supply points and automation equipment. Following this analysis, E.L.K. Energy may then develop one or more project scope(s) that may be the subject of a future ICM application(s) for the four remaining communities to prudently fund the required investments.

E.L.K. Energy

Answer to Interrogatory from

OEB STAFF

Interrogatory Staff -11

Reference: (ii) Manager's Summary, Appendix B-ICM Application, Pg. 12

ELK Energy has entered into a Management Services Agreement with Chatham-based Entegrus Powerlines Inc. (Entegrus) in 2023 to provide management services for ELK Energy's operations. With the assistance of Entegrus, ELK Energy developed a Grid Modernization Roadmap which sets out a plan to improve service quality and reliability.

Question(s):
a) Please explain what steps ELK Energy has taken thus far in implementing the Grid Modernization Roadmap.

Response:

a) E.L.K. Energy has completed the following projects outlined in its Grid Modernization Roadmap:
    a. Installed the SCADA system, which provides monitoring capabilities at the host distributor (Hydro One Networks) breakers within the E.L.K. Energy service territory and will also provide monitoring at the Primary Metering Equipment ("PME").
    b. Commenced GIS implementation, which is currently at Stage 2 (data migration).
    c. Installed Smart Fault Indicators in both 2022 and 2023.
    d. Recloser switches are on order and expected to be received in first quarter of 2024.

E.L.K. Energy

Answer to Interrogatory from

Vulnerable Energy Consumers Coalition

Interrogatory VECC-1

Ref: Appendix A
E.L.K. experienced two extraordinary storms in 2023 that resulted in significant damage to its infrastructure and substantive storm restoration costs.

Question:
a) Please provide a summary of E.L.K.'s previous Z-factor applications for storm events in the past 10 years and provide the amounts requested and approved by the OEB.

b) Please provide E.L.K's forecast compared to actual storm costs (operating and capital) for the years 2018 to 2023.

c) Please provide the amount of storm restoration spending embedded in rates for the years 2018 to 2024.

d) Please provide E.L.K's forecast compared to actual vegetation management costs operating and capital) for the years 2018 to 2023.

Response:

a) E.L.K. Energy has not filed for a Z Factor Application in the last 10 years.
b) E.L.K. Energy does not have forecasted and actual storm costs for the years 2018 to 2022 in segregated accounts. Prior to 2022, E.L.K. Energy did not budget or track storm costs in segregated accounts. Storm costs during this period were allocated into appropriate maintenance accounts. See Staff-06 for additional details on how E.L.K Energy now budgets for and records actual costs related to storm response.
c) See response to part b above.
d) Please see the table below for 2018-2023 actual vs. budget tree trimming. Please see also the response to Staff-06.

Year	Budget	Actual	Variance
2018	$72,000	$60,000	($12,000)
2019	$71,000	$42,614	($28.386)
2020	$59,910	$64,737	$9,827
2021	$77,197	$123,802	$46,605
2022	$61,625	$260,269	$198,644
2023	$200,000	$263,147	$63,147
Average Variance (annualized)			**$51,032**

Please see response to VECC-06 part a for a more detailed explanation of E.L.K. Energy's vegetation management process for the years 2018 to 2021 and differences implemented from 2022 onward.

The variances between actuals and budget for years 2018 to 2021 are a result of a variance in the number of customer complaints and operational inspection related vegetation expenditures.

The variance in 2022 is a result of E.L.K. Energy implementing a robust vegetation management process as an outcome of its Settlement Agreement in EB-2021-0016. Additional detail is provided in the response to Staff-06 part b)

The variance in 2023 which an approximate overspend of $63K was a result of unplanned additional vegetation management in its Kingsville community. Additional detail is provided in the response to Staff-06 part b)

E.L.K. Energy

Answer to Interrogatory from

Vulnerable Energy Consumers Coalition

Interrogatory VECC-2

Ref: Appendix A p. 7 The achieved regulatory ROE for 2022 was -1.97%, which is 10.63% lower than the 8.66% OEB-approved ROE. E.L.K.'s forecast for its regulated 2023 ROE at this time is also expected to be below the OEB Deemed ROE.

Question:
Please provide the latest forecast of ROE for 2023.

Response:

E.L.K. Energy's 2023 audit is not expected to be complete until Q2 of 2024, and as such 2023 ROE is not known at this time. Based on the best information available to E.L.K. Energy, 2023 ROE is expected to be less than OEB-approved deemed ROE of 8.66%.

E.L.K. Energy

Answer to Interrogatory from

Vulnerable Energy Consumers Coalition

Interrogatory VECC-3

Ref: Appendix A p. 8 With respect to Emergency Notification, E.L.K. indicates an emergency notification is issued once a call is received from the customer and the contingency is assessed by the Emergency Coordinator (EPC).

Question:
a) Please provide a copy of E.L.K.'s Emergency Response Plan.

b) Please confirm full activation of the plan was required and E.L.K. did not deviate from the plan.

Response:

a) The E.L.K. Energy Emergency Response Plan ("ERP") is being provided under the OEB's Confidentiality provisions.
b) The ERP was fully activated in both cases. The exception to the ERP was that some critical customers were not attended in the order prescribed in the ERP. This was driven by the location of power supply restorations by the host distributor, Hydro One Networks. E.L.K. Energy focused its own restoration efforts on affected primary circuits as they were cleared and become available from Hydro One Networks.

E.L.K. Energy

Answer to Interrogatory from

Vulnerable Energy Consumers Coalition

Interrogatory VECC-4

Ref: Appendix A p. 10 Table 2 provides a breakdown of Ice Storm Event Costs in February 2023.

Question:
a) Please confirm the operating costs for E.L.K. staff does not include Regular Labour.

b) Please provide further details on the work order for reconnect cost.

c) Please provide a breakdown of the major assets replaced.

d) Please identify the assets replaced that were scheduled for replacement as part of the capital plan.

e) Please provide the invoices for the electrical contracting work, operating and capital.

f) Please provide the invoices for Distributor A and Distributor B.

Response:

a) Confirmed.
b) The work order for reconnect cost is associated with E.L.K. Energy's reconnection of customers who had a damaged stack or meter base. An outcome of the ice storm was some customers requiring an electrical contractor performing repairs on stacks and meter bases. A work order for reconnect was issued post the occurrence of these repairs by electrical contractors, with E.L.K. Energy staff then performing the reconnection of each customer's service.
c) Please see response to Staff – 02 part c.
d) There were 3 poles that were identified in the pole inspections. These poles were damaged during the February Ice Storm and were replaced during storm restoration
e) Please see Appendix A below.
f) Please see Appendix B below.

Appendix A: Invoices for the electrical contracting work, operating and capital

a) Electrical Contractor Invoices – Capital

QUANTITY	MATERIAL	PRICE	AMOUNT	DESCRIPTION OF WORK
2	35ft treated pole CL5		$ 1,645.30	First trip: WPL Supplied 2 poles. Hydrovac 2 locations. Backyards for pole replacements. Set poles and backfill. 133 Munger 184 Sinisac
	Material		$ 1,645.30	

Business# [redacted]

THANK YOU

OTHER CHARGES	AMOUNT
Excavator 8hr @ 100.00/hr	$ 800.00
RBD Truck 4hr @ 100.00/hr	$ 400.00
Wash Truck 8hr @ 100.00/hr	$ 800.00
TOTAL OTHER	$ 2,000.00

LABOUR	HOURS	RATE	AMOUNT
Charron	8	$ 110.00	$ 880.00
Dibbley	8	$ 100.00	$ 800.00
Hanifan	8	$ 100.00	$ 800.00
DeBroe	8	$ 110.00	$ 880.00

Labour	$ 3,360.00
TOTAL OTHER	$ 2,000.00
Material	$ 1,645.30
SUBTOTAL	$ 7,005.30
HST	$ 910.69
TOTAL	$ 7,915.99

QUANTITY	MATERIAL	PRICE	AMOUNT	DESCRIPTION OF WORK
				303 Kilrae Belle River ON Pole supplied by ELK Attend address and wash hole with vac. Attend with RBD & bucket. Replace and transfer single points & wire.

OTHER CHARGES	AMOUNT
RBD, Bucket & Vac Truck 12hr @ 100.00/hr	$ 1,200.00
TOTAL OTHER	$ 1,200.00

LABOUR	HOURS	RATE	AMOUNT
Dibbley	4	$ 100.00	$ 400.00
Simes	4	$ 100.00	$ 400.00
Dunmore	4	$ 110.00	$ 440.00
Speal Jr	4	$ 100.00	$ 400.00
Montour	4	$ 110.00	$ 440.00

Material	Labour	$ 2,080.00
	TOTAL OTHER	$ 1,200.00
	Material	$ -
Business# [redacted]	SUBTOTAL	$ 3,280.00
	HST	$ 426.40
THANK YOU	TOTAL	$ 3,706.40

QUANTITY	MATERIAL	PRICE	AMOUNT	DESCRIPTION OF WORK
				Centre & Queen St., Harrow ON Pole supplied by ELK Attend and wash hole with vac truck. RBD and bucket trucks set and transfer attachments and wire.

OTHER CHARGES	AMOUNT
RBD, Bucket & Vac Truck 12hr @ 100.00/hr	$ 1,200.00
TOTAL OTHER	$ 1,200.00

LABOUR	HOURS	RATE	AMOUNT
Dibbley	4	$ 100.00	$ 400.00
DeBroe	4	$ 100.00	$ 400.00
Dunmore	4	$ 110.00	$ 440.00
Mallen	4	$ 100.00	$ 400.00
Speal Sr	4	$ 110.00	$ 440.00

Labour	$	2,080.00
TOTAL OTHER	$	1,200.00
Material	$	-
SUBTOTAL	$	3,280.00
HST	$	426.40
TOTAL	$	3,706.40

Material

Business# [redacted]

THANK YOU

QUANTITY	MATERIAL	PRICE	AMOUNT	DESCRIPTION OF WORK
				6336 Main Street, Comber Pole supplied by ELK Attend address and wash hole with vac. Attend with RBD & bucket. Install service pole and hardware Transfer wire to new pole

OTHER CHARGES	AMOUNT
RBD, Bucket & Vac Truck 12hr @ 100.00/hr	$ 1,200.00
TOTAL OTHER	$ 1,200.00

LABOUR	HOURS	RATE	AMOUNT
Dibbley	4	$ 100.00	$ 400.00
Simes	4	$ 100.00	$ 400.00
Dunmore	4	$ 110.00	$ 440.00
Speal Jr	4	$ 100.00	$ 400.00
Montour	4	$ 110.00	$ 440.00

Labour	$	2,080.00
TOTAL OTHER	$	1,200.00
Material	$	-
SUBTOTAL	$	3,280.00
HST	$	426.40
TOTAL	$	3,706.40

Material

Business# [redacted]

THANK YOU

NOTE: 50% of this invoice is capital

QUANTITY	MATERIAL	PRICE	AMOUNT	DESCRIPTION OF WORK
				115 Westlawn Essex Pull pole. Remove cut out at new tx pole. Hang tx. Put tx in parallel Remove existing tx from parallel
	Material		$ -	

Business# [redacted]

THANK YOU

OTHER CHARGES	AMOUNT
1 Bucket truck 8hr @ 100.00/hr	$ 800.00
1 RBD Truck 8hr @ 100.00/hr	$ 800.00
TOTAL OTHER	$ 1,600.00

LABOUR	HOURS	RATE	AMOUNT
Dunmore	8	$ 110.00	$ 880.00
Montour	8	$ 110.00	$ 880.00
Hills	8	$ 110.00	$ 880.00
Pittman	8	$ 100.00	$ 800.00
Speal Jr	8	$ 100.00	$ 800.00

Labour	$ 4,240.00
TOTAL OTHER	$ 1,600.00
Material	$ -
SUBTOTAL	$ 5,840.00
HST	$ 759.20
TOTAL	$ 6,599.20

QUANTITY	MATERIAL	PRICE	AMOUNT
300m	4/3c triplex		$ 1,131.00
4	bust anchors		$ 1,200.00
37	amp fittings		$ 1,262.86
3	pole brackets		$ 89.13
3	KL28 SK		$ 504.00
4	res lines 28 kv		$ 392.00
8	hot line clamps		$ 150.00
	Guy steel 3/8" & insulrods		$ 747.25
	strain insulators		
	Misc Hardware:		
25	WR-9		
25	5/8x12" galvanized ball		
50	2x2 SFW		
25	200amp R&S		
10	johnny balls		
21	#4 service Cat		
6	Combo grey filling w/cleats		
6	gauge fillingw/spans		
	Lot price for above		$ 1,541.41
	Material		$ 7,017.65

Business# [redacted]

THANK YOU

DESCRIPTION OF WORK

Material - Ice Storm

OTHER CHARGES	AMOUNT
TOTAL OTHER	$ -

LABOUR	HOURS	RATE	AMOUNT

Material	$ 7,017.65
TOTAL OTHER	$ -
Labour	$ -
SUBTOTAL	$ 7,017.65
HST	$ 912.29
TOTAL	$ 7,929.94

QUANTITY	MATERIAL	PRICE	AMOUNT
	PO# 22-138-UN		
	Pole Replacement Project		
	Material purchased BY WPL		
20	secondary rack 4wire		$ 2,792.00
80	spool insulator		$ 160.00
10	long sleeve barrel		$ 176.03
15m	RW90 black 1/0		$ 188.75
15m	RW 90 black 2 CU		$ 139.50
17	tape vinyl		$ 210.25
2	2x30 rubber splice tape		$ 62.45
2	2x30 rubber splice tape		$ 124.92
20	1/0 crimp sleeve long barrel		$ 319.00
		Material	$ 4,172.90

Business# [redacted]

THANK YOU

DESCRIPTION OF WORK			
OTHER CHARGES			**AMOUNT**
		TOTAL OTHER	$ -
LABOUR	**HOURS**	**RATE**	**AMOUNT**

Material	$	4,172.90
TOTAL OTHER	$	-
Labour	$	-
SUBTOTAL	$	4,172.90
HST	$	542.48
TOTAL	$	4,715.38

QUANTITY	MATERIAL	PRICE	AMOUNT	DESCRIPTION OF WORK
				Set backyard pole on Westlawn. Frame new TX pole Swing secondary over. 115 Westlawn Essex
	Material		$ -	

Business# [redacted]

THANK YOU

OTHER CHARGES	AMOUNT
2 Bucket Truck 8hr @ 100.00/hr each	$ 1,600.00
TOTAL OTHER	$ 1,600.00

LABOUR	HOURS	RATE	AMOUNT
Dunmore	8	$ 110.00	$ 880.00
Montour	8	$ 110.00	$ 880.00
Simes	8	$ 100.00	$ 800.00
Pittman	8	$ 100.00	$ 800.00
Speal Jr	8	$ 100.00	$ 800.00

Labour	$ 4,160.00
TOTAL OTHER	$ 1,600.00
Material	$ -
SUBTOTAL	$ 5,760.00
HST	$ 748.80
TOTAL	$ 6,508.80

QUANTITY	MATERIAL	PRICE	AMOUNT	DESCRIPTION OF WORK
1	35ft treated pole		$ 822.65	WPL Supplied pole. 29 Victoria, Harrow, ON Secondary pole replacement Frame and resag Quad wre as well as triplex on 2 additional poles. No outage for commercial customers.
		Material	$ 822.65	

Business# [redacted]

THANK YOU

OTHER CHARGES	AMOUNT
Bucket Truck 4hr @ 100.00/hr	$ 400.00
RBD Truck 4hr @ 100.00/hr	$ 400.00
Wash Truck 4hr @ 100.00/hr	$ 400.00
TOTAL OTHER	$ 1,200.00

LABOUR	HOURS	RATE	AMOUNT
Dunmore	8	$ 110.00	$ 880.00
Montour	8	$ 110.00	$ 880.00
Simes	8	$ 100.00	$ 800.00
Speal Jr	8	$ 100.00	$ 800.00
Dibbley	8	$ 100.00	$ 800.00
Carter	8	$ 65.00	$ 520.00

Labour	$ 4,680.00
TOTAL OTHER	$ 1,200.00
Material	$ 822.65
SUBTOTAL	$ 6,702.65
HST	$ 871.34
TOTAL	$ 7,573.99

b) <u>Electrical Contractor Invoices – Operating</u>

QUANTITY	MATERIAL	PRICE	AMOUNT	DESCRIPTION OF WORK
				ELK Supplied Pole Corner of Church & Centre St. Harrow ON Set & transfer span, repair neutral
	Material		$ -	

OTHER CHARGES			AMOUNT
Bucket Truck 4hr @ 100.00/hr			$ 400.00
RBD Truck 4hr @ 100.00/hr			$ 400.00
Wash Truck 4hr @ 100.00/hr			$ 400.00
	TOTAL OTHER		$ 1,200.00
LABOUR	HOURS	RATE	AMOUNT
Dunmore	6	$ 110.00	$ 660.00
Montour	6	$ 110.00	$ 660.00
Speal Jr	6	$ 100.00	$ 600.00
Pittman	6	$ 100.00	$ 600.00

Labour	$	2,520.00
TOTAL OTHER	$	1,200.00
Material	$	-
SUBTOTAL	$	3,720.00
HST	$	483.60
TOTAL	$	4,203.60

Business# [redacted]

THANK YOU

QUANTITY	MATERIAL	PRICE	AMOUNT	DESCRIPTION OF WORK
				Remove transformer from backyard pole. 115 Westlawn Drive Essex, ON

OTHER CHARGES	AMOUNT
Bucket Truck 4hr @ 100.00/hr	$ 400.00
RBD Truck 4hr @ 100.00/hr	$ 400.00
Service bucket 4hr @ 100.00/hr	$ 400.00
TOTAL OTHER	$ 1,200.00

LABOUR	HOURS	RATE	AMOUNT
Dunmore	4	$ 110.00	$ 440.00
Montour	4	$ 110.00	$ 440.00
Simes	4	$ 100.00	$ 400.00
Pittman	4	$ 100.00	$ 400.00
Speal Jr	4	$ 100.00	$ 400.00

Material	$ -	Material
		Labour
		TOTAL OTHER
		Material
		SUBTOTAL
		HST
		TOTAL

Labour	$ 2,080.00
TOTAL OTHER	$ 1,200.00
Material	$ -
SUBTOTAL	$ 3,280.00
HST	$ 426.40
TOTAL	$ 3,706.40

Business# [redacted]

THANK YOU

QUANTITY	MATERIAL	PRICE	AMOUNT	DESCRIPTION OF WORK
310m	#2/3 NS-7S		$ 3,720.54	Ice Storm

OTHER CHARGES			AMOUNT
		TOTAL OTHER	$ -

LABOUR	HOURS	RATE	AMOUNT

Labour	$	-
TOTAL OTHER	$	-
Material	$	3,720.54
SUBTOTAL	$	3,720.54
HST	$	483.67
TOTAL	$	4,204.21

Material		$ 3,720.54

Business# [redacted]

THANK YOU

QUANTITY	MATERIAL	PRICE	AMOUNT	DESCRIPTION OF WORK
				Ice Storm Wednesday Feb 22/23 to Sunday February 26/23

OTHER CHARGES	AMOUNT
Bucket Trucks x 2 @ 42hr @100.00/hr each	$ 8,400.00
RBD Truck 42hr @ 100.00/hr	$ 4,200.00
Wash Truck 18hr @ 100.00/hr	$ 1,800.00
TOTAL OTHER	$ 14,400.00

LABOUR	HOURS	RATE	AMOUNT
Overtime	235.5	$ 200.00	$ 47,100.00
Reg Time	153	$ 100.00	$ 15,300.00

Labour	$	62,400.00
TOTAL OTHER	$	14,400.00
Material	$	-
SUBTOTAL	$	76,800.00
HST	$	9,984.00
TOTAL	$	86,784.00

Material

Business# [redacted]

THANK YOU

QUANTITY	MATERIAL	PRICE	AMOUNT	DESCRIPTION OF WORK
				Second trip: Secondary transfers. Climbers 133 Munger 184 Sinisac

OTHER CHARGES	AMOUNT
TOTAL OTHER	$ -

LABOUR	HOURS	RATE	AMOUNT
Dunmore	8	$ 110.00	$ 880.00
Montour	8	$ 110.00	$ 880.00
Simes	8	$ 100.00	$ 800.00
Speal Jr	8	$ 100.00	$ 800.00

	Labour	$ 3,360.00
	TOTAL OTHER	$ -
Material	Material	$ -
	SUBTOTAL	$ 3,360.00
	HST	$ 436.80
	TOTAL	$ 3,796.80

Business# [redacted]

THANK YOU

QUANTITY	MATERIAL	PRICE	AMOUNT	DESCRIPTION OF WORK
				115 Westlawn Essex Outage in essex on fairview & langtry. Eliminate span of highline in backyard. Cut down old pole.

OTHER CHARGES	AMOUNT
1 Bucket truck 8hr @ 100.00/hr	$ 800.00
1 RBD Truck 8hr @ 100.00/hr	$ 800.00
TOTAL OTHER	$ 1,600.00

LABOUR	HOURS	RATE	AMOUNT
Simes	8	$ 100.00	$ 800.00
Montour	8	$ 110.00	$ 880.00
Speal Jr	8	$ 100.00	$ 800.00
Pittman	8	$ 100.00	$ 800.00
Carter	8	$ 65.00	$ 520.00

Material	$ -	Material
		Labour
		TOTAL OTHER
		Material
		SUBTOTAL
		HST
		TOTAL

	$ 3,800.00
	$ 1,600.00
	$ -
	$ 5,400.00
	$ 702.00
	$ 6,102.00

Business# [redacted]

THANK YOU

QUANTITY	MATERIAL	PRICE	AMOUNT	DESCRIPTION OF WORK
				Raise primary deadends and switch opener/. 151 Fairview Ave West

OTHER CHARGES	AMOUNT
Bucket Truck 4hr @ 100.00/hr	$ 400.00
RBD Truck 4hr @ 100.00/hr	$ 400.00
Service bucket 4hr @ 100.00/hr	$ 400.00
TOTAL OTHER	$ 1,200.00

LABOUR	HOURS	RATE	AMOUNT
Dunmore	4	$ 110.00	$ 440.00
Montour	4	$ 110.00	$ 440.00
Simes	4	$ 100.00	$ 400.00
Pittman	4	$ 100.00	$ 400.00
Speal Jr	4	$ 100.00	$ 400.00

Material	$ -	Labour	$ 2,080.00
		TOTAL OTHER	$ 1,200.00
		Material	$ -
		SUBTOTAL	$ 3,280.00
		HST	$ 426.40
		TOTAL	$ 3,706.40

Business# [redacted]

THANK YOU

QUANTITY	MATERIAL	PRICE	AMOUNT	DESCRIPTION OF WORK
				Remove transformer from backyard pole. 115 Westlawn Drive Essex, ON

OTHER CHARGES	AMOUNT
Bucket Truck 4hr @ 100.00/hr	$ 400.00
RBD Truck 4hr @ 100.00/hr	$ 400.00
Service bucket 4hr @ 100.00/hr	$ 400.00
TOTAL OTHER	$ 1,200.00

LABOUR	HOURS	RATE	AMOUNT
Dunmore	4	$ 110.00	$ 440.00
Montour	4	$ 110.00	$ 440.00
Simes	4	$ 100.00	$ 400.00
Pittman	4	$ 100.00	$ 400.00
Speal Jr	4	$ 100.00	$ 400.00

Material	$ -	

Labour	$ 2,080.00
TOTAL OTHER	$ 1,200.00
Material	$ -
SUBTOTAL	$ 3,280.00
HST	$ 426.40
TOTAL	$ 3,706.40

Business# [redacted]

THANK YOU

Appendix B: Invoices for Distributor A and Distributor B work, operating and capital

a) Distributor A

Description			Amount
LABOUR			$27,922.14
EQUIPMENT			$4,840.00
MATERIALS AND SUPPLIES			$1,901.50
		Subtotal	$34,663.64
		HST [redacted]	$4,506.27
		AMOUNT DUE	**$39,169.91**

b) Distributor B

Description SALE OF MATERIAL:
(3) 13585 80K SMU FUSE
(5) 13593 140K SMU FUSE
(6) 13620 200K SMU FUSE

Job 23-2082 - Sale of material to E.L.K.

Salesperson	Customer Number	Contract Number	Payment Terms	Due Date	Shipping Method
	E.L.K. ENERGY I		NET 30	5/18/2023	

	Billing Amount	$2,653.14
	Retention Withheld	$0.00
	Retention Due	$0.00
	Subtotal	$2,653.14
	Miscellaneous	$0.00
Fed Portion of HST on Sales	$132.66	
Ontario Portion of HST on Sale	$212.25	
	Total Ta›	$344.91
	Total	**$2,998.05**

E.L.K. Energy

Answer to Interrogatory from

Vulnerable Energy Consumers Coalition

Interrogatory VECC-5

Ref: Appendix A p. 10 Table 5 provides a breakdown of Thunderstorm Event Costs in July 2023.

Question
a) Please confirm the operating costs for E.L.K. staff does not include Regular Labour.

b) Please provide further details on the work order for reconnect cost.

c) Please provide a breakdown of the major assets replaced.

d) Please identify the assets replaced that were scheduled for replacement as part of the capital plan.

e) Please provide a description of the work undertaken by the Vegetation Management Contractor by service area (Kingsville & Harrow).

f) Please provide the invoices for the third-party contracting work, Distributor A, Distributor B, and Distributor C.

Response:

a) Confirmed
b) Please see response to VECC-04 part b.
c) Please see response to Staff-03 part d.
d) There was 1 pole that was identified in the pole inspections. This pole was damaged during the storm and replaced during the storm restoration
e) The July Thunderstorm resulted in downed trees, and a substantive number of tree limbs falling onto power lines. The vegetation management contractor provided tree removal, trimming and disposal services where power lines were affected.
f) Please see Appendix A to this response.

Appendix A: Invoices for the third-party contracting work, Distributor A, Distributor B, and Distributor C.

a) Distributor A – OM&A

Description			Amount
LABOUR - regular labour & overtime labour costs			$3,584.55
VEHICLE - Bucket truck costs			$1,188.00
		Subtotal	$4,772.55
		HST #[redacted]	$620.43
		AMOUNT DUE	**$5,392.98**

b) Distributor B – OM&A & Capital

Job 23-2190 - Assist ELK w/Storm Damage

Salesperson	Customer Number	Contract Number	Payment Terms	Due Date	Shipping Method
	E.L.K. ENERGY I		NET 30	9/13/2023	

	Billing Amount	$34,392.89
	Retention Withheld	$0.00
	Retention Due	$0.00
	Subtotal	$34,392.89
	Miscellaneous	$0.00
Fed Portion of HST on Sales	$1,719.64	
Ontario Portion of HST on Sale	$2,751.43	
	Total Tax	$4,471.07
	Total	$38,863.96

Distributor B work that was related to capital activities

Distributor B used the following material during the July storm restoration:

Job Analysis > Cost Type 2 Actual Breakdown

BACK EXPOR

Description	Cost Code	Date Promoted	Quantity	Unit Cost	Base Cost	Overhead Cost	Total Cost
IN AP Burdens Aug - manual	4389-00-02-000-2	2023-08-01	1.00	$0.00	$997.46	$0.00	$997.46
11070 BOLT-5/8" X 14"	4389-00-02-000-2	2023-08-01	20.00	$4.31	$86.20	$0.00	$86.20
11200 BOLT-WSHR SQ 2" X 2" X 5/8" HOLE	4389-00-02-000-2	2023-08-01	3.00	$0.51	$1.53	$0.00	$1.53
11320 BRACKET-SIDE POST 9"(CHICKEN WINGS)	4389-00-02-000-2	2023-08-01	6.00	$41.57	$249.43	$0.00	$249.43
11325 BRACKET-POLE TOP	4389-00-02-000-2	2023-08-01	3.00	$40.18	$120.54	$0.00	$120.54
13120 CROSSARM-STEEL 9.5' 4X4	4389-00-02-000-2	2023-08-01	1.00	$598.13	$598.13	$0.00	$598.13
14061 PREFORM-GRIP 3/0	4389-00-02-000-2	2023-08-01	5.00	$2.73	$13.63	$0.00	$13.63
14664 INSUL-UNIV POST 46KV	4389-00-02-000-2	2023-08-01	12.00	$141.20	$1,694.34	$0.00	$1,694.34
15830 #POLE-45' WOOD CL3	4389-00-02-000-2	2023-08-01	3.00	$718.79	$2,156.38	$0.00	$2,156.38
17493 STUD-SHORT 3/4" X 3"	4389-00-02-000-2	2023-08-01	9.00	$4.03	$36.27	$0.00	$36.27
17495 STUD-3/4" X 7" FOR CROSSARM	4389-00-02-000-2	2023-08-01	3.00	$10.29	$30.86	$0.00	$30.86
Total:			66.00	$1,561.74	$5,984.77	$0.00	$5,984.77

In addition to the above material, Distributor B invoiced E.L.K. Energy for 189 hours of labour equating to $4,922.50. The total of both costs equates to Distributor B's $10,907 capital amount.

c) <u>Distributor C – OM&A & Capital</u>

Service address:
E.L.K. Energy Inc.
Attn: Kayla Lucier, Farooq Hyder
172 Forest Ave
Essex ON N8M 3E4

Customer number
44141
E.L.K. Energy Inc.

Requirements:
Terms of payment Net Due Immediately

Currency: CAD

Material	Qty	Price	Price unit	Value
56				23,429.92
Storm Damages Assistance - Harrow, ON July 2023 line work re storm damages in Harrow Ontario. See attached summary for details.				
Total items				23,429.92
HST	13.000 %			3,045.89
Final amount				26,475.81

d) <u>Third Party – OM&A & Capital</u>

Bill To:
E.L.K Energy Inc.
172 Forest Ave.
Essex, Ontario
N8M 3E4

Hrs	Rate	Description	Unit Price	
6		Thursday July 27 11am-5pm Kingsville Crew with Bucket Truck, Chipper & Extra Labourer - to remove limbs from powerlines	$290.00	$1,740.00
11		Thursday July 27 5pm - Friday July 28 4am Kingsville Crew with Bucket Truck & Chipper- to remove limbs from powerlines	$330.00	$3,630.00
4.5		Friday July 28 8am-12:30pm Kingsville Crew with Bucket Truck & Chipper- to remove limbs from powerlines	$225.00	$1,012.50
4.5		Friday July 28 12:30pm - 5pm Kingsville/Harrow Crew with Bucket Truck, Chipper & Extra Labourer- to remove limbs from powerlines	$290.00	$1,305.00
8		Saturday July 29 11am-7pm Harrow/Kingsville Two Crews with Bucket Trucks & Chippers - to remove limbs from powerlines	$660.00	$5,280.00

Subtotal	$12,967.50
HST	$1,685.78
Total	**$14,653.28**
Balance Due	**$14,653.28**

Services	Quantity	Price	Amount
Bucket Truck & Chipper Crew to clear hydro lines from storm damage afterhours 7:30pm - 10pm 07/19/2023	3	$250.00	$750.00
Bucket Truck & Chipper Second crew to clear hydro lines from storm damage afterhours 7:30pm - 10pm 07/19/2023	3	$250.00	$750.00
Extra laborer with saw Extra man with saw after hours 7:30pm - 10pm 07/19/2023	3	$90.00	$270.00
Bucket Truck & Chipper Crew to clear hydro lines from storm damage 07/20/2023	4.5	$165.00	$742.50
Bucket Truck & Chipper Second crew to clear hydro lines from storm damage 07/20/2023	11.5	$165.00	$1,897.50
Extra laborer with saw 07/20/2023	11.5	$60.00	$690.00

Subtotal:	$5,100.00
HST/GST 13% [redacted]	$663.01
Total:	$5,763.01
Amount Due (CAD):	**$5,763.01**

Quantity	Unit	Description	Tax	Base Price	Disc %	Unit Price	Amount
3	HRS	HYDROVAC #57 VAC FOR (3) POLE REPLACEMENTS	H	240.00		240.00	720.00
1	LOT	SERVICE VEHICLE	H	220.00		220.00	220.00
3	HRS	EXTRA LABOURER TO ASSIST.	H	80.00		80.00	240.00
100	FT	MATERIALS - BIG O HOSE	H	2.50		2.50	250.00
1	LOAD	DISPOSAL OF MUD & WATER.	H	350.00		350.00	350.00
1	LOT	FUEL SURCHARGE	H	72.00		72.00	72.00
		Subtotal:					1,852.00
		H - HST 13% HST					240.76

C.E.O. CHQ #
RECEIVED 5120
OEB FH

Shipped By Tracking Number:

Terms: Net 30. Due 08/30/2023.

Comment: NOTE: EFFECTIVE IMMEDIATELY THE [redacted] WILL BE IMPLEMENTING A TEMPORARY FUEL SURCHARGE.

Sold By:

Total Amount	2,092.76
Amount Paid	0.00
Amount Owing	**2,092.76**

Quantity	Unit	Description	Tax	Base Price	Disc %	Unit Price	Amount
6	HRS	VACTOR FLUSHER #58 EMERGENCY - EXCAVATE (3) POLE HOLES FRO REPLACEMENT, DUE TO STORM	H	300.00		300.00	1,800.00
1	LOAD	DISPOSAL OF MUD & WATER	H	350.00		350.00	350.00
1	LOT	FUEL SURCHARGE	H	180.00		180.00	180.00
		Subtotal:					2,330.00
		H - HST 13%					
		HST					302.90

C.E.O. CHQ #
FINANCE 5120
OPS FH

Shipped By: Tracking Number:	Total Amount	2,632.90
Terms: Net 30. Due 08/25/2023.	Amount Paid	0.00
Comment: NOTE: EFFECTIVE IMMEDIATELY THE [redacted] WILL BE IMPLEMENTING A TEMPORARY FUEL SURCHARGE.	Amount Owing	2,632.90
Sold By:		

QUANTITY	MATERIAL	PRICE	AMOUNT	DESCRIPTION OF WORK
	Storm Call out July 26, 27, 28, 2023			
	Material List attached		$ 7,470.23	

OTHER CHARGES			AMOUNT
Dump truck 24hr @ 100.00/hr			$ 2,400.00
HydroVac Truck 16hr @ 100.00/hr			$ 1,600.00
Line Trucks 48hr @ 100.00/hr			$ 4,800.00
Bucket Trucks 48hr @ 100.00/hr			$ 4,800.00
	TOTAL OTHER		$ 13,600.00
LABOUR	**HOURS**	**RATE**	**AMOUNT**
See Attached			$ 46,450.00

Labour	$	46,450.00
TOTAL OTHER	$	13,600.00
Material	$	7,470.23
SUBTOTAL	$	67,520.23
HST	$	8,777.63
TOTAL	$	76,297.86

Material $ 7,470.23

Business# [redacted]

THANK YOU

E.L.K. Energy

Answer to Interrogatory from

Vulnerable Energy Consumers Coalition

Interrogatory VECC-6

Ref: Appendix A-1 p. 14 E.L.K. has implemented a robust tree trimming program beginning in 2021 and is committed to continuing this effort, with a focus on completing comprehensive tree clearing initiatives for two entire towns each year. This program encompasses the maintenance of both primary and secondary circuits, ensuring the reliability and resilience of the electrical infrastructure.

Question:
a) Please compare E.L.K.'s 2021 tree trimming program and tree clearing initiatives compared to previous years.

b) Please provide E.L.K.'s Tree Trimming schedule by year for the years 2021 to 2026 based on the two towns cleared each year.

c) Please confirm E.L.K. accomplished its Tree Trimming program as planned for the years 2021 to 2023.

d) Please confirm the Tree Trimming program and schedule undertaken for the years 2016 to 2020 was completed as planned. If not, please discuss any variances in work and cost.

Response:

a) Please see response to Staff-06 c) and VECC-5 for the financial differences in E.L.K Energy's vegetation management for the years 2018 to 2023. Prior to 2021, E.L.K. Energy managed vegetation in a reactive manner based on the customer complaints and operations inspection of vegetation growth around electrical circuit[1]. With respect to E.L.K. Energy's vegetation management operations the following list details differences that were implemented after 2021:
    - Tree trimming for all circuits including primary, secondary and secondary services entering customers' demarcation
    - Tree trimming for 1/3rd of the system which consists of 2 out of 6 communities every year.

[1] Additional details are available in EB-2021-0016 Interrogatory Responses to 2-Staff-22, 2-Staff-24, 2-Staff-25 and 4-Staff-48. Document can be found at: https://www.rds.oeb.ca/CMWebDrawer/Record/746312/File/document

- Inspection conducted every year for the backyard circuits especially with open bus secondary. Where needed, such areas are included in the scheduled tree trimming.
- Wide range of arborist contractors are included in the tender process to get more competitive prices[2]

b) Please see the following two tables that list out the tree trimming areas (i.e. E.L.K. Energy communities), and the schedule for each area from 2021 to 2030:

Inspection & Tree Trimming Areas		
Area #1	Town of Kingsville	Community of Kingsville Community of Cottam
Area #2	Town of Essex	Community of Essex Community of Harrow
Area #3	Town of Lakeshore	Community of Belle River Community of Comber

Tree Trimming Schedule										
Area	**2021**	**2022**	**2023**	**2024**	**2025**	**2026**	**2027**	**2028**	**2029**	**2030**
#1	X			X			X			X
#2		X			X			X		
#3			X			X			X	

c) Confirmed.

d) As stated in section 1.2 of E.L.K.'s Settlement Proposal for its 2022 Cost of Service (EB-2021-0016), E.L.K. Energy recently transitioned from a reactive to proactive approach to tree trimming based on a 3-year tree trimming cycle beginning in 2021. This transition, and the increase in the tree trimming budget to facilitate the 3-year cycle, was expressly supported by VECC in the Settlement Proposal. E.L.K. Energy confirms it executed its tree trimming program as intended for the period of 2016 to 2020 based on observed issues and customer concerns.

[2] Note that in Exhibit 2, Tab 4, Attachment 1, p. 17 of EB-2021-0016, E.L.K. Energy stated its intent to outsource tree trimming to a third-party contractor

E.L.K. Energy

Answer to Interrogatory from

Vulnerable Energy Consumers Coalition

Interrogatory VECC-7

Ref: Appendix A-1 p. 17 An alternative approach that allocates the incremental revenue requirement to one or a few particular customer rate classes would be contrary to the across-the-board impact of the Two Major Events - for instance, some impacted customers would be unjustly enriched by other impacted customers who would have to foot the bill for the restoration costs, simply because they were chosen by an arbitrary allocation method. This scenario would be highly desirable, and we have decided not to proceed with this allocation approach.

Question
Please provide examples of where this alternative approach has been approved by the OEB.

Response:

Please note that the reference provided includes a typographical error. A corrected version of the sentence would state "This scenario would be highly undesirable..." consistent with the context of the paragraph.

E.L.K. Energy is not aware of any instances in which the OEB has approved the exclusion of select rate classes from Z-Factor cost recovery.

E.L.K. Energy

Answer to Interrogatory from

Vulnerable Energy Consumers Coalition

Interrogatory VECC-8

Ref: Appendix B p. 4 E.L.K. is requesting ICM approval to fund the purchase of two single bucket trucks and six Reclosing Switches.

Question:
a) Please confirm the delivery date of each single bucket truck.

b) Please provide details of any amounts paid to date for each bucket truck.

c) Please confirm the delivery date(s) of the six reclosing switches.

d) Please provide details of any amounts paid to date for the reclosers.

Response:

a) Delivery dates for each of the bucket trucks listed in the table below:

Truck	Delivery Date
MODEL 200-42	Arrived January 4, 2024
MODEL 400-46	Expected April, 2024

b) E.L.K Energy has paid to date $129,639 for the Model 400-46 truck, and $257,085 for the Model 200-42 truck
c) The expected delivery date for the six reclosing switches is April 2024.
d) E.L.K. Energy has not paid any amounts to date for the six reclosers.

E.L.K. Energy

Answer to Interrogatory from

Vulnerable Energy Consumers Coalition

Interrogatory VECC-9

Ref: Appendix B p. 6 E.L.K. indicates the switches will facilitate a reduction in customer outages due to Loss of Supply, which is the most significant cause of reliability issues for E.L.K.

Questions:
a) Please provide a breakdown of SAIDI and SAIFI by cause code for the years 2018 to 2023.

b) Please explain the source and key drivers of the Loss of Supply events 2018 to 2023.

Response:

a) Please see table below for response to Part a) of this interrogatory.. Note that the processing of 2023 SAIDI/SAIFI remains in progress and will not be available until filing of Reporting and Record Keeping ("RRR") data in April, 2024.

2018 Reliability by Cause Code										
	0. Unknown/Other	1. Scheduled Outage	2. Loss of Supply	3. Tree Contact	4. Lightning	5. Defective Equipment	6. Adverse Weather	7. Adverse Equipment	8. Human Element	9. Foreign Interference
SAIDI	0.082	0.077	1.322	0.037	-	0.040	0.218	0.998	0.011	0.164
SAIFI	0.028	0.032	0.648	0.018	-	0.017	0.045	0.285	0.001	0.055

2019 Reliability by Cause Code										
	0. Unknown/Other	1. Scheduled Outage	2. Loss of Supply	3. Tree Contact	4. Lightning	5. Defective Equipment	6. Adverse Weather	7. Adverse Equipment	8. Human Element	9. Foreign Interference
SAIDI	0.039	0.013	0.808	0.039	0.016	0.377	0.497	0	0	0.865
SAIFI	0.022	0.008	0.591	0.013	0.007	0.125	0.245	0	0	0.302

2020 Reliability by Cause Code										
	0. Unknown/Other	1. Scheduled Outage	2. Loss of Supply	3. Tree Contact	4. Lightning	5. Defective Equipment	6. Adverse Weather	7. Adverse Equipment	8. Human Element	9. Foreign Interference
SAIDI	0.096	0.008	2.262	0.466	0.578	0.319	1.546	0.004	0	0.574
SAIFI	0.067	0.003	1.102	0.157	0.209	0.086	0.399	0.001	0	0.31

2021 Reliability by Cause Code										
	0. Unknown/Other	1. Scheduled Outage	2. Loss of Supply	3. Tree Contact	4. Lightning	5. Defective Equipment	6. Adverse Weather	7. Adverse Equipment	8. Human Element	9. Foreign Interference
SAIDI	0	0.031	0.729	1.57	0.007	0.208	0.086	0	0.171	0.07
SAIFI	0	0.018	0.334	0.399	0.004	0.084	0.018	0	0.024	0.033

2022 Reliability by Cause Code										
	0. Unknown/Other	1. Scheduled Outage	2. Loss of Supply	3. Tree Contact	4. Lightning	5. Defective Equipment	6. Adverse Weather	7. Adverse Equipment	8. Human Element	9. Foreign Interference
SAIDI	0.017	0.05	5.703	0.044	0	0.134	0	0	0	0.077
SAIFI	0.014	0.016	1.477	0.015	0	0.042	0	0.002	0	0.031

b) The source of Loss of Supply between 2018 and 2023 is primarily driven by interruptions to the electrical feed from Hydro One's circuit. The following issues are the most common cause of the interruption to the feed:
    a. Animal contact
    b. Tree contact
    c. Adverse weather

E.L.K. Energy

Answer to Interrogatory from

Vulnerable Energy Consumers Coalition

Interrogatory VECC-10

Ref: Appendix B p. 6 E.L.K.'s request for ICM funding to purchase the Switches is integral to its Smart Grid plan ("Roadmap").
Question:

a) Please provide the reference to the development of a Smart Grid plan in E.L.K.'s 2022 DSP.

b) Please provide the dates the Roadmap was started and completed.

c) Please provide a copy of E.L.K.'s Smart Grid Plan.

d) Please discuss if the installation of the six recloser switches was specifically noted in the 2022 DSP and the Customer Survey.

Response:

a) E.L.K. Energy's 2022 Distribution System Plan ("DSP") did not reference the development of its Smart Grid Plan. E.L.K. Energy developed its Smart Grid Plan in 2023 with the help of Entegrus under the Management Services Agreement that was described in its pre-filed evidence[1]. As noted in the pre-filed evidence, the Smart Grid Plan sets out a plan to improve service quality and reliability in response to customer feedback.
b) Please see responses to Staff-11 and VECC-12
c) Please see Attachment 1 to this response for a copy of the Smart Grid Plan.
d) The installation of six recloser switches were not specifically noted in E.L.K. Energy's 2022 DSP or the Customer Survey. However, E.L.K. Energy set SAIDI and SAIFI targets as part of the Reliability Commitment Account and the six recloser switches will help in achieving those targets. In the fall of 2023, E.L.K. Energy management, Entegrus and the E.L.K. Energy Chair held customer open houses in Essex and Harrow and received positive responses from customers regarding the recloser investments. Customer letters of support have been filed in the EB-2023-0013 docket.

[1] EB-2023-0013, Appendix B - ICM Application, Page 12 of 36

VECC-10 Attachment 1

E.L.K. Grid Modernization Report

Summary

Over the coming years LDCs are expected to be facing a unique combination of challenges, as the pressure of aging infrastructure collides with increased electrical demand due to electrification. Meeting these challenges will require Ontario's LDCs to make use of all available tools at their disposal, including the many grid modernization technologies which have been developed in recent years. While these technologies have the potential to provide significant benefits to LDCs, they can also add significant cost and complexity and require specialized expertise to maintain. In this report a staged approach to grid modernization is proposed, which will allow internal staff to build their expertise over time, as well as to ensure adequate resources are available to support successful deployments.

Objectives of Grid Modernization

The overarching goal of any grid modernization effort is to improve the operation of the distribution system by applying modern communication and computer processing technology to traditional power systems components. The benefits of adopting modern grid technologies include reducing outage restoration time, optimizing use of assets, allowing integration of complex system components like generation and energy storage, and improved system planning though availability of historical system data. Given the upcoming challenges facing LDCs in Ontario, many of the benefits offered by smart grids are anticipated to shift from optional enhancements to essential requirements.

New Challenges facing LDC's

Electrification of Heating, EV Penetration

Increased electrical demand due to the shift away from fossil fuels in the realm of heating and transportation poses a major challenge throughout the electricity sector. LDCs will be faced with the task of serving an unprecedented increase in demand from their customers. Traditional distribution system designs standards do not incorporate the levels of spare capacity which would be required to meet the forecast load increases due to electrification. Additionally, as customers begin to rely on electricity for essential needs such as transportation, there will be even lower acceptance of service interruptions, particularly those of long duration. By enabling better utilization of existing assets and improving reliability, smart-grid technologies can improve customer experiences while deferring costly upgrade and reinforcement programs.

Capacity Constraints, Bidirectional load flows

In a traditional distribution system there is a one-way flow of energy from the upstream distributor or transmission station to the loads. Distributed Energy Resources (DERs) however have the potential to reverse this during times of high output and low loading, and potentially deliver energy upstream or to adjacent feeders. This is known as bidirectional power flow. The historical approach to integration of DERs has been to impose highly conservative limits on the amount of generation/energy storage within the distribution system to avoid running into issues of bidirectional load flow, as the traditional grid control/protection elements are not equipped to deal with this issue. Maintaining this operating philosophy may become unfeasible in the near future, with the emphasis on distribution connected DERs to meet the challenges of electrification. LDCs will be required to adapt their operating practices to allow for greater complexity on the distribution system. Smart-Grid technology allows a dynamic grid

where deeper penetrations of DER's can be achieved, and benefits rather than liabilities can be accrued by their presence.

Changes in Regulation and Market Operation: Move toward DSO's

By 2026 distribution connected DERs will be permitted to participate in the wholesale electricity market in a similar manner to traditional large-scale generation. LDCs will have a critical role to play in facilitating the dispatch of generators connected to their system, and will require LDCs to take on the role of a Distribution System Operator (DSO). Real-time visibility into power flows within distribution networks are a requirement for DSOs to effectively manage load and generation requirements within their networks. The foundational elements needed to address the visibility, data and grid management are addressed through grid modernization.

Elements of Grid Modernization

Modernizing the distribution grid involves integrating many diverse devices and technologies to build operational awareness and capability. It is useful to think of these devices primarily by the function and roll they play within the system.

Back-office Systems

The foundation of a scalable, efficient, secure smart-grid is the back-office systems. The core elements of the smart grid are a SCADA (Supervisory Control And Data Acquisition) system, a Operational Data Store (ODS), a communication network and cyber security infrastructure.

SCADA

SCADA is the central system used by utility staff to observe telemetry information. It provides several key functions from receiving telemetry and issuing controls to field devices, through visualizing system state for utility staff, to monitoring of communications and exchanging data with other agencies.

ODS

One of the value streams generated by a smart grid is the rich data about system performance. Retaining this data allows post-hoc analysis of events, historical analysis, as well as a deeper understanding of system operation and operating trends. It provides an information base useful for all types of system impact studies as well as report development.

While SCADA is primarily concerned with current system state, the ODS is primarily concerned with providing the efficient storage and prompt recall of large volumes of historical data, while providing easy to use, flexible interfaces for accessing that data.

Data Exchange

The SCADA system, ODS or other specialized software can be used to support the secure automated, real-time exchange of information or control with other agencies (such as Hydro One) as well as with customer owned equipment. One of the key benefits of a developed data exchange is the ability to leverage Hydro One equipment to support operations staff. This typically means the ability to establish hold-offs from the office, and receive system information such as current, voltage and power flow information, as well as fault indication information.

Communication Networks

The ability to receive telemetry and issue controls to Smart-Grid assets as well as enabling distributed automation is contingent upon a secure, reliable communication network. These networks cover the entire service territory and are required to operate in challenging electrical and environmental conditions. Establishing, monitoring, and maintaining this network is key to the success of a Smart-Grid.

Cyber Security

Mis-operation or unavailability of Smart-Grid systems can directly impact customer reliability. Given the history of successful cyber-attacks against smart-grid and generation assets worldwide, best practices have been developed to guide utilities. These involve policies and procedures, specific IT asset configurations to restrict access as well as active monitoring tools. Coverage should include both in office and in field networks, as well as interfaces to other agencies and customers.

Distribution System Observation / Telemetry

One of the key aspects of a smart grid is the increase in situational awareness that it brings. Devices provide rich data streams which can be stored for future analysis, presented immediately to operations and management staff, and filtered to identify abnormal conditions needing immediate action. These data streams allow staff to monitor voltage conditions as well as system loading and phase balances, to ensure that assets are utilized in an optimal way, and the system is operated within the required boundaries to ensure power quality for customers. The data can also be used to help localize failures, providing information to responding staff to assist in making timely repairs.

While all classes of field smart-grid devices can provide telemetry, certain classes of device are specialized for this purpose:

Wholesale Meters

Located at the electrical boundaries of the service territory, the primary purpose of these meters is to measure bulk electricity in and out of the distribution system for the purpose of settlement. These meters are sophisticated devices, capable of providing real time voltage and current information, as well as fault indication. They also perform waveform capture when abnormal conditions are present to assist engineers in post hoc analysis.

Fault Indicators

Low-cost devices designed to be deployed in a dense mesh through the distribution system, they provide visible notification of downstream failures locally through a flashing light, as well to an upstream SCADA system. Fault indicators help the line crew/control room narrow down the location of a fault to portion of a feeder downstream of the fault indicator which registered a fault. This speeds the identification of faulted equipment and can reduce outage duration. Fault indicators are also capable of providing real time current values.

Distribution System Control

Expanding capability beyond the having simple visibility into system operating conditions, some assets such as primary switches, capacitors and voltage regulators can be used to influence power flows through the community, as well as adjust system voltage conditions. While these classes of device have

long existed within the distribution system, under Smart-Grid, they are paired with a digital controller and communications equipment. This allows integration with the SCADA system for remote control and operation, as well as enabling distributed intelligence, bringing awareness of system conditions to the devices themselves and enabling them to make local decisions to maintain power quality and customer reliability.

Reclosers

Reclosers are primary voltage switches capable of interrupting system faults equipped with digital controllers. When multiple reclosers are installed within a community, they can be used to perform switching operations in support of operations and maintenance activities, minimize outages by isolating damaged sections of line to prevent upstream breaker lock-outs, or to restore power from an available supply when a loss of supply event occurs.

Switching can occur from the office when integrated with the SCADA system, or in the field. These devices also support operations by enabling hold-offs to be established, both remotely and locally, to support crew safety.

Capacitors and Voltage Regulators

Both capacitors and voltage regulators operate on the system to maintain the voltage within the mandated range. These can be programmed to operate autonomously based on system conditions, reporting their status and activities to the office via SCADA, or can be controlled manually either remotely or in the field.

Distributed Energy Resources (DER's)

Distributed Energy Resources include all types and sizes of generation connected to the distribution system. This ranges from small scale solar on a residence, through behind the meter generation at a commercial or industrial site, through to wind and solar farms. When these generators are active, they influence the electrical behavior of the distribution system. Understanding the state of these generators is a requirement imposed by hydro one. These generators can be connected to the SCADA system to give utility staff visibility and a historical record. Maintaining visibility into the state of these generators is important when developing switching to ensure overloads are not occurring, and voltages stay within acceptable limits.

Grid Modernization Roadmap

This section outlines a staged approach for implementing the various elements of grid modernization into E.L.K.'s system. Figure 1 below highlights the key components and timeline of the grid modernization road map.

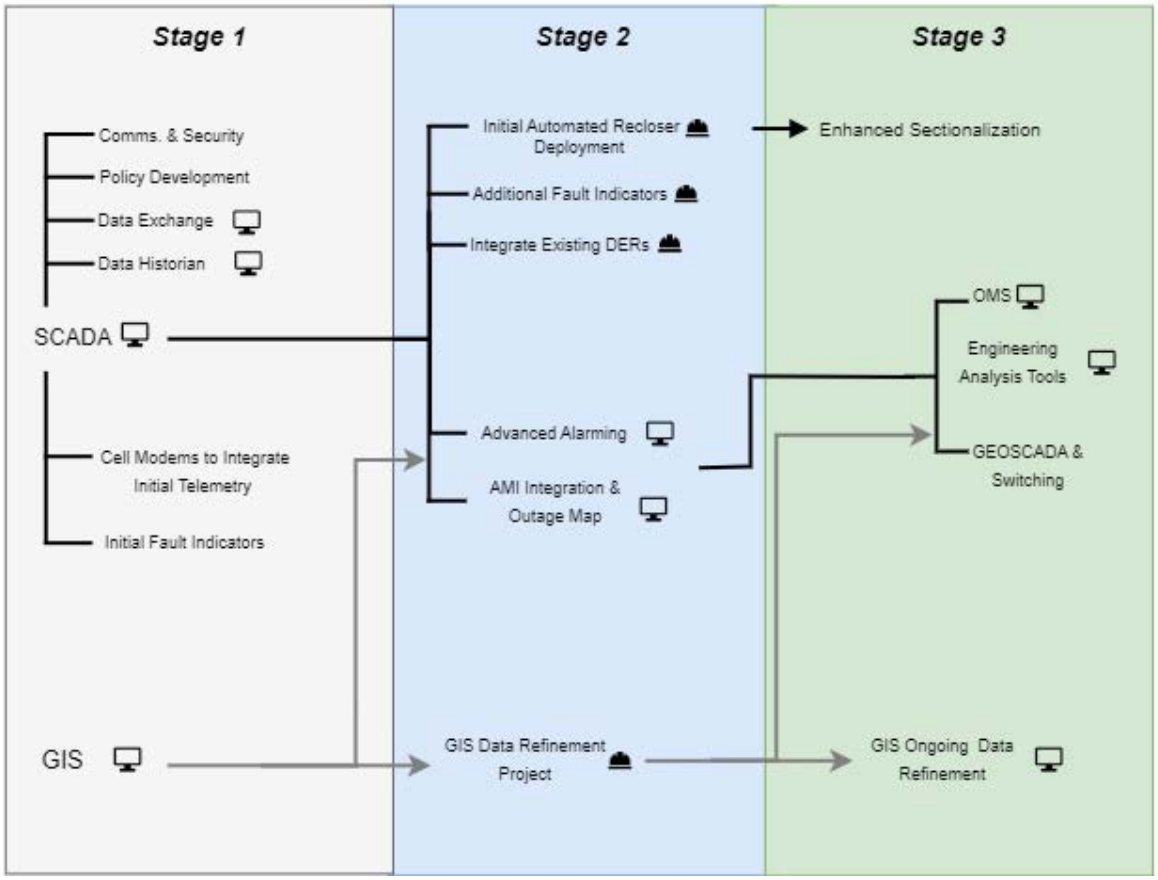


Figure 1: Grid Modernization Roadmap

Stage 1: Initial Development

An initial step toward establishing a smart grid, establishing back-office systems provide the foundational components needed to build from and leveraging existing field assets. Work on the items in stage 1 would commence immediately upon the implementation of this Grid Modernization Plan. Completion of this stage establishes key infrastructure which is required prior to beginning many of the items in Stage 2.

Establish a SCADA System

The SCADA System is the heart of a Smart-Grid. This forms the hub through which all field communication occurs. These systems are complex, as they must be able to deliver high reliability and security, and require significant expertise and manpower to establish and maintain. Working with a partner will allow a timely, cost-effective implementation, while providing support to build expertise among internal staff.

Recommendation: Work with a partner to establish a SCADA system.

Establish an ODS

The ODS stores historical data from the SCADA system, making it accessible to standard analysis tools and easily exchanged between enterprise systems. Like the SCADA system the ODS can require significant expertise and manpower to establish and maintain the integration with the

SCADA system. Selecting an ODS with a proven track record of integration with the chosen SCADA system is key to achieving a timely implementation. Leveraging the ODS of a partner reduces the cost and timeline of implementation and ensures the ODS will integrate well with the SCADA system.

> **Recommendation:** Work with a partner to establish an ODS.

Establish a Secure Edge Network

Establish a field network supported by a cyber security suite, policies and procedures. While a number of technologies exist which could serve the purpose of a secure edge network, establishing or leveraging a partner's a cellular access point network (APN) is a modern, reliable and cost-effective method of meeting this need.

> **Recommendation:** Establish best practices cyber-security systems, policies and procedures allowing the creation of a cellular based secure edge network, or leverage an existing network via a partner.

Initial Telemetry Devices

Once the SCADA system, ODS, and edge network are in the place in-field devices can be used to collect telemetry (such as voltage and currents) from the system in real-time. Fault indicators provide basic telemetry points as well as fault alerts with a relatively low-cost installation and setup. Further details on the preliminary fault indicator deployment plan are provided in Appendix A. Existing wholesale meters can also be reconfigured to integrate with the SCADA system and provide telemetry. A third source of data can be obtained from Hydro One directly via a data exchange system. Hydro One telemetry often includes breaker status (e.g. Open VS Closed) and Station Bus level voltages. Breaker status in particular is highly valuable information for determining timing and scope of outage events.

> **Recommendations:** Begin deploying fault indicators for telemetry and fault location. Set up telemetry points on existing wholesale primary meter points and integrate into the SCADA system. Work with a partner to leverage an existing Hydro One data exchange channel to receive available telemetry from Hydro One.

Establish a GIS

Modern Geographic Information System (GIS) tools provide a powerful system for storing asset information and location system. A GIS is a foundational tool for utilities to create system maps, record asset information, and feed data to other systems such as SCADA, power system analysis tools, and outage management systems. A GIS implementation project is currently underway to convert existing CAD maps to Esri's Utility Network model.

> **Recommendation:** Complete the GIS implementation project.

Stage 2: Mapping Refinement and Control

This stage builds on the fundamental components established in stage 1 and adds additional tools and features, including GIS mapping, outage mapping, and distribution control devices. Several of the items in this stage are longer implementation time projects (12 months and upwards).

GIS Mapping Refinement

Implementing a GIS from the ground up and maintaining the data consistently is a significant undertaking. Once the GIS system from Stage 1 has been established, the next step is to conduct a data collection/validation exercise. High quality data from the GIS system is a requirement for more advanced tools such as an outage map or OMS, which typically make their predictions based on connectivity derived from GIS models.

> **Recommendation:** Begin an asset mapping program to record and label assets in the field. Implement processes to ensure new construction and changes to the distribution system are captured in GIS in a timely and consistent manner.

AMI Integration and Outage Map

An outage map is a valuable tool to keep both customer and internal staff informed during and outage event. Public-facing outage maps provide customers with up-to-date information regarding the extent of an outage and estimate restoration times without increasing the burden on customer service representatives. An outage map with higher granularity can be used internally in tandem with SCADA information to help staff restore customers more quickly during an outage.

> **Recommendation**: Adopt a web-based outage map based on similar maps used by other utilities

Additional Telemetry Devices and Advanced Alarming

Telemetry devices in stage 2 include additional fault indicators and existing DER installations. All DERs with a rating greater than 250kW are required to have remote monitoring of a number of telemetry points, however the existing DERS in E.L.K.'s system are sending their telemetry directly to Hydro One. Retro-fitting these installations to integrate with E.L.K.'s SCADA system will provide essential visibility into the true state of power flow on the distribution network. The additional telemetry available in stage 2 will allow for implementation of alarming schemes to provide staff with real time alerts about abnormal system conditions and faults.

> **Recommendation:** Install fault indicators at additional locations to increase available telemetry and fault identification capability. Retrofit existing DERs to integrate with existing SCADA system. Leverage alarm capabilities in SCADA to provide SMS notifications to on-call staff identifying faults and abnormal conditions.

Automatic Load Transfer

Regions serviced by shared feeders often have greater exposure and are susceptible to loss of supply events. An automatic load transfer system can mitigate the impact of a loss of supply event by automatically transferring load to an alternate supply. Implementing an auto load transfer system requires at minimum three switching devices (reclosers or sectionalizers) complete with a programable controller and a reliable communication network connecting them. This type of scheme can be implemented in a community with 2 or more supply feeders. Further details regarding recloser deployments are included in Appendix A.

Recommendation: Investigate the impact of Loss of Supply outages in E.L.K.'s communities with dual feed. Implement an automatic load transfer system in the community which is most impacted by these outages.

Stage 3: Expanded Capabilities

The items in stage 3 are predicated on the successful completion of stage 2 and provide extended capabilities such as an Outage Management System (OMS), Geo-SCADA, Engineering Analysis tools, and Enhanced Sectionalization.

Engineering Analysis Tools

Engineering analysis tools allow detailed accurate modeling of the present distribution system, as well as potential changes and future construction. This allows utility planners to fully understand the impact of new connections to the distribution system as well as ensuring that capital projects being constructed today are right sized to serve customers over it's expected lifespan. These tools are able to leverage data in the SCADA historian, and connectivity contained within GIS to streamline modeling and analysis tasks and improve the accuracy of the results.

Recommendation: Survey the market and acquire licensing for an engineering analysis tool suitable to perform the studies required to support the distribution system. Examples would include: Fault Analysis, Protection Coordination, Load Flow and Voltage Analysis.

Enhanced Sectionalization

One key principle in maintaining system reliability is to limit the maximum number of customers impacted by an unplanned outage. By deploying additional intelligent sectionalizing switches, especially in communities with multiple feeds, the maximum number of customers impacted by an unplanned outage can be controlled, and the system gains the ability to self-heal around the failed segment. This improves customer experience, by reducing the scope of the outages, and improves restoration times by reducing the time required to identify the failed asset.

Recommendation: Sectionalization projects have the greatest impact on feeders with higher numbers of internal faults and higher customer counts. The order in which feeders are prioritized for sectionalization projects should therefore be based on a combination of overall reliability and number of customers served.

Geo-SCADA

Building off the enhanced GIS model from Stage 2 a geographically accurate model of the distribution network can be modeled in SCADA. This enables the operator to complete develop switching orders withing the SCADA system itself, and to maintain an electronic record of switch states, allowing the real-time network configuration to be available to all staff members.

Recommendation: work with a partner to import Geometric network data into the SCADA mapping display.

Outage Management System (OMS)

An OMS is a software tool which assists crews with outage restoration through fault locating, dispatching resources, prioritizing restoration, and improving customer facing restoration time estimate. The OMS combines data from sources such as Advanced Metering Infrastructure (AMI) and SCADA along with geographically referenced network diagrams and information regarding crew location and customer calls. An OMS is particularly valuable during large-scale outage events where there are multiple outages, allowing for a prioritized response. Although there are many benefits to deploying an OMS, it is also a highly complex system with a significant cost to implement. A successful OMS deployment is also highly dependent on the proper implementation of a number of other systems including SCADA, GIS, and AMI.

> **Recommendation**: Conduct a review of OMS tools currently available on the market. A key consideration for OMS selection is the compatibility with other software tools such as GIS, SCADA, AMI and Customer Information System (CIS), along with vender support.

E.L.K. Grid Modernization - Appendix A

2023-2026

The following plan details the deployment of Fault Indicators (FIs), recloser deployments, and considerations for additional feeders within E.L.K.'s service territories.

FAULT INDICATORS

Budget: $42,000[1] annually from 2023-2026
Annual quantity: 8 per year[2]
Total deployment quantity over 2023-2026 period: 32 (+2 redeployments)

Please see Table 1 for the proposed FI deployment schedule for E.L.K.'s service territories.

Table 1 Proposed Fault Indicator Deployment Schedule

	2023	2024	2025	2026
Harrow	2 (redeployment)	3	0	0
Essex	2	3	2	0
Kingsville	1	2	3	1
Belle River	2	0	3	2
Cottam	1	0	0	3
Comber	1	0	0	2

HARROW

The FI deployment plan for Harrow involves relocation of 2 previously installed individual FIs in 2023, and 3 new sets in 2024 for a total of 5 FI sets. Please see Figure 1 for proposed locations, as denoted by the stars on the map.

One FI set will be placed immediately upstream (or downstream)[3] each of Harrow's two wholesale metering points (Harrow East PME, 3M1 and Harrow North, 3M7).

The remaining three FI sets will be located at the King St E and Walnut St N & S intersections, where the 3M1 feeder trifurcates.

This will leave 2 individual FIs that can either remain at their current locations or be redeployed to other single-phase applications.

[1] Assuming that $42,000 covers material only; labour and equipment costs excluded – plan to be adjusted if more budget required
[2] Annual quantity based on budgetary quote of $4,900 per set of Horstmann Smart Navigator FIs as quoted by Rexel on April 13th, 2023.
[3] FIs can be installed immediately upstream to detect faults within the PME equipment; ownership demarcation points are to be considered prior to deciding on upstream or downstream location

Figure 1 Harrow Fault Indicator Locations

ESSEX

The FI deployment plan for Essex involves installing 2 new FI sets in 2023, 3 new FI sets in 2024 and 2 new FI sets in 2025 for a total of 7 FI sets. Please see Figure 2 for proposed locations, as denoted by the stars on the map.

One FI set will be placed immediately upstream (or downstream) the Hopgood PME (56M29) and two FI sets will be placed approximately 5 pole spans downstream of the Naylor PME (56M24), where the 56M24 feeder bifurcates at the Maidstone Ave E and Fairview Ave intersection.

Three FI sets will be located near the Maidstone Ave W and Allen Ave intersection, where the 56M29, near where the feeder splits into three different feeds: one feed headed east on Maidstone Ave W, another headed southeast through greenspace to Hanlan St N, and the third headed west on Maidstone Ave W.

The final FI set will be placed on Laird Ave, just northeast of the Hanlan St N intersection.

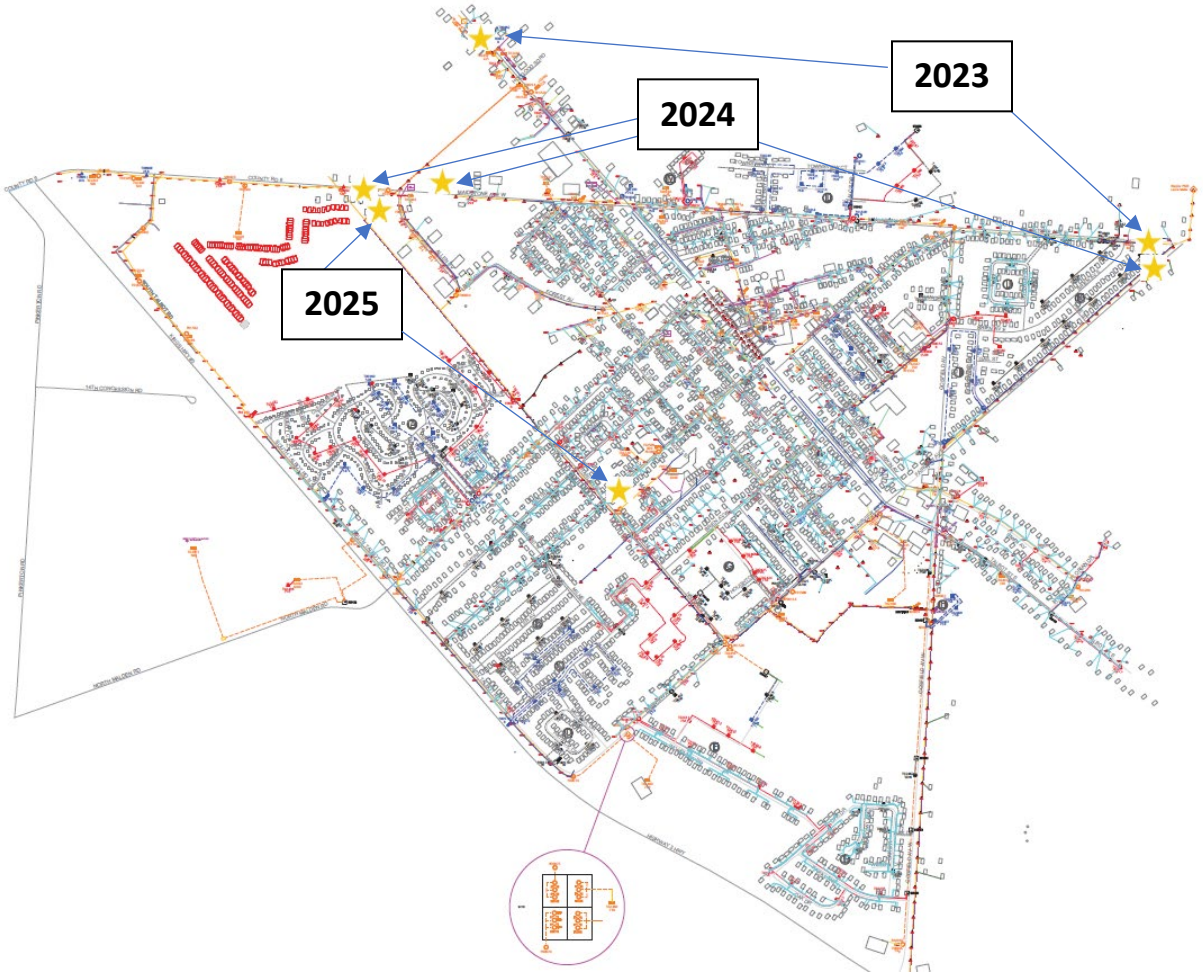


Figure 2 Essex Fault Indicator Locations

KINGSVILLE

The FI deployment plan for Kingsville involves installing 1 new FI set in 2023, 2 new FI sets in 2024, 3 new FI sets in 2025, and 1 FI set in 2026 for a total of 7 FI sets. Please see Figure 3 for proposed locations, as denoted by the stars on the map.

One FI set will be located immediately upstream (or downstream) the Kingsville PME (3M5).

At the location where the first bifurcation occurs on the feeder (north of Mill Creek Cr), one FI set will be located on each leg of the bifurcation.

Two FI sets will be located on each leg of the bifurcation near the Main St E and Wigle Ave intersection, one on each leg of the bifurcation. One more FI set will be located where Wigle Ave bends into Lakeview Ave. The final FI set will be located downstream S40069, just off Wigle Ave.

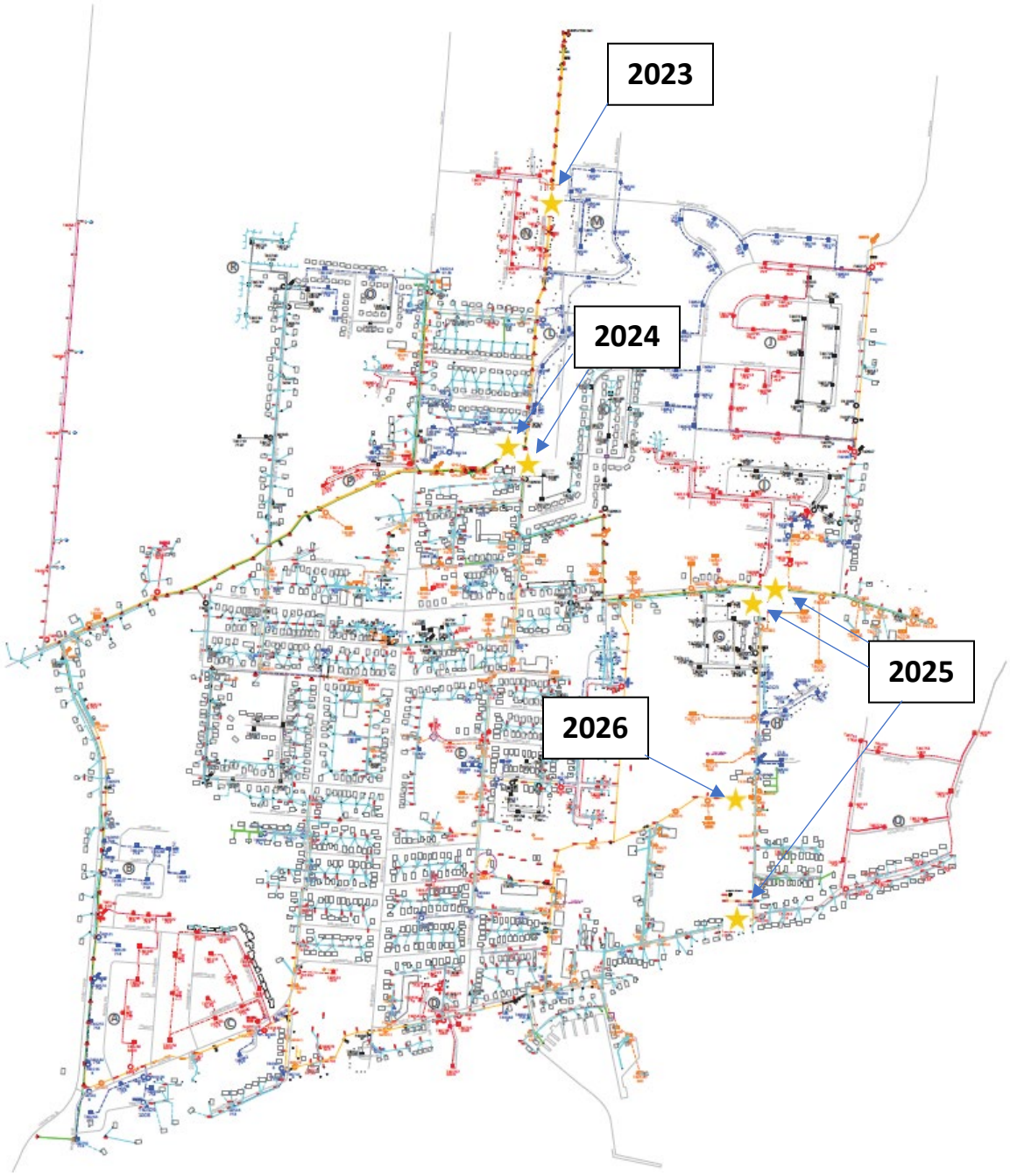


Figure 3 Kingsville Fault Indicator Locations

BELLE RIVER

The FI deployment plan for Belle River involves installing 2 new FI sets in 2023, 3 new FI sets in 2025, and 2 new FI sets in 2026 for a total of 7 FI sets. Please see Figure 4 for proposed locations, as denoted by the stars on the map.

One FI set will be installed on each leg of the bifurcation that occurs immediately downstream the Belle River PME (143M4).

Two FI sets will be installed on the main bus that runs north/south on Belle River Rd; one on St Peter St and the other on St. Charles St.

One FI set installed immediately after each riser downstream of SC9082. The final FI set will be installed on Eleventh St, immediately south of the intersection with Tecumseh Rd.

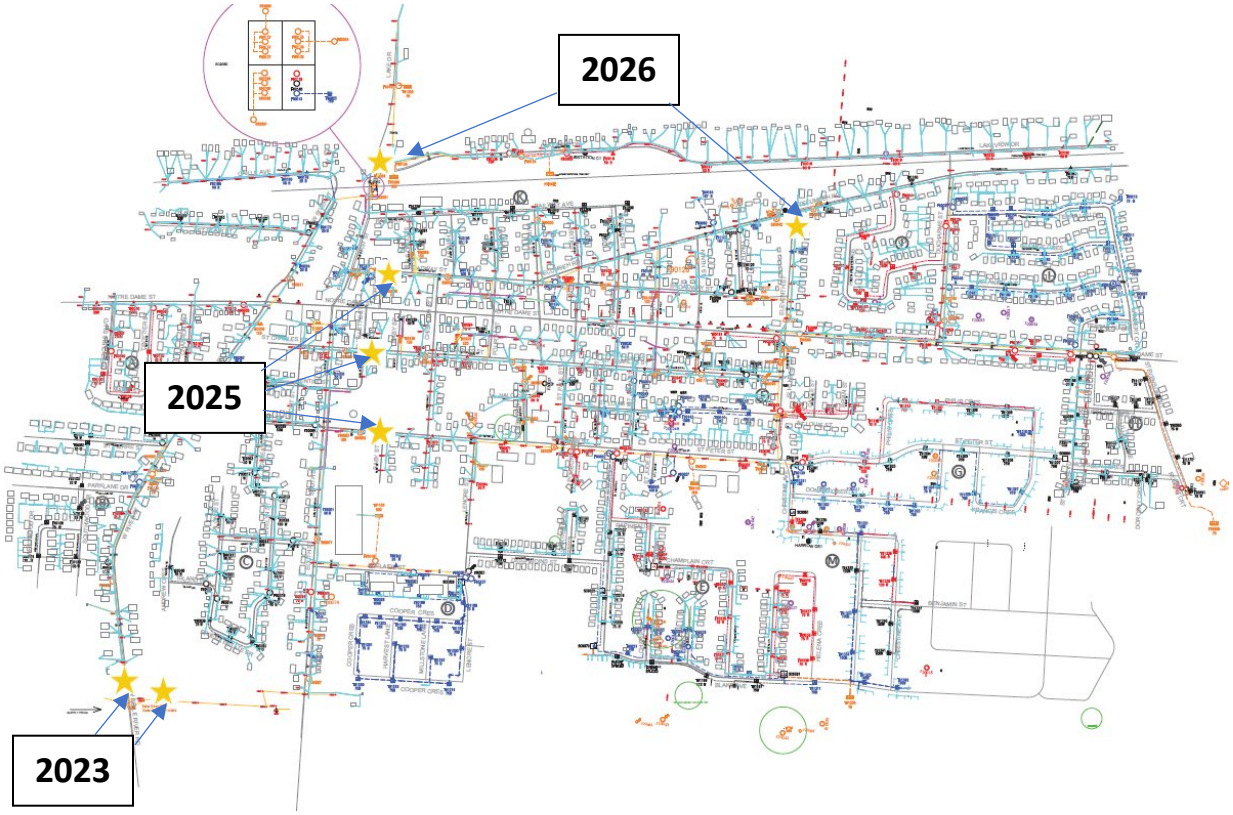


Figure 4 Belle River Fault Indicator Locations

COTTAM

The FI deployment plan for Cottam involves installing 1 new FI set in 2023, and 3 new FI sets in 2026 for a total of 4 FI sets. Please see Figure 5 for proposed locations, as denoted by the stars on the map.

One set will be located immediately upstream (or downstream) the Cottam PME (3M10). The other three sets will be located downstream each feed from the trifurcation of the feeder at the intersection of County Rd 27 W and County Rd 34.

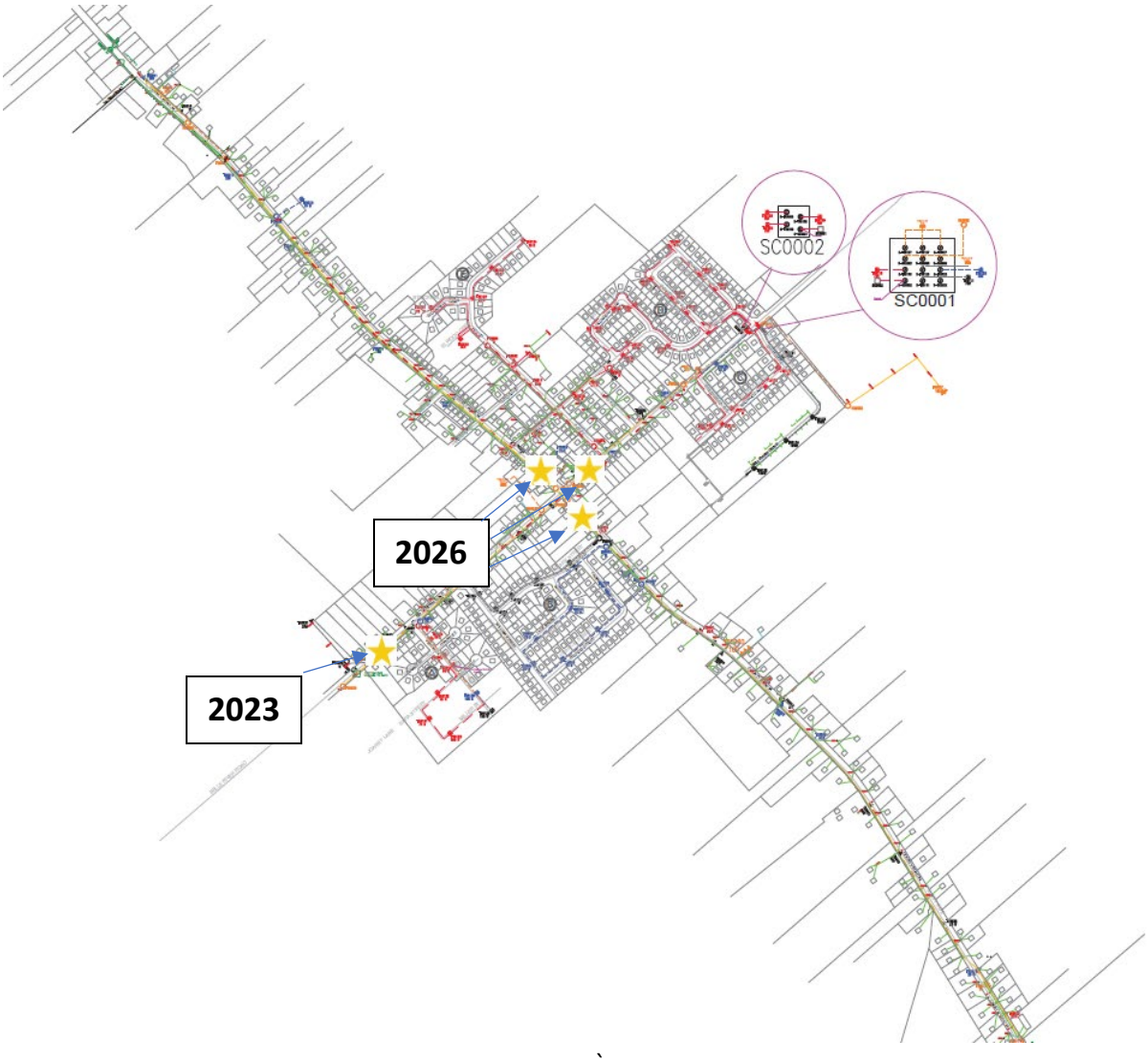


Figure 5 Cottam Fault Indicator Locations

COMBER

The FI deployment plan for Comber involves installing 1 new FI set in 2023, and 2 new FI sets in 2026 for a total of 3 FIs. Please see Figure 6 for proposed locations, as denoted by the stars on the map.

One FI set will be located immediately upstream (or downstream) the Comber PME. The remaining two sets will be located at each feed after the feeder splits at Country Rd 46 and Taylor Ave.

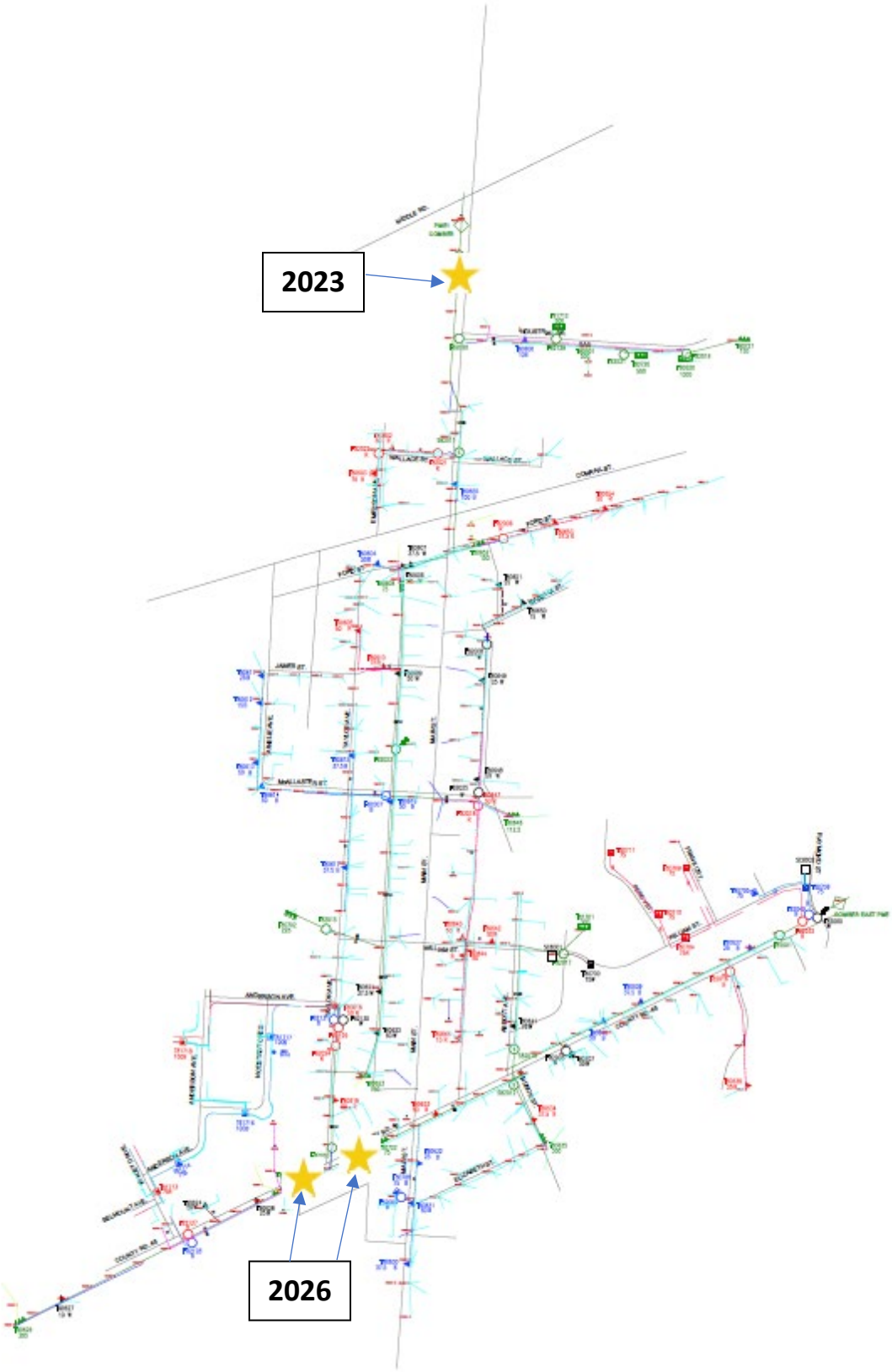


Figure 6: Comber Fault Indicator Locations

RECLOSERS

HARROW

Harrow is supplied by two separate feeders from Kingsville TS. This supply configuration would allow for a three-switch automated load restoration scheme to be implemented. One recloser installed immediately downstream of each PME, and one installed at an existing normally open tie point (S20029) will establish an effective automation scheme for Loss of Supply (LoS) events. Challenges with this deployment are:

- Significant portions of the conductor of each feeder are owned by Hydro One
- Each feeder has embedded Hydro One load downstream the E.L.K. portions of the feeders
- The 3M1 has a Hydro One recloser downstream the E.L.K. portion of the feeder
- The 3M1 has a Distribution connected windfarm downstream the E.L.K. portion of the feeder
- Coordination will be required with upstream Hydro One reclosers

Total recloser count: 3

ESSEX

Essex is supplied by two separate feeders from Lauzon TS. This supply configuration would allow for a three-switch automated load restoration scheme to be implemented. One recloser installed immediately downstream of each PME, and one installed at an existing normally open tie point (S00214) will establish an effective automation scheme for Loss of Supply (LoS) events. Challenges with this deployment are:

- Significant portions of the conductor of each feeder are owned by Hydro One
- One feeder has embedded Hydro One load downstream the E.L.K. portion of the feeder
- Embedded generation on E.L.K.'s system will need to be evaluated in terms of any feeder restrictions or transfer trip requirements
- The 56M24 has an embedded Hydro One Distribution Station that may to be considered
- Coordination will be required with upstream Hydro One reclosers

Total recloser count: 3

KINGSVILLE

As a single-supply community, Kingsville lacks an alternate supply point, which is a requirement for an automated load transfer system. Establishing a second supply point from Hydro One will be a requirement prior to implementation of this project. Once a second supply point is available, a three-switch automated load restoration scheme could be implemented. One recloser installed immediately downstream of each PME and one additional recloser at the tie point would establish an effective automation scheme to reduce loss of supply events. Challenges with this deployment are:

- Availability of a second supply
- Coordination with upstream Hydro One protective devices

Total recloser count: 3

BELLE RIVER

As a single-supply community, Belle River lacks an alternate supply point, which is a requirement for an automated load transfer system. Establishing a second supply point from Hydro One will be a requirement prior to implementation of this project. Once a second supply point is available, a three-switch automated load restoration scheme could be implemented. One recloser installed immediately downstream of each PME and one additional recloser at the tie point would establish an effective automation scheme to reduce loss of supply events. Challenges with this deployment are:

- Availability of a second supply
- Coordination with upstream Hydro One protective devices

Total recloser count: 3

RECOMMENDATION

The towns of Essex and Harrow both have favorable supply configurations (i.e. dual feed) for an auto-restoration recloser deployment and should be the initial deployment sites. The next step for site selection is to examine the reliability metrics from all four communities to determine which areas are greater impacted by loss of supply events which could be mitigated by the recloser deployment. The town which would see the greater improvement in customer experienced reliability should be the first deployment location. In the event data is unavailable or shows no significant difference, Essex would be the recommended site to deploy first, as there is a larger customer count and there are fewer items to coordinate with Hydro One. Securing additional supply points for the single-fed communities of Belle River and Kingsville will require coordination with Hydro One and is a critical first step towards grid automation in these areas.

E.L.K. Energy

Answer to Interrogatory from

Vulnerable Energy Consumers Coalition

Interrogatory VECC-11

Ref: Appendix B p. 8 E.L.K.'s Fleet Replacement Program considers annual vehicle test results including stress/electrical testing.

Question:

Please discuss if any significant work and investment has been required in the previous years (2018 to 2023) as a result of this testing.

Response:

E.L.K. Energy has reviewed annual vehicle expenses and identified third party fleet investments that arose from testing beyond typical in-house maintenance conducted by staff. These amounts are listed in the table below:

Vehicle	Date	Amount	Description of work
400-46A	May 2021	$30,510	• Remove Body And Boom • Fabricate New Subframe • Weld Unit Back to Subframe • Reinstall Body, Hoses, Wiring • Fabricate New Floor and Paint • Load Testing/Stability Testing
834-9HX	Feb 2021	$7,238	• On Steer Axle • On Drive Axle • Refurbished Bucket
200-42A	Jun 2019	$6,389	• Repair Subframe • Clean Excess Rust • Patch Rusted Holes • Rust Proofing
428-8HK	May 2020	$4,377.99	• On Steet Axle • Kings Pin • Rear Axle • Lights
834-9HK	Oct 2020	$4,182.76	• Air lead during braking • On Steer Axle • Replaced Spring Assembly • Replace Separator Filter

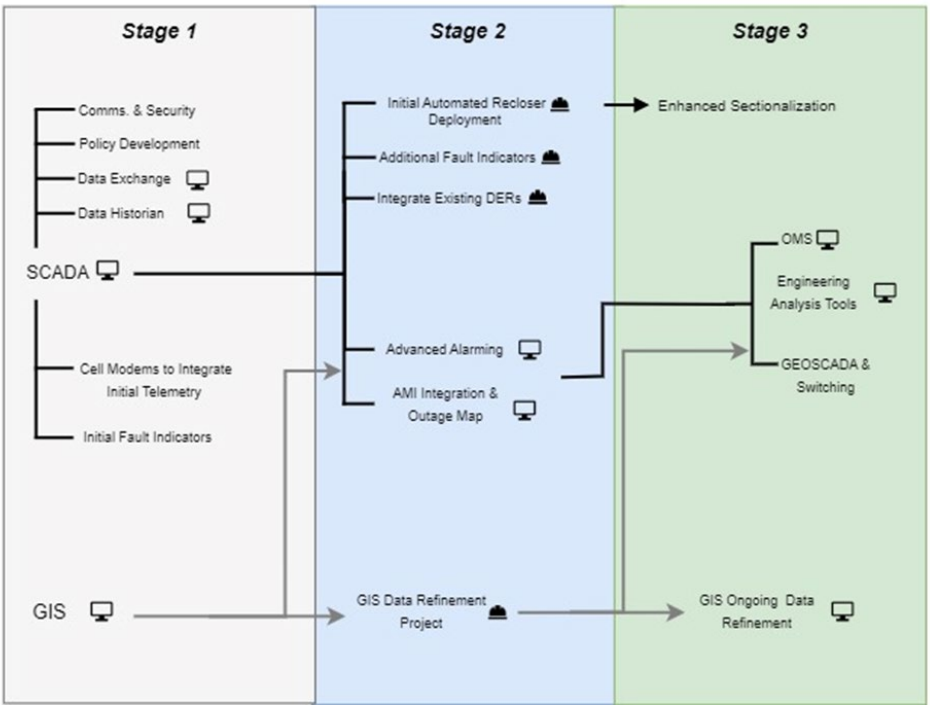
E.L.K. Energy

Answer to Interrogatory from

Vulnerable Energy Consumers Coalition

Interrogatory VECC-12

Ref: Appendix B p. 17 Figure 5 provides a schematic of E.L.K.'s Energy Grid Modernization Roadmap.



Questions:
a) Please provide the start and end dates of each Stage.

b) Please summarize E.L.K.'s plan to install additional recloser switches as part of the Roadmap and the need for a future ICM.

c) Please provide the number of planned fault indicators noted in the 2022 DSP to be installed each year over the period 2022 to 2026 and the corresponding investment amounts.

d) Please provide the actual Fault Indicators installed in 2022 and the latest forecast for 2023 to 2026 and the corresponding investment amounts.

e) Please discuss if E.L.K. plans to install any other equipment in addition to fault indicators and switches as part of the Roadmap.

Response:

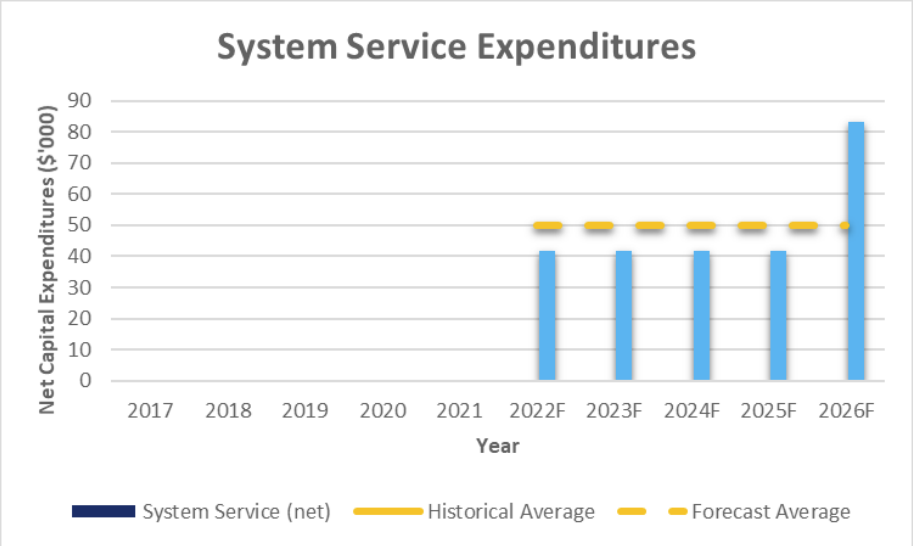
a) E.L.K Energy has a firm plan for its completion of Stage 1. Stage 2 and 3 have estimated start and end dates that are dependent on system planning, procurement of planned investments and installation being performed without issues. The following table outlines the start and end dates for each stage of E.L.K. Energy's Grid Modernization Plan:

Stage	Actual/Estimated Start Date	Actual / Estimated End Date
1	Q1, 2023	Q3, 2023
2	Q2, 2024	Q2, 2025
3	Q3, 2025	TBD

b) Please see Appendix A of E.L.K. Energy's Smart Grid Plan which can be found in Attachment A of the response to VECC-10 part c, and the response to Staff-10.

c) The 2022 Distribution System Plan ("DSP") noted the following investment in fault circuit indicators:

"E.L.K. forecasts deploying ten sets of fault circuit indicators per year starting with a test year in Kingsville service territory, with 20 sets being installed across two service areas in 2026[1]."



[2]

[1] EB-2021-0016 Exhibit 2, Tab 4, Attachment 1, Page 88 of 527
[2] EB-2021-0016 Exhibit 2, Tab 4, Attachment 1, Page 94 of 527

d) E.L.K. Energy installed 6 fault circuit indicator devices in-service in 2022. The following table details the current schedule to install fault indicator units as per E.L.K Energy's Smart Grid Plan:

Community	**2022A**	**2023F**	**2024F**	**2025F**	**2026F**
Harrow	6	2	3	0	0
Essex		2	3	2	0
Kingsville		1	2	3	1
Belle River		2	0	3	2
Cottam		1	0	0	3
Comber		1	0	0	2

e) Fault indicators and switches form the backbone of the current Smart Grid Plan. However, E.L.K. Energy is committed to re-evaluating its Smart Grid Plan investments and based on new technologies as they become available. Accordingly, E.L.K. Energy may deploy additional equipment as needs or opportunities arise.

E.L.K. Energy

Answer to Interrogatory from

Vulnerable Energy Consumers Coalition

Interrogatory VECC-13

Ref: Appendix B p. 19

E.L.K. has received a firm quote of $485,024 for both the purchase and installation of the switches.

Question:

Please define "firm". Can customers expect that this will be the final cost? If not, please explain.

Response:

E.L.K. Energy can confirm the $485,024 is the final cost to the supplier for the purchase and installation of the switches. The definition of firm is that the price received from the supplier will not change.

E.L.K. Energy

Answer to Interrogatory from

Vulnerable Energy Consumers Coalition

Interrogatory VECC-14

Ref: Appendix B p. 24 Table 5 provides the total E.L.K. Customer Hours Loss of Supply for the years 2018 to 2022.

Question:

Please provide the total E.L.K. Customer Hours of interruption from all causes for the years 2018 to 2022.

Response:

The following is a list of the total E.L.K. Energy Customer Hours of Interruption for all causes for each of the years 2018 to 2022

2018: 35,254 Hours
2019: 32,152 Hours
2020: 71,744 Hours
2021: 35,702 Hours
2022: 76,235 Hours
2023: E.L.K. Energy is still processing data to finalize its 2023 SAIDI/SAIFI performance metrics.

E.L.K. Energy

Answer to Interrogatory from

Vulnerable Energy Consumers Coalition

Interrogatory VECC-15

Ref: Appendix B p. 33 E.L.K. provides the ICM bill impacts in Table 9.

Question:
Please provide the bill impacts separately for each ICM project.

Response:

Please see below bill impacts by rate class specific to the Bucket Truck ICM Project, inclusive of the 200-42 and 400-46 models:

2x Truck ICM Rate Rider Bill Impacts	Distribution Bill	Total Bill	ICM Rider Revenue	Distribution Impact	Total Impact
RESIDENTIAL	$ 19.73	$ 117.48	$ 0.51	2.58%	0.43%
GENERAL SERVICE LESS THAN 50 kW	$ 32.51	$ 285.70	$ 0.90	2.77%	0.32%
GENERAL SERVICE 50 TO 4,999 KW	$ 545.26	$ 12,491.98	$ 14.19	2.60%	0.11%
UNMETERED SCATTERED LOAD	$ 9.28	$ 91.58	$ 0.27	2.86%	0.29%
SENTINEL LIGHTING	$ 16.17	$ 124.85	$ 0.42	2.63%	0.34%
STREET LIGHTING	$ 1,098.58	$ 3,578.30	$ 27.23	2.48%	0.76%
EMBEDDED DISTRIBUTOR	$ 1,545.57	$ 107,970.18	$ 40.25	2.60%	0.04%

Please see below bill impacts by rate class specific to the Recloser Switches ICM Project:

ICM Rate Rider Bill Impacts	Distribution Bill	Total Bill	ICM Rider Revenue	Distribution Impact	Total Impact
RESIDENTIAL	$ 19.73	$ 117.48	$ 0.18	0.91%	0.15%
GENERAL SERVICE LESS THAN 50 kW	$ 32.51	$ 285.70	$ 0.38	1.17%	0.13%
GENERAL SERVICE 50 TO 4,999 KW	$ 545.26	$ 12,491.98	$ 5.05	0.93%	0.04%
UNMETERED SCATTERED LOAD	$ 9.28	$ 91.58	$ 0.07	0.75%	0.08%
SENTINEL LIGHTING	$ 16.17	$ 124.85	$ 0.15	0.90%	0.12%
STREET LIGHTING	$ 1,098.58	$ 3,578.30	$ 9.38	0.85%	0.26%
EMBEDDED DISTRIBUTOR	$ 1,545.57	$ 107,970.18	$ 14.31	0.93%	0.01%

E.L.K. Energy

Answer to Interrogatory from

Vulnerable Energy Consumers Coalition

Interrogatory VECC-16

Ref: Appendix B p. 34 E.L.K. provides its capital forecast 2023 to 2026 including ICM projects.

Question:

Please identify base capital spending and asset quantities related to the installation of recloser switches for each of the years 2023 to 2026.

Response:

Please refer to Smart Grid Plan, E.L.K. Grid Modernization – Appendix A, Recloser Switches Stage 2 and Stage 3 for a description of E.L.K. Energy's planned recloser switch capital spending, asset quantities and project approach. For reference, the table below summarizes the annual forecasts for 2023 to 2026

Year	Forecasted Quantity of Recloser Switch Installations
2023	None
2024	6 Reclosers
2025	6 Reclosers – please see Staff-10(d) for steps required in advance of this investment
2026	4 Reclosers – please see Staff-10(d) for steps required in advance of this investment

E.L.K. Energy

Answer to Interrogatory from

Vulnerable Energy Consumers Coalition

Interrogatory VECC-17

Ref: Appendix B p. 35

Question:

Please explain the drivers of the variance in 2024 related to System Access.

Response:

As noted in the Application at Appendix B page 35, the primary driver of variance between the 2024 Forecast and 2022 Distribution System Plan ("DSP") System Access spending is an increase in customer growth, driven by subdivision and commercial connections, as well as cost increases related to the procurement of the assets required to connect these customers.

With respect to the System Access forecasts relating to subdivision and commercial connections, E.L.K. Energy reviewed the past Offer to Connects for subdivisions and commercial connections and determined that based on the economic evaluation, the capital contribution for subdivisions and commercial connection is approximately 50.5%. For 2023, the subdivisions were $1.155M and 50.5% of that came to $583,275. The 2024 forecast applied an inflation factor of 6% to the 2023 estimate (i.e. total is $1.224M) and applied the historical average of 50.5% for capital contributions (i.e. capital contribution of $618,272).