Elexicon Energy Inc.

Answer to Interrogatory from

School Energy Coalition

Interrogatory SEC-01:

Please provide a copy of all material provided to the Applicant's Board of Directors regarding the proposed ICM for the Whitby Smart Grid (WSG) project.

Response:

Please see Attachment 1 to this response for Management's update to its Board of Directors on June 14, 2022.

Please see Attachment 2 to this response for Management's September 27, 2022 report to its Board of Directors that included the presentation made to Whitby Town Council.

SEC – 1

Attachment 1

Board Meeting

Date of Report	June 6, 2022
Submitted by	Indy J. Butany-DeSouza, President & Chief Executive Officer
Subject	CEO Report
Meeting Date	June 14, 2022

Action Request:

☐ Recommend/Approve ☒ For Discussion ☐ For Information Only

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`Whitby Smart Grid, North Brooklin ICM Application and OEB Sandbox

Management has been in discussions with the Brooklin Landowners Group Inc. ("BLGI") regarding the extension of its infrastructure from Whitby Transformer Station to a demarcation point in Whitby that is on Ashburn Road north of Columbus Road West (the "Extension"). BLGI has requested that Elexicon seek an exemption from the Distribution System Code ("DSC") requirement that BLGI pay for the cost of the Extension, which is estimated to be approximately $28M.

With the support of BLGI, Elexicon is exploring an innovative approach to meeting the electricity supply needs in the Whitby, Ajax and Pickering service areas over the next 20 years: the Whitby Smart Grid and Sustainable Brooklin (the "Projects"). The Projects will invest capital in grid modernization technologies throughout Whitby (approximately $50M over 2.5 years), provide BLGI with a DSC-exempt Extension (approximately $28M), and have BLGI build Distributed Energy Resource (DER) 'roughed-in' homes as a first tranche of the Whitby Smart Grid (estimated at approximately $2,000 investment per home).

In this context, Elexicon is preparing a proposal to submit to the OEB's Innovation Sandbox, an OEB management group whose sole purpose is to engage in informal discussions with its regulated entities to explore innovative energy solutions. This proposal would involve modernizing the grid in the Whitby Hydro service area to accommodate high levels of DER integration. The Projects would involve the integration of voltage optimization ("VVO"), switched capacitor banks, fault location isolation and service restoration ("FLISR"), and communicating faulted circuit indicators ("CFCI"). It would also allow the creation of a local (distribution level) energy and capacity market to create financial incentives for cost effective DER integration. In return, BLGI will ensure that the homes in north Brooklin are all built with standard rough-ins for rooftop solar, battery storage and EV charging – equipping customers with a cost effective option to participate in the DER market if desired.

If the proposal receives OEB approval for Incremental Capital Module ("ICM") funding, a rate rider would be applied for the Whitby Rate Zone until the next rebasing. In the absence of ICM approval, Elexicon would not proceed with the Projects and the BLGI would have to pay for the Extension.

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SEC – 1

Attachment 2

Board Meeting

Date of Report	September 16, 2022
Submitted by	Indrani J. Butany-DeSouza, President & Chief Executive Officer
Subject	CEO Report
Meeting Date	September 27, 2022

Action Request:

☐ Recommend/Approve ☒ For Discussion ☐ For Information Only

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Other Business:

- **Presentation to Whitby Council of the Incremental Rate Application with the Ontario Energy Board**

Following a request by the Mayor of Whitby, on July 11, 2022, Elexicon made a presentation to Whitby Council (the "Council") to get support for the Incremental Rate Application ("ICM") application to the Ontario Energy Board ("OEB") for the Whitby Smart Grid and Sustainable Brooklin projects. The presentation was well received, and Council endorsed the ICM application to the OEB.

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Elexicon Energy Inc.

Answer to Interrogatory from

School Energy Coalition

Interrogatory SEC-02:

Please provide a copy of any internal business cases for the proposed WSG project, if different from the business case filed with the Application.

Response:

The Business Case filed as Appendix B-1 is the only business case for the proposed WSG project.

Elexicon Energy Inc.

Answer to Interrogatory from

School Energy Coalition

Interrogatory SEC-03:

Please provide any information used by the Applicant in benchmarking the costs for the WSG project, or advise that no benchmarking was carried out.

Response:

Elexicon has not identified a substantive record of similar projects against which to benchmark its Whitby Smart Grid project In Ontario there has only been one proposal similar to the Whitby Smart Grid that has been reviewed by the OEB, and approved. Elexicon has incorporated engineering details from the one similar Ontario project it found, which is PUC Distribution's Sault Smart Grid project[1]. With respect to the costs for the WSG, Elexicon has developed a more accurate Class 4 estimate for the non-ADMS component of the WSG and a Class 5 estimate for the ADMS component.

Elexicon provides the following high level comparison of the Whitby Smart Grid costs to PUC Distribution's Sault Smart Grid costs. The table below identifies like assets for each Smart Grid, costs provided on the public record, and Elexicon's supporting commentary.

While there are differences in the mix of assets proposed in both Smart Grids, the data in the table provides an understanding of the costs for like assets proposed in each of the projects.

Table 1 – Comparison of Costing between the Whitby Smart Grid and PUC Distribution Sault Smart Grid Projects

[1] EB-2020-0249/EB-2018-0219

Elexicon Whitby Smart Grid Asset and Cost Summary				PUC Distribution Smart Grid Asset and Cost Summary				Elexicon Assessment/Commentary
Asset Type	**Units**	**Projected Costs ($)**	**Average Cost (S)**	**Asset Type**	**Units**	**Projected Costs ($)**	**Average Cost (S)**	
Automated Switches	144	$18,360,000	$127,500	Automated Switches and Poles	60	$ 10,899,462	$181,658	Elexicon has chosen switches which are a lower cost compared with reclosers
Capacitors	46	$2,850,000	$61,957	Capacitors	6	$ 255,802	$42,634	Elexicon has assumed a pole every cap bank
Voltage Regulators	46	$7,910,000	$171,957	Voltage Regulators	50	$ 5,649,600	$112,992	Elecixon has assumed a pole every regulator
Major Equip Field Commissioning	236	$590,000	$2,500	Major Equip Field Commissioning			-	
Communicating Faulted Circuit Interrupters	138	$830,000	$6,014	Communicating Faulted Circuit Interrupters	80	$ 139,192	$1,740	Elexicon has chosen interrupters that are 3 phase. The variance may be attributed to PUC Distribution selecting single phase.
Voltages Sensor	138	$1,930,000	$13,986	AMI system		$ 2,013,446	-	Assets not comparable
Radio HeadEnd	8	$280,000	$35,000	Radio HeadEnd			-	
Routers and Leased Line	8	$800,000	$100,000	Routers and Leased Line			-	
Minor Equip Field Commissioning	292	$230,000	$788	Minor Equip Field Commissioning			-	
				DA additional poles	120	$ 1,420,456	$11,837	Elexicon has these costs included in its list of assets.

Elexicon Energy Inc.

Answer to Interrogatory from

School Energy Coalition

Interrogatory SEC-04:

Elexicon indicated it will be filing an application by October 12, 2022 for a Z-factor claim related to the May 21st storm.

a) Please provide an estimate of the capital and OM&A associated with such a Z-factor claim for each of the two rate zones and bill impacts

b) Does Elexicon anticipate that any rate riders approved as part of the Z-factor application will be effective January 1, 2023?

Response:

a) Elexicon is still cataloging the OM&A and capital costs associated with its Z-factor claim, and at this time unable to provide an estimate or associated bill impacts.

b) Elexicon plans to file for Z-Factor rate riders effective May 1, 2023.

Elexicon Energy Inc.

Answer to Interrogatory from

School Energy Coalition

Interrogatory SEC-05:

Elexicon states that a proxy for its OEB approved ROE is 9.43% and its 2021 ROE was 6.87%. What is Elexicon's forecast for its 2022 ROE?

Response:

For clarity, Elexicon's proxy as noted in the question above references the OEB's 2023 Filing Requirements, which identifies a distributor must file its most recent calculation of its regulated return at the time of the applicable Price Cap IR application in which funding for the project, and recovery through rate riders, would commence. Elexicon has filed its 2021 regulated ROE in this application[1] in support of this requirement.

Elexicon's forecast for its regulated 2022 ROE at this time is expected to be below the OEB Deemed ROE, and fall within the OEB's 300 basis points ROE deadband.

[1] Section 3.2.9 of the Application

Elexicon Energy Inc.

Answer to Interrogatory from

School Energy Coalition

Interrogatory SEC-06:

Appendix B page 6 #1 states that Elexicon is seeking relief for 'ICM funding of $43.171MM' for the WSG …'in the Whitby Rate Zone (WRZ)'. Please confirm that:

a) The stated $43.171MM includes the $6.431MM for the Veridian Rate Zone (VRZ).

b) The revenue requirement related to the $36,739k for the WRZ of $4,120k, when added to the revenue requirement for the Veridian portion of the WSG $1,538k plus the revenue requirement for Sustainable Brooklin (SB) of $2,161k represents a 10% increase in Elexicon's distribution revenue, based on Elexicon's 2020 revenue of $78,644,638, as reported in the OEB's 2020 Yearbook.

Response:

a) Confirmed

b) Elexicon confirms that compared to 2020 revenue, the revenue requirement related to the Whitby Smart Grid and Sustainable Brooklin projects is an approximate increase of 10%. Elexicon notes that its 2021 revenue reported in the OEB's 2021 Yearbook is $81MM which equates to a less than 10% increase in Elexicon's distribution revenue; a proportion which is anticipated to decline as revenues increase from 2023 to 2025 when the Whitby Smart Grid and Sustainable Brooklin Projects will be placed into service. Not incorporated into a revenue requirement comparison as made above are savings associated with reduced energy consumption, and the economic value of improved reliability (i.e., value of lost load).

   Please see Appendix B-1 - Whitby Smart Grid Business Case, Page 9 of 67 for details on the benefits that each grid segment will provide and bring to the Whitby Smart Grid. Of note, Elexicon expects customers to benefit from the interim completion of grid segments that will leverage the Volt-Var Optimization and Fault Location Isolation and Service Restoration technologies being deployed, prior to rate riders being implemented to collect revenues from customers.

Elexicon Energy Inc.

Answer to Interrogatory from

School Energy Coalition

Interrogatory SEC-07:

Elexicon refers to the OEB's April 28, 2022 letter and the OEB's intent to provide a bulletin informing communities that they have a choice to opt for a premium solution (DERs) and the related cost responsibility.

a) How has Elexicon taken this into consideration in preparing its application, i.e. how has Elexicon ensured that the specific community that opts for DERs made possible by the WSG will bear the cost responsibility?

b) What percentage of the Whitby customers will benefit from the expanded ability to install DERs once the WSG project is complete?

c) Specifically which areas of Whitby will benefit from the expanded ability to install DERs?

Response:

a) As is detailed in the Application, Elexicon is not proposing a premium solution, but is rather seeking to facilitate the most cost effective solution to meet the long-term needs of customers in the Town of Whitby. Both the Whitby Smart Grid ("WSG") and Sustainable Brooklin ("SB") projects (collectively, the "Projects") directly impact customers in the Town of Whitby. The Projects are forecasted to improve system reliability, conserve energy (thereby reducing total bill impacts), reduce losses, while also facilitating increased DER penetration in an effort to avoid a future costly capacity upgrade. In this context, Elexicon ensured that the community of Whitby's considerations were taken into account by presenting its proposals including the cost responsibility to the Whitby Town Council and seeking a vote of approval. Please see Elexicon's response to SEC-11 for the presentation it delivered at the Whitby Town Council meeting, and its response to CCMBC-11 part c for the minutes of the Town Council meeting where the Council unanimously approved both ICM projects.

b) Once the WSG project is placed in-service in 2025, all Whitby rate zone customers will receive the benefit of a distribution system equipped to accommodate significantly higher levels of DERs.

c) See b) above.

Elexicon Energy Inc.

Answer to Interrogatory from

School Energy Coalition

Interrogatory SEC-08:

Elexicon states that through the implementation of the WSG project and SB, it will then be able to determine if spending on traditional infrastructure to address capacity issues can be avoided or deferred. The two ICM projects represent a significant cost to Elexicon customers and should they not result in Elexicon being able to avoid or defer infrastructure investment Elexicon customers will also bear that cost responsibility.

a) What is the estimated cost of the traditional infrastructure Elexicon would be required to build to relieve the identified capacity issues on the 44 kV and 27.6 kV systems?

b) What would be the savings to the customer if this infrastructure could be:

i. Avoided completely

ii. Deferred by 1, 3 and 5 years

Response:

a) See Elexicon Energy's response to Staff-19 part d.

b)

i) If there was sufficient firm capacity to meet future demand with the existing physical infrastructure, the full cost described in STAFF-19 part d would be avoided.

ii) Table 1 below represents the net present value ("NPV") of the cost savings depends on the discount rate of future cash flows, which has been modelled at 3%, 5%, and 8% as a sensitivity analysis. Table 1 summarizes the NPV of the expected cost savings for varying discount rates and deferral periods.

Table 1 NPV of Cost Savings

Discount Rate	**Deferral Period**	**NPV of Expected Cost Savings ($ millions)**
3%	1 Year	0.39
3%	3 Years	1.15
3%	5 Years	1.90
5%	1 Year	1.14
5%	3 Years	3.33
5%	5 Years	5.40
8%	1 Year	2.22
8%	3 Years	6.30
8%	5 Years	9.94

Elexicon Energy Inc.

Answer to Interrogatory from

School Energy Coalition

Interrogatory SEC-09:

With respect to the NRCan funding, Elexicon states that it has 'secured approximately $4 million in NRCan funding to deploy an ADMS' and the agreement expires in 2025.

a) What other conditions has NRCan included in its funding agreement?

b) Has Elexicon discussed with NRCan the possibility of extending this agreement?

c) If the funding is to deploy an ADMS then has Elexicon considered doing this portion of the work first and then installing the hardware? If not, why not?

Response:

a) Please see Elexicon Energy's response to STAFF-9, which includes a copy of the NRCan Contribution Agreement.

b) No. Elexicon's project schedule falls within the dates required by the agreement. However, as noted at page 25 of Appendix B-1 of the Application, Elexicon has been engaged with NRCan to seek further funding.

c) Yes. Elexicon has already started implementing both the hardware and software portions of the ADMS project. The immediate benefits to customers realized through additional hardware installations (i.e. VVO and FLISR) are significant. Given VVO and FLISR will be facilitated by the ADMS, the expedient deployment of these technologies will also maximize the value of the ADMS investment for customers.

Elexicon Energy Inc.

Answer to Interrogatory from

School Energy Coalition

Interrogatory SEC-10:

Elexicon indicates that the WSG is just one project that makes up the Grid of the Future. One of these other projects that Elexicon has identified is the DER Incentive Program.

a) Is Elexicon planning for further increases to all customers related to the DER Incentive Program? If so, what is the estimate of the cost?

b) Does Elexicon envision further ICM projects related to the Grid of the Future before it rebases in 2029? If so, please describe and provide an estimated cost.

Response:

a) Elexicon's DER Enabling Program is expected to be a combination of non-ratepayer funding and funding eligible under the OEB's Conservation and Demand Management Guidelines for Electricity Distributors (EB-2021-0106). Elexicon's primary focus is to source non-ratepayer funding to support Whitby Rate Zone ("WRZ") customers installation of DER's and EV charging stations. As identified in its application, Elexicon will proceed with development of its DER Enabling Program services and costs only after receipt of OEB approval for the Whitby Smart Grid project.

b) Elexicon has not made a determination of any future ICM projects related to its Grid of the Future at this time. Elexicon is focused on supporting its Whitby Smart Grid and Sustainable Brooklin projects through the regulatory proceeding, and, if these are approved, it will commence its development and filing of a DER Enabling Program in 2023.

Elexicon Energy Inc.

Answer to Interrogatory from

School Energy Coalition

Interrogatory SEC-11:

Please provide a copy of the presentation to Whitby Town Council with respect to the scope, drivers, needs, benefits, cost and anticipated bill impacts to customers for the WSG project.

Response:

Please see Attachment 1 to this interrogatory response.

SEC – 11

Attachment 1

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ICM Application Update:

Whitby Smart Grid & Sustainable Brooklin

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ICM Application: Vision & Scope

- Project is first step in implementation of **Elexicon's Grid of the Future**
  - **Enable Net-Zero homes & implement base elements to support climate change goals**
- Implementing known and available innovation technologies with well understood customer and system benefits to support Grid of the Future
- **Whitby Smart Grid**:
  - Volt-VAR Optimization (VVO), Fault Monitoring and Distribution Automation (FLISR), Advanced Distribution Management System (ADMS)
- **Sustainable Brooklin:**
  - **Approximately 10,000 new homes over 20 years in North Brooklin encouraged to adopt DERs** as 1st tranche of Whitby Smart Grid
  - Developer group committing ~$2,260 per home to rough-in homes for Distributed Energy Resources (DERs) and EV adoption
  - **Seek OEB approval of exemption from developer group capital contributions** relating to the $26 million cost to build extension of grid to North Brooklin (specifically, exemption applicable to Section 3.2 of Distribution System Code (DSC))
- Long term establishment of Local Electricity Market

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ICM Application: Whitby Smart Grid

- Benefits
  - VVO can be operated to drive energy/capacity conservation benefits across distribution system
    - **Approx. ~2% to 5% - help to reduce all ratepayers' total bill**
    - Reduce Greenhouse Gas (GHG) reductions through energy conservations – Net-Zero
  - FLISR will improve system reliability
    - Helps Elexicon identify issues (e.g., outages, tree contacts) more quickly
    - **Allows Elexicon to respond to issues more efficiently** (e.g., by isolating the affected segment of line & rapidly restoring power to all other customers)
  - ADMS
    - This is the "brains" – the control hardware and software that Elexicon uses to deliver benefits from VVO and FLISR
- Modelled on the OEB approved Sault Ste. Marie Smart Grid project
  https://saultstemarie.ca/Newsroom/May-2021/Smart-Grid.aspx

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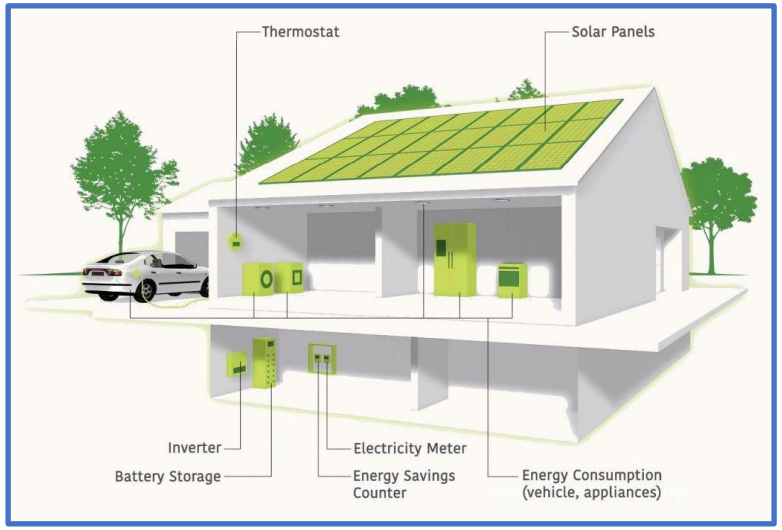
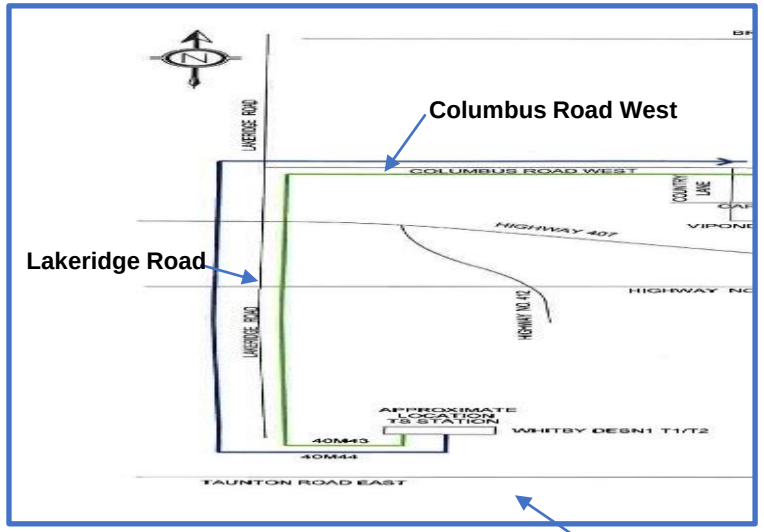
DRAFT – CONFIDENTIAL

ICM Application: Sustainable Brooklin

Developers pay for DER rough-ins:



In return, Whitby ratepayers would pay for "Extension Cord":



- Grid extension to North Brooklin cost ~ $26.3M
- Developer commitment (EV & solar, batteries rough ins) ~$19.9M - $30M
  - Cost varies based on rough-in cost of just over $2K per, times # of units
  - Cost varies based on impact of inflation on current cost estimates

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ICM Application: Project Financials*

Project	Asset Grouping	Cost Estimate ($ Million) (Class 5)	Estimated Total Bill Increase ($/month)
Whitby Smart Grid	VVO (CVR System)	$16.2	$2.59
	FLISR (& CFCI)	$16.0	
	ADMS (NRCan 50% funded)**	$4.0	
	Project Support Costs	$7.4	
	Sub-Total	$43.6	
Sustainable Brooklin	Extension of Grid to North Brooklin	$26.3	$2.60
	Total	$79.9	$5.19

Notes: (Estimates as of June 15, 2022)
***: Costs net of benefits to be recovered from Whitby ratepayers**
****: NRCan funding $4.0 million of $8.0 million project budget**

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ICM Application: Bill Impacts

- Estimate average Whitby customer's total bill is approx. $126/month
- Normal OEB formulaic inflationary increase anticipated to increase rates by $3.83/month in 2023
- Incremental Capital Module (ICM) increases are in addition, and vary based on scope and conservation assumptions*:
  - Sustainable Brooklin + Whitby Smart Grid** ~ $5.19 / month
  - Whitby Smart Grid (Full scope)** ~ $2.59 / month
  - **Whitby Smart Grid (No FLISR)** ~ $0.39 / month**
- Opportunity to further reduce bill impacts by getting more federal funding from NRCan will be pursued under all scenarios

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Notes:
***: Conservation assumptions still being modelled and finalized as of June 15, 2022**
****: Conservation assumption of 2.5% savings used for Sustainable Brooklin + Whitby Smart Grid, Whitby Smart Grid (Full Scope), and 3.0% savings used in calculation of Whitby Smart Grid (No FLISR)**

ICM Application: Summary

- **Elexicon Grid of the Future**:
  - Implement plans and technologies to address 2040 climate change goals, and enable transformation for customer adoption of DERs and construction of Net-Zero homes
- **Whitby Smart Grid**:
  - Technologies of VVO, FLISR and ADMS are proven, verifiable and have been implemented in multiple North American jurisdictions
  - Chosen technologies will deliver benefits (i.e., savings) that have being accepted by multiple North American energy regulators
- **Sustainable Brooklin**
  - Cost consequence of capital contribution exemption is substantially matched by developer contributions to rough-in new homes for DERs
  - “Extension cord” is the most cost effective solution to bring new capacity to North Brooklin
  - Alternative of building a Transformer Station does not address transformational environment (i.e., addressing climate change) and is not in IESO or Hydro One Regional planning outlook

elexicon

Elexicon Energy Inc.

Answer to Interrogatory from

School Energy Coalition

Interrogatory SEC-12:

Elexicon has provided illustrative 2025 rate riders and states that it would 'update and finalize 2025 rate riders and bill impacts relating to the WSG within its 2025 IRM application.'

a) If the OEB approves the 2025 illustrative rates riders, what updates does Elexicon envision doing? E.g. would the rate riders be updated for changes in the capital cost of the project?

b) Please provide bill impacts in 2025 based on both the SB and the WSG ICMs being approved.

Response:

a) Please see Elexicon Energy's response to STAFF-3 part a.

b) Elexicon has provided bill impacts from the Sustainable Brooklin project in 2023 in Section 6.5 Bill Impacts, as well as illustrative bill impacts associated with the Whitby Smart Grid in the same reference.[1] Elexicon does not have underpinning 2025 rates with which to provide combined 2025 bill impacts. Further, it does not believe the proposed bill impacts and illustrative bill impacts across different rate years should be appropriately combined in the manner suggested above.

[1] Appendix B – Incremental Capital Module Whitby Smart Grid & Sustainable Brooklin, Page 55 of 56

Elexicon Energy Inc.

Answer to Interrogatory from

School Energy Coalition

Interrogatory SEC-13:

The 2025 Capital Forecast for the WRZ is shown as $48,582k in Table 6 and for the VRZ as $37,330k in Table 7. Elexicon filed a DSP for 2022-2026 as part of its 2022 Rate Application EB-2021-0015 which included Forecasted Capital in Table 5.4-11. Table 26 in Appendix B-1 provides Current Forecast Capital Expenditure 2022-2028 by OEB Category.

a) Has Elexicon updated its capital forecast for 2023-2026? If, so please provide an update to Table 5.4.11.

b) If the updated forecast is materially different, please provide an explanation of the changes in capital plans for each year.

c) Forecasted gross capital expenditures for 2025 in Table 5.4-11 are $38,148k. How does this number relate to the forecasts for WRZ and VRZ provided in Tables 6 & 7?

d) Is Table 26 of Appendix B-1 capital expenditures for Elexicon or only the WRZ?

e) Please reconcile the numbers in Table 26 to the DSP forecast and to those used in the materiality threshold calculation.

Response:

a) Yes, as shown in Table 6 and Table 7 cited in this interrogatory response, Elexicon has updated its capital forecast for 2023-2026 since it filed its DSP in 2026.

   Table 1 below is a correction to the pre-filed application Table 26[1]. Elexicon inadvertently inserted a previous version of the capital forecast. The material differences between the pre-filed application Table 26 and the correct capital forecast are found in the System Renewal and System Service asset categories for years 2024, 2025 and 2026. In Table 1 below, the differences in years 2024, 2025 and 2026 reflect capital projects relating to the building of Uxbridge North Substation, the relocation of Fairport Station, the rebuild of Uxbridge East Substation, and building Foster Station.

[1] Appendix B-1 - Whitby Smart Grid Business Case, Page 57 of 67

Table 1 – Elexicon Service Area Capital Forecast 2023 to 2026

OEB Category	**$'000**			
	2023	2024	2025	2026
GENERAL PLANT	$8,662	$4,365	$3,747	$4,546
SYSTEM ACCESS	$9,370	$8,683	$10,198	$11,138
SYSTEM RENEWAL	$14,727	$16,821	$30,195	$19,474
SYSTEM SERVICE	$7,808	$9,156	$5,033	$10,723
Total	**$40,568**	**$39,025**	**$49,173**	**$45,882**

b) Elexicon provides the following listing of the major drivers of changes in each year's capital plan when compared to the 2021 DSP:

2023

- The Whitby TS DESN 1 True-up, Asset Management Enhancement Solution APM/AIP and several IT projects.
- Adjustments to Road Relocation projects & Connection of New Services.
- Movement of the Water Substation project to System Access (Substation Expansion Feeder enhancement project to Mid-Block Aterial Rd, Des Newman Station upgrade).
- Movement of the remaining components of the Fairport Station Project, Voltage Conversion to a future project.
- Updates to the cost and in-service dates of the Feeder Enhancement projects (i.e. Montgomery Park, Peter Matthews) and SCADA System Upgrade.

2024

- Updated estimates to several IT projects driven by material cost increases attributed by Elexicon to supply chain and COVID-19 pressures.
- Increase to Residential development project estimates driven by new forecasted connections.
- Decrease in system renewal projects to accommodate system service projects and overall budget envelope.
- Increased the investment in FCI and other reliability driven projects based on new reliability forecasted numbers.
- Updated general service forecast based on recent analysis of the number of connections.
- Moved the Belleville voltage conversion to accommodate for cost increase to address condition-based asset replacement projects.
- Moved Port Hope voltage conversion project to 2024.
- Added a reliability-driven project James F1 GRAV-Feeder Enhancement project.

2025

- Increase to Residential development project estimates driven by new forecasted connections.
- Increased investment in system renewal projects driven by the Asset Condition Assessment and address the backlog of assets to be replaced during 2020 and 2021 COVID-19 period.
- Increased investment in system Service projects driven by reliability report and address the backlog of system improvement projects.
- Moved the communication project to the 2023 ICM (Whitby Smart Grid/ADMS).
- Moved Uxbridge Station project to a future year.

2026

- Updates to General Service requests and Residential development projects.
- Increased investment in system renewal projects driven by the Asset Condition Assessment and address the backlog of assets to be replaced.
- Moved the communication project to the 2023 ICM (Whitby Smart Grid/ADMS) and updated IT projects (Ex: Cyber security, End User HW & SW Replacement & Additions).
- Moved the voltage conversion projects to a future year.
- Increased investment in system Service projects driven by reliability report and address the backlog of system improvement projects.

c) Table 6 and 7 in Elexicon's ICM application provide the total capital forecasts for each of the Whitby and Veridian Rate Zone's inclusive of their respective portions of the Whitby Smart Grid and Sustainable Brooklin ICM projects. These capital forecast amounts reflect the changes described in part b of this response to the 2022 Electricity Distribution Rate Application (EB-2021-0015) which included Forecasted Capital in Table 5.4-11.

d) Table 26 is for Elexicon's WRZ and VRZ.

e) Please see response to part b above for the listing of major drivers of differences between Elexicon's current forecast provided in Table 1, and Table 5.4.11 of the 2021 DSP.

With respect to the requested reconciliation of Table 26 in the ICM Application and the amounts used in the materiality threshold, please see Table 2 below.

Table 2 – Variance between 2021 DSP and Updated Capital Forecast, and Reconciliation Between Updated Capital Forecast and Capital Forecast Used in Materiality Threshold Calculation

($'000)	**2023**	**2024**	**2025**	**2026**
Elexicon Service Area DSP Forecast	$35,831	$36,025	$32,673	$35,261
Elexicon Service Area Updated Forecast	$40,568	$39,025	$49,173	$45,882
Variance	$4,737	$3,000	$16,500	$10,621
Whitby Rate Zone Updated Forecast **(Note 1)**	$13,056	$8,325	$11,843	$8,430
Veridian Rate Zone Updated Forecast **(Note 1)**	$27,512	$30,700	$37,330	$37,452
Elexicon Service Area Updated Forecast	$40,568	$39,025	$49,173	$45,882
Whitby Rate Zone ICMs	$26,657		$36,739	
Veridian Rate Zone ICMs				
Updated Whitby Rate Zone Forecast (incl. ICMs) **(Note 2)**	$39,712	$8,325	$48,582	$8,430
Updated Veridian Rate Zone Forecast (incl. ICMs) **(Note 2)**	$27,512	$30,700	$37,330	$37,452

Note 1: Evidence correction of Whitby and Veridian Rate Zone Forecast

Note 2:For purpose of maximum eligible capital calculation

In Table 2 above, Elexicon has provided the underlying amounts that reconcile the updated capital forecast for both Whitby Rate Zone and Veridian Rate Zone shown in Table 1 above, with the amounts used in Tables 5, 6 and 7 of the pre-filed application[2].

[2] Appendix B – Incremental Capital Module Whitby Smart Grid & Sustainable Brooklin, Page 35 of 56

Elexicon Energy Inc.

Answer to Interrogatory from

School Energy Coalition

Interrogatory SEC-14:

Elexicon states

'With respect to the VRZ, Elexicon's forecast capital expenditures in 2025, absent the ADMS and SCADA component of the WSG, already exceeds the materiality threshold for the VRZ by over $3MM. Elexicon's VRZ ICM request relates only to the ADMS and SCADA portion of the WSG at a cost of $6.431MM, and as such Elexicon is not seeking the maximum eligible incremental capital for the VRZ in 2025. With respect to the WRZ in both 2023 and 2025, Elexicon is seeking the maximum eligible incremental capital for recovery.' Please confirm:

a) That for VRZ the 2025 Capital Forecast, absent the ADMS and SCADA, is $37,330k-$6,431k = $30,899k which exceeds the Materiality Threshold by $6,650k.

b) In 2025, for WRZ the Maximum Eligible Incremental Capital is $37,985k and Elexicon is requesting $36,739k, not the total $37,985k.

Response:

a) Confirmed.

b) Confirmed.

Elexicon Energy Inc.

Answer to Interrogatory from

School Energy Coalition

Interrogatory SEC-15:

Elexicon states that the two alternative options it identified were delaying the deployment of the WSG to 2028 or not doing the project at all.

a) Did Elexicon consider scaling back the project, e.g. installing fewer poles, switches etc.?

b) If yes, why was this option rejected?

c) If no, why not?

Response:

a) Yes. Elexicon has provided details on the alternatives it evaluated. One of the alternatives included scaling back the project. Please see section 4.1 Alternative Descriptions and Comparative Analysis, Option 2: Deployment of Whitby Smart Grid by the end of 2028, using Elexicon's existing capital expenditure allocation[1].

b) Installing fewer poles, switches, etc., would result in only a partial smart grid implementation and the objectives of the project would not be realized. This would result in all WRZ customers bearing the costs of the WSG, while only a small percentage of customers would realize the benefits.

c) Not applicable.

[1] Appendix B-1 - Whitby Smart Grid Business Case, Page 45 of 67

Elexicon Energy Inc.

Answer to Interrogatory from

School Energy Coalition

Interrogatory SEC-16:

a) Elexicon states that there will be a reduction in overhead costs as a result of the ADMS. Please explain the nature of these reductions and what is Elexicon's estimate of these reduced costs?

b) Elexicon states that there will be O&M reductions as a result of fault location isolating and service restoration (FLISR) and distribution automation (DA) due to reduced travel time. What is Elexicon's estimate of these savings?

Response:

a) The reduction in overhead costs is attributable to the avoided software maintenance and support costs resulting from replacement of Elexicon's legacy OMS with the ADMS. This will result in a savings of approximately $95,000 per year.

b) Please see Elexicon Energy's response to VECC-02.

Elexicon Energy Inc.

Answer to Interrogatory from

School Energy Coalition

Interrogatory SEC-17:

On page 10 Elexicon forecasts a reduction in SAIFI from 0.87 to 0.28 and SAIDI from 1.03 to 0.45 as a benefit of installing FLISR/DA.

On page 37 Elexicon states that it has already installed the DA component of FLISR/DA in 17 locations on 6 feeders and Table 19 indicates that SAIDI is reduced as a result of installing DA from 0.87 to 0.28 and SAIFI reduced from 1.03 to 0.45.

a) Please place Elexicon's 2021 Scorecard on the record of this proceeding.

b) Please confirm that the improvement in SAIDI and SAIFI reported on page 10 is as a result of the installation of DA as reported in Table 19.

c) Is there an additional improvement in SAIDI and SAIFI as a result of installation of FLISR or only as a result on installing DA?

d) Is Elexicon saying that system SAIDI will improve from its 2021 reported value of 1.12 to 1.12 – (0.87-0.28) = 0.53 and SAIFI from 1.17 to 0.59?

e) If not, then what improvement in Elexicon's 2021 system SAIFI and SAIDI of 1.12 and 1.17 respectively does Elexicon forecast as a result of the full installation of the WSG?

Response:

a) Please see attachment 1 to this response.

b) Confirmed, with the clarifier that the improvements noted are on a forecast basis relating to assets (i.e. FLISR) which have not been implemented. The improvement in SAIDI and SAIFI reported on page 10 is what would have been achieved had DA system been in place. These figures are not based on Elexicon's pilot of DA installation.

c) The entire benefit is as stated in Table 19. There is no differentiation between FLISR and DA. DA is the Fault Location component of FLISR.

d) No. Elexicon is stating that if the DA system had been in place for the period April 2020 to January 2020 for the Whitby Rate Zone, then these would have been the SAIDI and SAIFI improvements as a result. Basing forecast benefits on actual system and outage data is the most reasonable approach to producing an estimate of benefits. Actual benefits will be a function of

actual outages experienced. Each year is unique and different due to varying number and types of outages occurring in the territory.

e) Please see d) above.

SEC – 17

Attachment 1

Scorecard - Elexicon Energy Inc.

8/31/2022

Performance Outcomes	Performance Categories	Measures		2017	2018	2019	2020	2021	Trend	Target: Industry	Target: Distributor
Customer Focus Services are provided in a manner that responds to identified customer preferences.	**Service Quality**	New Residential/Small Business Services Connected on Time		98.00%	96.00%	96.40%	93.74%	95.97%	↓	90.00%	
		Scheduled Appointments Met On Time		100.00%	99.00%	99.74%	98.80%	99.96%	↓	90.00%	
		Telephone Calls Answered On Time		82.00%	82.00%	76.01%	61.89%	75.99%	↓	65.00%	
	Customer Satisfaction	First Contact Resolution		86.80%	87.90%	88.60%	89.30%	93.00%			
		Billing Accuracy		99.91%	99.93%	99.92%	99.60%	99.75%	↓	98.00%	
		Customer Satisfaction Survey Results		92.00%	95.00%	95.00%	97.00%	97.00%			
Operational Effectiveness Continuous improvement in productivity and cost performance is achieved; and distributors deliver on system reliability and quality objectives.	**Safety**	Level of Public Awareness		83.00%	83.00%	84.00%	84.00%	87.00%			
		Level of Compliance with Ontario Regulation 22/04 [1]		C	C	C	C	C	→		C
		Serious Electrical Incident Index	Number of General Public Incidents	1	2	0	0	0	↓		1
			Rate per 10, 100, 1000 km of line	0.273	0.535	0.000	0.000	0.000	→		0.155
	System Reliability	Average Number of Hours that Power to a Customer is Interrupted [2]		0.98	1.32	1.34	1.37	1.17	↑		1.35
		Average Number of Times that Power to a Customer is Interrupted [2]		1.11	1.16	1.05	1.01	1.12	↓		1.69
	Asset Management	Distribution System Plan Implementation Progress		94.84%	99.07%	104.00%	76.81%	94.00%			
	Cost Control	Efficiency Assessment		3	3	3	3	3			
		Total Cost per Customer [3]		$605	$624	$648	$630	$652			
		Total Cost per Km of Line [3]		$26,361	$27,139	$28,396	$27,593	$28,531			
Public Policy Responsiveness Distributors deliver on obligations mandated by government (e.g., in legislation and in regulatory requirements imposed further to Ministerial directives to the Board).	**Connection of Renewable Generation**	Renewable Generation Connection Impact Assessments Completed On Time [4]		100.00%		100.00%	66.67%				
		New Micro-embedded Generation Facilities Connected On Time		95.00%	100.00%	100.00%	100.00%	100.00%	↑	90.00%	
Financial Performance Financial viability is maintained; and savings from operational effectiveness are sustainable.	**Financial Ratios**	Liquidity: Current Ratio (Current Assets/Current Liabilities)		1.33	0.81	1.04	1.29	1.46			
		Leverage: Total Debt (includes short-term and long-term debt) to Equity Ratio		1.05	1.05	0.91	1.07	1.18			
		Profitability: Regulatory Return on Equity	Deemed (included in rates)	9.43%	9.43%	9.43%	9.43%	9.43%			
			Achieved	9.09%	9.84%	7.61%	6.80%	6.87%			

1. Compliance with Ontario Regulation 22/04 assessed: Compliant (C); Needs Improvement (NI); or Non-Compliant (NC).
2. An upward arrow indicates decreasing reliability while downward indicates improving reliability.
3. A benchmarking analysis determines the total cost figures from the distributor 's reported information.
4. Value displayed for 2021 reflects data from the first quarter, as the filing requirement was subsequently removed from the Reporting and Record-keeping Requirements (RRR).

Legend:

5-year trend
↑ up ↓ down → flat

Current year
target met target not met

2021 Scorecard Management Discussion and Analysis ("2021 Scorecard MD&A")

The link below provides a document titled "Scorecard - Performance Measure Descriptions" that has the technical definition, plain language description and how the measure may be compared for each of the Scorecard's measures in the 2021 Scorecard MD&A:

http://www.ontarioenergyboard.ca/OEB/_Documents/scorecard/Scorecard_Performance_Measure_Descriptions.pdf

Scorecard MD&A - General Overview

In April 2019, Elexicon Energy Inc. ("Elexicon") was formed through the consolidation of Veridian Connections Inc. ("Veridian"), and Whitby Hydro Electric Corporation ("Whitby Hydro"). Elexicon is the fourth largest municipally owned electricity distributor in Ontario. It provides electricity service to approximately 174,000 customers across a nearly 800 sq. km service territory. This service territory spans the communities of Ajax, Belleville, Brock, Clarington, Gravenhurst, Pickering, Port Hope, Port Perry, Uxbridge and Whitby.

For the 2021 reporting year, Elexicon filed its third set of consolidated annual Reporting and Record Keeping Requirements ("RRR") data with the Ontario Energy Board ("OEB"). The 2019 to 2021 results in this scorecard are based on the 2019 to 2021 RRR data as filed by Elexicon. However, the data from 2017 and 2018 is based on consolidated data from the two predecessor entities. The historical data has been calculated in different ways depending on the measure. For example, in some instances the figures were recalculated based on historical RRR data; and in other instances, numbers were recast based on a weighted average number of customers. Regardless of the methodology used, Elexicon endeavored to consolidate past results in such a way so as to ensure accuracy and maximize comparability to its current performance.

In 2021, Elexicon built upon its four strategic pillars of: Customer Centricity; Operational Excellence; Economic Development; and Strategic Investment and offers the following highlights:

- Elexicon filed its new consolidated 2021-2026 Distribution Systems Plan ("DSP") with the Ontario Energy Board ("OEB"). Customer input and feedback was received by way of a survey and integrated into the plan to ensure Elexicon made the right investments to meet the needs of its communities at the right time.
- Construction started on the Seaton Municipal Transformer Station in north Pickering. This major project is several years in the making and will be the first time Elexicon will own a municipal transformer station. The station will provide connection capacity to over 32,000 new customers and is expected to be operational by late 2022.
- Elexicon launched Canada's first residential, nested community micro grid in 2021. In addition to being connected to the local grid, the community micro grid uses energy produced by rooftop solar panels and stored in a lithium-ion battery controlled and

monitored by advanced software and communications systems from Elexicon Energy's System Control Centre.

Management is pleased to share its scorecard results and the following discussion and analysis with all interested stakeholders.

Service Quality

- **New Residential/Small Business Services Connected on Time**

  In 2021, Elexicon connected 95.97% of eligible low-voltage residential and small business customers to its system within the five-day timeline prescribed by the OEB. Elexicon understands the importance of connecting its customers in a timely fashion once all service requirements are met and continues to improve and automate the reporting and data retention practices for all service territories. Working through the coronavirus ("COVID-19") pandemic (the "pandemic"), in unprecedented circumstances, new low-voltage residential and small business customers still proceeded with a total of 2,384 new service connections. Even with the challenges brought on by the pandemic, Elexicon was able to successfully meet and exceed the OEB service quality target of 90%.

- **Scheduled Appointments Met On Time**

  In 2021, Elexicon continued to meet the requirement to schedule and attend appointments within the four-hour window arranged with customers (or their representatives) during regular business hours. Elexicon achieved a score of 99.96% for appointments met on time, which is well above the OEB target of 90%. Elexicon recognizes the importance of such customer requests and has processes in place to achieve a consistent high level of service quality in this category.

- **Telephone Calls Answered On Time**

  In 2021, Elexicon's Customer Care Representatives responded to 112,565 customer telephone inquiries. 75.99% of the calls were answered within 30 seconds, which is well above the OEB target of 65%.

  Elexicon is very committed to customer centricity and its ability to respond to customer telephone inquiries. Corrective actions taken to address challenges related to the impact of COVID-19 have yielded results and improved the level of service significantly from the previous year (61.89%) for a comparable number of customer telephone inquiries.

Customer Satisfaction

- **First Contact Resolution**

  Specific first contact resolution measurements have not yet been defined for the industry. In July of 2014, the OEB instructed distributors to review and develop measurements in these areas and begin tracking and reporting on them. The OEB plans to review the information provided by electricity distributors and implement a commonly defined measure in the future. As a result, each distributor may have different measurements of performance until the OEB provides specific direction regarding a commonly defined measure.

  Elexicon's methodology includes measuring the number of customer contacts (i.e., telephone inquiries, written correspondence, and field contacts) related to the same topic or type of inquiry received within the period of a calendar month. Customers with contacts more than once within a calendar month for the same type of inquiry were excluded from being considered first contact resolution.

  Elexicon continues to improve in this category and achieved 93.0% first contact resolution in 2021.

- **Billing Accuracy**

  In 2021, Elexicon achieved a billing accuracy of 99.75% which is consistent with the results of previous years. Since being introduced as a measure in October of 2014, Elexicon and its predecessors have consistently exceeded the OEB target of 98%.

- **Customer Satisfaction Survey Results**

  Elexicon conducts a comprehensive customer satisfaction survey to obtain feedback from its customers on a biennial cycle. The most recent survey was conducted in Fall of 2020. The results indicated that 97% of Elexicon's customers were either 'very' or 'fairly' satisfied with the company's overall performance.

  The surveys are conducted by telephone and include a mix of residential and business customers. Survey questions cover a wide range of topics such as system reliability, customer services, billing and corporate image. Detailed results are reviewed by Elexicon staff to help inform the company's business planning processes. Over the 2017 – 2019 timeframe, both predecessor organizations utilized the same market research firm that Elexicon now uses to conduct the surveys using a consistent methodology and sample size.

  In addition to measuring Elexicon's customer satisfaction, Elexicon's market research firm conducts supplemental research to establish comparable provincial and national benchmarks. Elexicon has consistently exceeded these benchmark performance levels, as shown in

the table below:

Customer Satisfaction Scores					
Year	**2017**	**2018**	**2019**	**2020**	**2021**
Elexicon*	92%	95%	95%	97%	97%
Provincial Benchmark	76%	76%	89%	93%	93%
National Benchmark	86%	86%	91%	94%	94%
Elexicon Deviation from Provincial Benchmark	+16%	+19%	+6%	+4%	+4%

**Years 2017 through to 2019 represent blended scores for Veridian Connections and Whitby Hydro (weighted average based on customer count)*

Safety

- **Public Safety**

  - **Component A – Public Awareness of Electrical Safety**

    In order to gauge overall electrical safety awareness amongst the general public, Elexicon commissioned a research firm to conduct its Public Awareness of Electrical Safety Survey in January 2022. The survey consisted of a representative sample of 400 residents from amongst our service territories of Pickering, Ajax, Whitby, Clarington, Belleville, Brock and Gravenhurst. Reponses to the six core survey questions resulted in a 2021 Public Safety Awareness Index of 87%.

    Helping customers and the public understand the importance of staying safe and using electricity wisely is a priority for Elexicon. Elexicon worked to continuously enhance the public's awareness of electrical safety through the following initiatives in 2021:

    - **Student Education Programs:** Elexicon sponsors an informative and dynamic Kids Safety Village in Durham Region. The Safety Village is a community project dedicated to building a safer future for children. More than 200,000 school-aged students throughout Durham Region visit the site throughout the school year. Elexicon has a dedicated site on the property which educates students on electrical hazards of playing on or near ground transformers, hydro lines and call before you dig.
    - **Customer Newsletter:** Twice annually, Elexicon provides its customers with an information newsletter called "The Illuminator", which includes public safety information. Summer issue - Call Before you Dig information; Winter issue - Stray Voltage
    - **Social Media:** Safety related tweets using Electrical Safety Authority's ("ESA") social media calendar.
    - **Website Communication:** Elexicon's website provides video links and presentations to educate the public on: overhead powerline, underground cables and car safety.

    Due to COVID-19 restrictions, Elexicon's school safety presentations were cancelled for the 2021 school year.

  - **Component B – Compliance with Ontario Regulation 22/04**

    Ontario Regulation 22/04 establishes objective-based electrical safety requirements for the design, construction and maintenance of electrical distribution systems owned by licensed distributors. Specifically, the regulation requires the approval of equipment, plans, specifications and inspection of construction before they are placed into service.

    In 2021, Elexicon was compliant with Ontario Regulation 22/04.

- **Component C – Serious Electrical Incident Index**

The ESA defines a Serious Electrical Incident as an event that may cause or have the potential to cause death or critical injury. This measurement details the number of and rate of serious electrical incidents occurring on Elexicon's distribution system and has been normalized per 1,000 km of line. For 2021, Elexicon's Serious Electrical Incident Index was 0.

System Reliability

No distribution system is immune to the effects of severe weather and unexpected equipment failure. Elexicon is committed to providing a consistent and high level of reliability to its customers through putting in place a strict schedule of asset condition assessment, maintenance/replacement programs and timely monitoring/reviews to ensure that appropriate investments are made in its distribution system in a timely and cost-effective manner. Elexicon's regular maintenance program also includes an annual overhead tree-trimming program to ensure full coverage of the service area over a 3-year cycle.

Elexicon's consolidated outage data is derived from a combination of automated outage management system and manual reporting system based on proprietary GIS platform. These systems are capable of tracking system configuration changes in real time, providing accurate customer counts from affected areas, Integrated Voice Response ("IVR") and outage notifications.

The data from the two systems is collected and assimilated through a single outage database that is used to calculate and analyze the System Reliability metrics. Elexicon has reported an improvement in the average hours of interruption per customer, but a slight increase in the average number of interruptions per customer in 2021.

- **Average Number of Hours that Power to a Customer is Interrupted**

  Elexicon's 2021 year-end measurement on SAIDI reported a score of 1.17 (i.e., 1.17 hours of interruption on average, per customer). This result is better than the OEB target of 1.35.

- **Average Number of Times that Power to a Customer is Interrupted**

  Elexicon's 2021 year-end measurement on SAIFI reported a score of 1.12 (i.e., 1.12 times power was interrupted on average, per customer). This result is significantly better than the OEB target of 1.69.

Asset Management

- **Distribution System Plan Implementation Progress**

The OEB has permitted electricity distributors to use their discretion to develop and implement a measure that they feel most effectively reflects their performance in plan implementation. Elexicon is very cognizant of its commitment to prudently manage its annual capital investments and ensure that it remains within the approved capital budget throughout the year. Elexicon uses the following formula to calculate DSP Implementation Progress:

DSP Implementation Progress = (Total Annual Actual Capital Spend) / (Approved Annual Capital Budget)

Implementing the planned investment schedule and carrying out the capital program in its entirety continues to be an annual goal for the organization. This will ensure consistent alignment between customer preferences and Elexicon's investment objectives. Elexicon has adopted a target of 90% for this performance measure. A performance result of 100% would mean that the actual capital expenditures were equal to the planned budget.

In 2021, Elexicon reported a Distribution System Plan Implementation Progress value of 94.0% which is above target, despite the negative impact caused byrestrictions and delays associated with COVID-19.

Cost Control

- **Efficiency Assessment**

The OEB uses an econometric model that predicts total costs for each electricity distributor and compares it to their actual costs. Depending on the percentage difference between the predicted and actual costs over a three year average, the distributor is assigned to one of five groupings (1 being the most efficient, 5 being the least efficient). Since 2012, both predecessor distributors Veridian and Whitby Hydro have been included in Group 3 of the OEB's established five groups, and this trend has continued for Elexicon from 2019 to 2021.

In 2021, Elexicon's actual total costs were below the predicted costs by 2.9%. This represents a slight decline from 2020 when actual total costs were below the predicted costs by 4.3%. The increase in costs for 2021 is primarily due to higher headcount and also in part due to higher costs for pandemic related supplies. Elexicon expects to realize further cost savings going forward due to the merger.

- **Total Cost per Customer**

This metric is calculated by dividing the total of Elexicon's 2021 operating and capital costs, as derived within the OEB efficiency assessment model, by the total number of customers Elexicon serves. In 2021, the total cost per customer was $652 which compares favourably to the average for all distributors of $705.

The table below provides total costs broken out by operating and capital costs.

Cost per Customer	2021
Operating Costs	$ 248
Capital Costs	$ 404
	$ 652

Elexicon experienced higher OM&A costs per customer in 2021, an increase of 5% due to higher headcount that filled some staff vacancies, and higher costs for pandemic related supplies.

Over the last few years capital costs have trended higher as Elexicon has focused on the renewal and modernization of its distribution assets to enhance reliability for customers. Additionally, Elexicon has begun investments in system capacity to support major growth

within the Pickering Seaton communities. Elexicon will continue to manage asset replacement and rehabilitation and be prudent in its spending.

- **Total Cost per Km of Line**

This metric is calculated by taking Elexicon's total cost, as derived within the OEB efficiency assessment model and dividing this cost by the total kilometers of line that Elexicon operates to serve its customers.

The 2021 total cost per km of line was $28,531. This is an increase of 3.4% over 2020 which was partially due to the higher material costs resulting from supply chain constraints due to the pandemic. The additional kilometers of line in any given year can vary and as such, total cost per km of line can vary year over year. Variability is in part due to the OEB model requiring gross costs to be included in the total cost calculation. Third-party capital costs, for example, roadwork construction, are beyond Elexicon's control and to a great extent funded by third-parties.

As capital investments for replacement and rehabilitation of existing lines begins to grow at a faster rate than additions of lines within Elexicon's service area, total cost per km of line will be expected to increase in the future.

Connection of Renewable Generation

- **Renewable Generation Connection Impact Assessments Completed on Time**

Upon receipt of a completed application for a renewable energy generation facility that has a nameplate rated capacity of greater than 10 kW, Elexicon is required to complete the Connection Impact Assessment ("CIA") within the application timeline prescribed in Ontario Regulation 326/09. For projects up to 500 kW, the timeline is (a) 60 days or (b) 120 days if an upstream electricity distributor CIA is required. For projects greater than 500 kW and less than 10 MW, the timeline is (a) 90 days or (b) 120 days if it requires the involvement of other upstream electricity distributors.

In 2021, Elexicon received 1 application requiring a CIA. Regulation 326/09 was revoked as of July 1, 2021, as a result, RRR reporting for Connection Impact Assessment has been eliminated.

- **New Micro-embedded Generation Facilities Connected On Time**

For a renewable energy generation facility that has a nameplate rated capacity of less than or equal to 10 kW, an offer to connect is to be issued no later than 90 days after the date the connection request is received. After the project is installed and has passed the electrical safety inspection, Elexicon must have the following information to finalize the connection:

(a) Connection Authorization letter issued by the Electrical Safety Authority;
(b) Payment for the connection costs; and
(c) A signed "Micro-Embedded Generation Facility Connection Agreement".

On receipt of all of the required connection information, Elexicon would install and connect the meter within 5 business days of all conditions being met.

The percentage completion for new micro embedded generation facilities has consistently been 100% since 2018. In 2021, Elexicon connected 8 micro-embedded generation facilities and all of them were connected within the prescribed timeframe, thereby exceeding the 90% target.

Financial Ratios

- **Liquidity: Current Ratio (Current Assets/Current Liabilities)**

  Current ratio is a common measure of a company's ability to pay its short-term debts and financial obligations and a ratio higher than 1 is favourable. Elexicon's current ratio in 2021 was 1.46. The increase in this ratio was primarily due to an increase in cash and cash equivalents as a result of strong earnings and debt proceeds, and the timing of billing and collection activities.

- **Leverage: Total Debt (includes short-term and long-term debt) to Equity Ratio**

  In 2021, Elexicon maintained a total debt to equity structure well below the deemed 60% debt and 40% equity capital mix as set out by the OEB. Elexicon's total debt to equity ratio was 1.18, whereas the deemed rate, set as the 'standard' or 'preferred', is 1.5. This indicates that, to operate its business and complete its capital programs Elexicon has significant debt capacity. Elexicon's ratio below the deemed rate is a strong financial indicator. This was supported by DBRS Morningstar in July 2022; it confirmed the Issuer Rating of Elexicon Corporation at "A" with a Stable trend.

- **Profitability: Regulatory Return on Equity – Deemed (included in rates)**

  Elexicon's current distribution rates for the Veridian and Whitby rate zones were approved by the OEB and include an expected (deemed) regulatory return on equity. The weighted average deemed ROE for Elexicon is calculated as 9.43% based on the predecessor distributors last approved cost of service rate applications. The OEB allows a distributor to earn within +/- 3% of the deemed return on equity.

- **Profitability: Regulatory Return on Equity – Achieved**

  Elexicon's achieved regulatory return on equity in 2021 was 6.87%, which is 2.56% below the expected (deemed) level and within the +/- 3% range allowed by the OEB.

Note to Readers of 2021 Scorecard MD&A

The information provided by distributors on their future performance (or what can be construed as forward-looking information) may be subject to a number of risks, uncertainties and other factors that may cause actual events, conditions or results to differ materially from historical results or those contemplated by the distributor regarding their future performance. Some of the factors that could cause such differences include legislative or regulatory developments, financial market conditions, general economic conditions and the weather. For these reasons, the information on future performance is intended to be management's best judgement on the reporting date of the performance scorecard, and could be markedly different in the future.

Elexicon Energy Inc.

Answer to Interrogatory from

School Energy Coalition

Interrogatory SEC-18:

The ICM Models show the following budget for the project:

RZ		Budget $	Subtotal Hardware $	Subtotal ADMS $
WRZ	WSG - Wood Poles	6,630,000		
WRZ	WSG - OH Load Inter Switch	17,570,000		
WRZ	WSG - Tx Polemount	10,170,000	34,370,000	
WRZ	WSG - SCADA	1,281,502		
WRZ	WSG - ADMS - Computer Software	579,138		
WRZ	WSG - ADMS - Computer Equipment	89,562		
WRZ	WSG - ADMS - Communications Equipment	419,231		2,369,433
VRZ	WSG - SCADA	3,478,498		
VRZ	WSG - ADMS - Computer Software	1,572,007		
VRZ	WSG - ADMS - Computer Equipment	243,106		
VRZ	WSG - ADMS - Communications Equipment	1,137,957		6,431,567
	Total	43,171,000	34,370,000	8,801,000
	NRCan Funding	4,041,000		4,041,000
	Total	47,212,000	34,370,000	12,842,000

The footnote on page 11 of Appendix B-1 states that 'Estimates provided for the VVO and FLISR field hardware herein should be considered Class 4 estimates as defined by AACE and other standard estimate formats. The conditions for a Class 4 estimate presume that 1-15% of Project Definition has been completed. Typical Accuracy ranges of a Class 4 estimate are -30% on the low side and +50% on the high side. All other costs can be considered Class 5 estimates as defined by ACCE.'

a) Does the above budget include Engineering, Project Management and IT support in the percentages as shown in Table 5-1 of Appendix B-5? If so, please show where these are allocated. If not, please explain.

b) How has Elexicon allocated the funding from NRCan between the WRZ and VRZ?

c) Elexicon has included two reports prepared by METSCO for this application. What was the cost of these reports and where are they included in the budget?

d) Is Elexicon applying to the OEB at this time using estimates which are preliminary due to the timing of the NRCan Funding? If not, why has Elexicon not waited until the project is better defined before applying to the OEB?

e) When will Elexicon have produced estimates with a greater level of definition and accuracy?

f) At what budget estimate would Elexicon consider the WSG project no longer beneficial for its customers?

Response:

a) Yes, the budget includes Engineering, Project Management and IT support costs as shown in Table 5-1. Please see Table 1 below for a breakdown of Equipment, Engineering, Project Management, Information Technology ("IT") and Consulting and Legal costs:

Table 1 – Whitby Smart Grid Project Costs

Rate Zone	Asset Category	Budget	Equipment	PM (5%)	Eng (10%)	IT (2%)	Consulting and Legal	Sub-Total WSG (Note 1)	NRCan ADMS Component
WRZ	WSG Wood Pole	6,630,000	5,670,000	283,500	567,000	113,400			
WRZ	WSG OH Load Inter Switch	17,570,000	14,760,000	738,000	1,476,000	295,200	300,000		
WRZ	WSG – Tx Polemount	10,170,000	8,690,000	434,500	869,000	173,800		**34,370,000**	
WRZ	WSG - SCADA	1,281,502	1,095,301	54,765	109,530	21,906			
WRZ	WSG ADMS – Computer Software	579,138	579,138						
WRZ	WSG ADMS – Computer Equipment	89,562	89,562						
WRZ	WSG ADMS – Communications Equipment	419,231	419,231						2,369,433
VRZ	WSG - SCADA	3,478,498	2,973,075	148,654	297,308	59,462			
VRZ	WSG ADMS – Computer Software	1,572,007	1,572,007						
VRZ	WSG ADMS – Computer Equipment	243,106	243,106						
VRZ	WSG ADMS – Communications Equipment	1,137,957	1,137,957						6,431,568
	Total	43,171,001	37,229,377	1,659,419	3,318,838	663,768	300,000	34,370,000	8,801,001
	NRCan Funding	4,041,000							4,041,000
	Total	47,212,001	37,229,377	1,659,419	3,318,838	663,768	300,000	34,370,000	12,842,001
Note 1:	**Subtotal of WSG is rounded to thousands.**								

b) Please see response to STAFF-10 part a.

c) The costs for the two METSCO reports included in the application are estimated at $63,475 and have been allocated 50% to each of the Whitby Smart Grid and Sustainable Brooklin projects. These costs are included in the Consulting and Legal costs shown in Table 1 of this response.

d) Elexicon filed its application to the OEB at this time to meet the Brooklin Landowner's Group's timeline to have Sustainable Brooklin in-service by Q3, 2023. Elexicon also undertook development of the more accurate Class 4 estimate of the Whitby Smart Grid to accompany its Class 4 estimate of Sustainable Brooklin. Elexicon has confidence in both projects' scope and cost estimate.

e) Elexicon's tendering for each project will be the final step prior to commencement of each project.

f) Elexicon has not conducted sensitivity analysis with respect to customer benefits weighed against various cost scenarios. The question poses a hypothetical situation that could entail multiple scenarios. The WSG as proposed provides value to customers via energy savings, improved reliability, and the facilitation of higher levels of DER connection.

Elexicon Energy Inc.

Answer to Interrogatory from

School Energy Coalition

Interrogatory SEC-19:

[Appendix B-5 METSCO Table 5-1, WSG 2023 ACM ICM Model, Tab 9b, APB Unit Cost Calculations 2020 Results, May 4, 2022 Tab 8]

a) Table 5-1 shows that 144 + 46 + 46 = 236 poles are to be added for the WSM project. The ICM model shows $6,630k for Poles. Elexicon's results from the APB 2020 results show an average unit cost of $11,465 per pole. Please confirm the above numbers and that the average cost per pole for the WSG project is $28,093/pole addition.

b) Why is the cost per pole for the WSG project more than double Elexicon's average cost?

c) Table 5-1 does not indicate any Polemounted transformers. The ICM model shows $10,170,000 for Padmount Txs. Please explain.

d) Do the new poles replace existing poles? If not, please explain why new poles are needed. If yes, what is the condition of the poles to be replaced?

e) Is there any overlap between installing these new poles and the Poles Renewal programs that forms part of Elexicon's 2022-2026 DSP? I.e. can the new poles to be installed as part of the WSG project replace ones that is already designated to be replaced in an existing program?

Response:

a) Confirmed.

b) The poles required for this project will need to support the major equipment (i.e. regulators, cap banks and DA switches) detailed in the design of the Whitby Smart Grid. These higher and bigger class poles have a higher cost per pole, and are required to support the specified equipment.

c) Table 5-1 does not indicate any transformers. Regulators and Capacitors are coded to 1850-002, which is the same accounting code as transformers.

d) The new poles are needed because the basic tangent pole will not have enough clearance for the line equipment to be installed (i.e. regulators, cap banks and DA switches). Elexicon's final detailed system design and plan will identify the specific poles that will be replaced.

e) Elexicon's planning processes intend to coordinate pole replacements with the construction of the Whitby Smart Grid like assets. Elexicon's capital planning process will allocate the funds made

available to the pole replacement program towards the next set of required pole replacements. Elexicon has replaced an average of 23 poles over the 2021 and 2022 years under the like-for-like pole replacement program.

Elexicon Energy Inc.

Answer to Interrogatory from

School Energy Coalition

Interrogatory SEC-20:

With respect to Customer Engagement, Elexicon states that in its 2020 survey, customers support investing in grid management technologies. What were customers told about the cost of such investments?

Response:

Elexicon Energy ("Elexicon") has leveraged its 2021 Distribution System Plan customer engagement effort to identify customer needs and preferences to inform the development of the ICM Projects and this application. The Customer Engagement Report is found in Appendix B-7.

Elexicon has relied on this Customer Engagement Report as support for customers' preference to modernize the electricity grid, and increase resilience to storms and severe weather events. In the 2021 Customer Engagement Report, customers stated a preference for value for money, which, as demonstrated in Table 1 of Elexicon's application, the Whitby Smart Grid is expected to deliver a net benefit of $0.673MM to Elexicon's customers.

Elexicon Energy Inc.

Answer to Interrogatory from

School Energy Coalition

Interrogatory SEC-21:

Elexicon states that the WSG ICM project is critical in enabling functionality of the SB project. If the OEB does not approve the SB project, would Elexicon still move ahead with the WSG project?

Response:

Yes. The Whitby Smart Grid will substantially modernize the WRZ grid and bring about material benefits for customers. The value of the Whitby Smart Grid will however be enhanced via approval of Elexicon's application as filed, as the technologies installed will facilitate the Sustainable Brooklin Project, greater proliferation of DERs, and the potential for deferral of material infrastructure investments among other benefits.

Elexicon Energy Inc.

Answer to Interrogatory from

School Energy Coalition

Interrogatory SEC-22:

The METSCO Peak Load Forecast was finalized on July 22, 2022 and the METSCO Feasibility Study Whitby SmartGrid VVO and DA on July 20, 2022. This application was filed on July 27, 2022. METSCO's analysis concludes that Elexicon is expected to exceed available capacity on its 44 kV system as early as 2030, and to exceed available capacity on both its 44 kV and 27.6 kV systems as early as 2036.This need for addition capacity is one of the primary drivers of both the WSG and SB projects. Please provide a schedule of when the original need for the WSG was identified, possible options were explored, budgets was developed, Board of Directors approval was received, customer engagement was done, METSCO was hired, NRCan was engaged and funding secured, etc.

Response:

- **October 2019:** METSCO was engaged to develop top-down and bottom-up peak demand forecasting models for Elexicon with a ten-year planning horizon.
- **October 2020 to December 2020:** Customer engagement via online and telephone surveys was completed.
- **November 2020:** Active monitoring of Sault Ste. Marie Smart Grid Application (EB-2020-0249).
- **April 2021:** Registration for NRCan funding was submitted.
- **May 2021:** Review and discussions in respect of the key benefits of the Sault Ste. Marie Smart Grid Decision and Order issued April 29, 2021 (EB-2020-0249). The need – to determine if similar benefits (conservation benefits associated with VVO, increased reliability associated with DA) could be obtained for Elexicon customers. The need was further refined as time progressed.
- **September 2021**: NRCan submission completed.
- **Q4 2021**: Discussions with North Brooklin developers identify high growth forecasts in Region of Durham. Ability of WSG to facilitate DERs to help alleviate future capacity requirements incorporated into need.
- **March 2022:** NRCan advised Elexicon of approval for funding up to $4.041M.
- **April 2022:** METSCO was engaged to develop a twenty-year forecast for the Ajax-Pickering-Whitby subregion and complete a feasibility study for the WSG project.
- **May 21, 2022:** A derecho storm swept through large portions of Elexicon's service territory causing extensive damage to the distribution system leading to prolonged power outages for Elexicon's customers. Storm hardening / resiliency incorporated into need.

- **February to June 2022:** OEB Sandbox team was engaged.
- **June 2022:** Options analysis for WSG project completed.
- **July 2022:** Class 4 budget estimate for WSG project was developed.
- **July 2022:** Whitby Town Council approval for WSG and SB project was received.
- **July 2022:** IRM application was submitted.
- **August 2022:** NRCan contribution agreement was signed.

Elexicon Energy Inc.

Answer to Interrogatory from

School Energy Coalition

Interrogatory SEC-23:

Elexicon's most recent DSP includes a Summary of Grid Modernization Efforts.

a) Please discuss how the Programs listed in Table 5.2-4, specifically System Reliability Improvements, Standards Equipment Reliability and Compliance (SERC) and Information Technology, overlap with the components of the WSG.

b) Will any of the investments related to Grid Modernization in the DSP no longer be implemented as a result of the planned WSG project? If so, which ones and what was the planned investment dollars?

c) At the time the DSP was being prepared, was Elexicon in the process of negotiating with NRCan regarding funding for the AMDS?

Response:

a) Regarding the SERC program, this is budgeted with an annual amount intended to maintain analytical and standard design improvement work across the future DSP period. This program is distinct from and does not have any components that overlap with the investments proposed under the Whitby Smart Grid ("WSG").

   Regarding the System Reliability Improvements Program, Elexicon put forward a project called 'Whitby Intellirupters Smart Self-Healing Network'. As discussed in this ICM application, Elexicon has piloted Distribution Automation ("DA") on 6 feeders and 5 stations; these are still in the commissioning stage at this time. Elexicon did not include the costs associated with this pilot in the WSG ICM application.

   Regarding the Information Technology Program, the ADMS implementation project overlaps with the ADMS component of WSG project as described at Appendix B-1 at pages 24-25 of the Application. The scope of the ADMS implementation contemplated in the DSP concluded March 2022. In order to ensure the costs related to the ADMS implementation included in the Application are only for incremental work, only costs forecasted to be incurred from April 1, 2022 have been included in the WSG ICM application.

b) No. All of the Grid Modernization investments identified in the DSP are still planned and required.

c) No. Elexicon filed its DSP on April 1, 2021 and did not submit its registration form to NRCan until April 24, 2021. Elexicon received an acknowledgement from NRCan that Elexicon's project met the minimum project eligibility criteria on April 28, 2021.The full application was submitted to NRCan on September 22, 2021 with funding approved on March 3, 2022. Elexicon did not have a firm commitment from NRCan until Q1, 2022.