Elexicon Energy Inc.

Answer to Interrogatory from

OEB Staff

Interrogatory STAFF-1:

Ref 1: 2023 IRM Rate Generator for the Whitby Rate Zone

Ref 2: 2023 IRM Rate Generator for the Veridian Rate Zone

The Rate Generator model was updated to reflect the most current Uniform Transmission Rates and Hydro One Sub-Transmission Rates on Tab 11 as well as the updated Smart Meter Entity charge on Tab 17.

a) Please confirm the accuracy of the Rate Generator for each rate zone, as well as the accuracy of the Retail Transmission Service Rates, following these updates.

Response:

a) Elexicon confirms the accuracy of the Rate Generator for each rate zone, as well as the accuracy of the Retail Transmission Service Rates, following these updates.

Elexicon Energy Inc.

Answer to Interrogatory from

OEB Staff

Interrogatory STAFF-2:

Ref 1: Appendix B – Incremental Capital Module Whitby Smart Grid, p. 6

Ref 2: Whitby Smart Grid ACM/ICM model_WRZ

The ICM model for the WSG project in the Whitby RZ shows a project cost of $36.74M. On page 6 of Appendix B, Elexicon notes the incremental funding request of $43.171MM for the WSG project for the Whitby RZ.

a) Please confirm that the requested amount for the Whitby Smart Grid project for the Whitby RZ is $36.74M, not $43.171M.

b) Please explain if this amount and the ensuing rate rider are requested on an interim basis or if Elexicon will be providing updated project costs with the 2025 IRM application, which is the year the project will be used and useful and the rate rider will be effective.

Response:

a) Please see response to interrogatory SEC-06.

b) Elexicon will be providing updated project costs and rate rider calculations in its 2025 IRM application.

Elexicon Energy Inc.

Answer to Interrogatory from

OEB Staff

Interrogatory STAFF-3:

Ref 1: Appendix B-1 – Whitby Smart Grid Business Case, p.45

Ref 2: Whitby Smart Grid ACM/ICM model

Elexicon Energy stated that it will place the Whitby Smart Grid into service in 2025. Elexicon Energy proposed to update and finalize 2025 rate riders and bill impacts relating to the Whitby Smart Grid within its 2025 IRM application.

a) Please confirm if Elexicon Energy is seeking ACM-like treatment of the Whitby Smart Grid in this application. If so, why?

b) In reference 2, the Whitby Smart Grid costs are shown in 2023. Please explain why these costs are shown in 2023 if the rate riders and the Whitby Smart Grid won't be in-service till 2025.

Response:

a) Elexicon Energy ("Elexicon") does not confirm the statement. Elexicon is seeking ICM treatment of the Whitby Smart Grid ("WSG") in a manner consistent with the OEB's treatment of the Sault Ste. Marie Smart Grid proposal. Given the scope of the WSG and the novel nature of assets required to facilitate its completion, Elexicon requires regulatory approval in 2023 in order to place the WSG into service by 2025. Given the gap in time between estimates made in 2022 and project completion in 2025, Elexicon has recommended the finalization of costs and rate recovery in 2025 to reflect costs in rates more accurately and reduce the potential for future ICM cost-recovery variances.

b) As noted in Appendix B, page 55, Elexicon has provided illustrative bill impacts associated with placing the WSG into service. Elexicon submitted this evidence to provide the OEB a fair approximation of the anticipated impacts to customer bills resulting from the WSG. In order to prepare bill impacts, Elexicon was required to rely on 2023 rates, and as such entered the WSG costs into the 2023 cells of the ICM/ACM Model to facilitate illustrative bill impact analysis.

Elexicon Energy Inc.

Answer to Interrogatory from

OEB Staff

Interrogatory STAFF-4:

Distribution System Plan

Ref 1: Appendix B-1 Whitby Smart Grid Business Case, p. 24

a) Please file a copy of Elexicon Energy's 2021 Distribution System Plan on the record of this proceeding.

b) Please provide a detailed list of all projects in the DSP that will be altered, amended, rescheduled, or canceled as a result of the Whitby Smart Grid proposal. For each such project, please provide details of any changes in timing, cost, and other relevant factors.

Response:

a) Elexicon has filed a copy of Elexicon Energy's 2021 Distribution System Plan with the IRRs as part of this proceeding.

b) The only project that Elexicon Energy will alter due to the Whitby Smart Grid proposal, is the ADMS project. This project is now being incorporated in the overall Whitby Smart Grid Project. For variance explanations between the 2021 DSP and Elexicon's current forecast please see response to SEC-13 part b.

1

Elexicon Energy Inc.

Answer to Interrogatory from

OEB Staff

Interrogatory STAFF-5:

2023 Capital Budget

Ref 1: Appendix B-1, Whitby Smart Grid Business Case, p. 57

a) Please provide five years of historical capital expenditures by capital projects under the categories of General Plant, System Access, System Renewal, and System Service, including forecasted capital expenditures for 2022.

b) Please provide an additional column showing the year-to-date capital expenditures for 2022 capital projects.

c) Please provide a list of Elexicon Energy's capital projects for 2023 and their associated costs.

Response:

a) Please find Tables 1 and 2 below that provides a comparison between the five years of historical capital expenditure including 2022 Forecast.

Table 1 – Veridian Rate Zone 2018 to 2021 Plan and Actual Capital Spend and September 30, 2021 and September 30, 2022 Actuals

Category	**2018**	**2018**	**2019**	**2019**	**2020**	**2020**	**2021**	**2021**	**Sept 2021 YTD**	**2022**	**Sept 2022 YTD**
Plan	**Plan**	**Actual**	**Plan**	**Actual**	**Plan**	**Actual**	**Plan**	**Actual**	**Actual**	**Plan**	**Actual**
	VRZ	**VRZ**	**VRZ**	**VRZ**	**VRZ**	**VRZ**	**VRZ**	**VRZ**	**VRZ**	**VRZ**	**VRZ**
System Access	34,018	13,223	28,891	11,586	11,860	13,595	33,301	17,156	1,623	44,914	2,303
System Renewal	10,117	10,846	9,885	17,810	8,298	9,917	11,404	14,912	1,523	12,218	1,689
System Service	0	21	354	63	536	2,972	1,191	5,383	225	2,000	1,043
General Plant	2,650	4,857	3,051	5,611	4,315	4,221	10,467	4,830	839	10,752	733
Total (Gross)	46,785	28,948	42,182	35,070	25,009	30,705	56,363	42,281	4,210	69,884	5,768
Contributed Capital	4,053	6,345	13,657	5,369	9,451	12,855	25,059	10,616	1,039	33,241	1,550
Total (Net)	42,732	22,603	28,525		15,557	17,850	31,304	31,665	3,171	36,643	4,218

Table 2 – Whitby Rate Zone 2018 to 2021 Plan and Actual Capital Spend and September 30, 2021 and September 30, 2022 Actuals

Category	2018	2018	2019	2019	2020	2020	2021	2021	Sept 2021 YTD	2022	Sept 2022 YTD
Plan	Plan	Actual	Plan	Actual	Plan	Actual	Plan	Actual	Actual	Plan	Actual
	WRZ	WRZ	WRZ	WRZ	WRZ	WRZ	WRZ	WRZ	WRZ	WRZ	WRZ
System Access	6,930	2,132	14,276	14,794	10,087	10,694	11,380	8,857	617	15,379	735
System Renewal	7,347	7,032	3,275	9,189	4,865	3,249	8,264	5,669	1,343	2,998	483
System Service	2,840	476	152	1,035	784	199	227	3,740	0	43,228	611
General Plant	3,124	1,309	1,309	205	1,849	1,809	1,597	1,844	359	2,379	215
Total (Gross)	20,241	10,948	19,012	25,223	17,585	15,951	21,467	20,109	2,319	63,984	2,044
Contributed Capital	3,671	1,786	5,853	11,438	4,051	3,486	7,417	5,049	578	13,265	648
Total (Net)	16,570	9,162	13,159		13,535	12,465	14,051	15,060	1,741	50,719	1,395

b) See response to part a, 2022 YTD.

c) Please see table below for listing of capital expenditures by sub-categories:

Table 3 – Capital Expenditure Listing for 2023

Category & Programs	$'000
GENERAL PLANT	**$8,662**
P1-Facilities	$650
P2-Fleet	$1,870
P3-Information Technology	$5,027
P4-Tools & Equipment	$115
P5-Intangibles	$1,000
SYSTEM ACCESS	**$9,370**
A1-Road Relocation	$2,701
A2-Connection of New Services	$5,305
A3-Feeder Expansion	$0
A4-Metering	$1,273
A5-Customer Requested Work	$91
SYSTEM RENEWAL	**$14,727**
R1-Substation Renewal	$7,460

Category & Programs	**$’000**
R2-Renewal Programs-Rebuilds	$1,375
R3-Renewal Programs-Poles	$1,685
R4-Renewal Programs-Distribution Transformers	$885
R5-Renewal Programs-Switches & Switchgears	$678
R6-Renewal Programs-Others	$831
R7-Renewal Programs-Reactive	$1,813
SYSTEM SERVICE	**$7,808**
S2-Substation Upgrades	$30
S3-Standard Equipment Reliability & Compliance	$450
S4-Feeder Enhancement	$265
S5-System Reliability Improvement	$6,063
A6-Substation Expansion	$1,000
S6-Voltage Conversion	$0
Grand Total	**$40,568**

Elexicon Energy Inc.

Answer to Interrogatory from

OEB Staff

Interrogatory STAFF-6:

Ref 2: WRZ_SB_2023 ACM_ICM Model, Tab 9b

Ref 3: WRZ_WSG_2023 ACM_ICM Model, Tab 9b

a) On tab 9b of the SB_ICM model, Elexicon Energy provides a total DSP CapEx of $39.7M for the Whitby rate zone. On tab 9b of the WSG_ICM model, Elexicon Energy shows a DSP CapEx of $48.5M for 2023, and on p. 57 of Appendix B-1, Elexicon Energy forecasts capital spending of $40.5M. Please reconcile and explain the differences.

Response:

Please see response to SEC-13 (e)

Elexicon Energy Inc.

Answer to Interrogatory from

OEB Staff

Interrogatory STAFF-7:

METSCO Feasibility Study – Volt/Var Optimization

Ref 1: Appendix B-1 – Whitby Smart Grid Business Case, pp. 12 and 45

Ref 2: Appendix B-5 – METSCO Feasibility Study Whitby SmartGrid VVO and DA

Elexicon Energy proposed $39.1 million in VVO/CVR and FLISR/DA field hardware. This is intended to reduce losses and improve reliability. Elexicon Energy provided two alternatives, one was to complete the project in 2025 and the other was to complete the project in 2028.

a) Please provide how much of the $39.1 million is related to Volt/Var Optimization.

b) One of the benefits of Volt/Var Optimization is energy savings. In reference 1 table 17, Elexicon Energy showed the maximum energy savings for 4 potential feeders. Please provide the expected yearly cost savings for the feeders included in the Whitby Smart Grid project over the next 20 years and provide the net present value.

c) Compare the net present value in part b) with the Volt/Var Optimization project costs. If the net savings is below the project cost, please explain why Elexicon Energy has continued to pursue Volt/Var Optimization.

d) The benefits of Volt/Var Optimization and equipment needed are per feeder. Please explain why the implementation of Volt/Var Optimization cannot be better paced over a longer timeline if the benefits can be realized one feeder at a time.

e) Does Elexicon Energy intend to track and report on the reduction of losses and improvements to its reliability metrics? If yes, please provide the metric Elexicon Energy proposes to track. If not, why not.

f) Please provide the NPV calculations Elexicon Energy used to justify that option 2 (2028 completion date) would be greater than option 1 (2025 completion date). Please omit the NRCan funding on both options and provide the assumptions used.

Response:

a) $12.7 million of the $39.1 million is related to Volt/Var Optimization (excluding project management, engineering, and IT support costs).

b) The table below shows forecast energy cost savings from 2025 through 2044 assuming a 2% annual increase to the Cost of Power for the Whitby Rate Zone (WRZ). No assumptions have been incorporated to account for customer and load growth served by the existing WRZ system (which would be expected to increase the quantum of benefit) or load reductions due to conservation (which would be expected to decrease the quantum of benefit). The net present value of these energy savings over 20 years based on this analysis is $57.7MM utilizing a 3% discount rate.

Table 1 – Forecasted Energy Cost Savings 2025 to 2044

Year	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Forecast Energy Savings ($MM)	3.26	3.32	3.39	3.46	3.52	3.59	3.67	3.74	3.81	3.89

Year	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044
Forecast Energy Savings ($MM)	3.97	4.05	4.13	4.21	4.30	4.38	4.47	4.56	4.65	4.74

c) While the $12.7 million cost of the Whitby Smart Grid does not include project management, engineering and IT support costs, the $57.7MM in 20-year net present value energy savings well exceeds the capital cost.

d) See response to Staff 8 part e) and f).

e) Reliability is tracked in the OEB Scorecard on an annual basis, and improvements to reliability metrics will demonstrate themselves in this reporting. Elexicon expects efforts to accurately assigned metric improvements to the Whitby Smart Grid may be challenged to achieve precision, as differentials must inherently be established in comparison to a baseline that did not happen (i.e. a scenario in which the Whitby Smart Grid was not undertaken). Elexicon will be responsive to the OEB's Decision and Order should it include guidance or conditions with respect to reporting on these matters.

f) The NRCan funding has been omitted from both options and the following assumptions have been used:

- Average yearly inflation factor of 2% was used from 2025 onwards as Bank of Canada predicts the average yearly inflation to decline back to 2% from 2025. Similarly, the inflation is predicted to reach around 3% by the end of 2023. As such, 3% factor was used to calculate the inflation for 2024.

- Discount Rate of 3% and 5% assumed to reflect likely project cost scenarios for Option 2. Elexicon's 2019 Discount Rate of 3.2% was also considered when deciding on three different discount rate scenarios (3%, 5%, 8%)

Option 1 (2025 completion date)

The capital project costs ($'000) were estimated as follows:

Table 2 – Captial Project Costs for Option 1

Smart Grid Field Hardware Costs	$ 39,130
ADMS Costs	$ 8,082
Total Capital Cost of Project	**$ 47,212**

With the above stated assumptions, the following NPV was calculated.

To calculate the cash profile, the total project cost of $47,212,000 was divided by three years and then adjusted for inflation.

Table 3 – Cash Flow Profile for Option 1

Cash Profile	**2023**	**2024**	**2025**	**Total**
	($'000)	*($'000)*	*($'000)*	*($'000)*
CPI Adjusted	15,737	16,209	16,534	**48,480**

Project NPV

Three discount rate scenarios were explored – at 3%, 5% and 8%.

Table 4 – NPV for Various Discount Rates for Option 1

Cash Flow Profile	**Total Cost**	**NPV at 3%**	**NPV at 5%**	**NPV at 8%**
	($'000)	*($'000)*	*($'000)*	*($'000)*
CPI Adjusted	**48,480**	**45,689**	**43,973**	**41,594**

Option 2 (2028 completion date)

To calculate the cash profile, the total project cost of $47,212,000 was divided by six years and then adjusted for inflation.

Table 5 – Cash Flow Profile for Option 2

Cash Profile	**2023** *($'000)*	**2024** *($'000)*	**2025** *($'000)*	**2026** *($'000)*	**2027** *($'000)*	**2028** *($'000)*	**Total** *($'000)*
CPI Adjustment	7,869	8,105	8,267	8,432	8,601	8,773	50,046

Project NPV

Three discount rate scenarios were explored – at 3%, 5% and 8%.

Table 6 – NPV for Various Discount Rates for Option 2

Cash Flow Profile	**Total Cost** *($'000)*	**NPV at 3%** *($'000)*	**NPV at 5%** *($'000)*	**NPV at 8%** *($'000)*
CPI Adjusted	**50,046**	**45,102**	**42,209**	**38,377**

Elexicon Energy Inc.

Answer to Interrogatory from

OEB Staff

Interrogatory STAFF-8:

METSCO Feasibility Study – Distribution Automation

Ref 1: Appendix B-1 – Whitby Smart Grid Business Case, p. 12

Ref 2: Appendix B-5 – METSCO Feasibility Study Whitby SmartGrid VVO and DA

Elexicon Energy proposed $39.1 million in VVO/CVR and FLISR/DA field hardware. This is intended to reduce losses and improve reliability. Reference 2 stated that the Whitby Rate Zone has been active in the development of the initial stages of SmartGrid and has piloted DA on 6 feeders and 5 stations and as well as procured centralized controlling software under previous and ongoing projects.

a) Please provide how much of the $39.1 million is related to Distribution Automation.

b) Please confirm if the cost of these 5 stations and 6 feeders are included in the Whitby Smart Grid cost.

c) Please provide any findings Elexicon Energy has learned from this pilot, including any metrics Elexicon used to track and measure performance improvement.

d) Please provide the costs Elexicon Energy incurred for this pilot.

e) Part of distribution automation is sectionalizing and automated backfeed. Please confirm if the benefits of distribution automation can be realized either by feeder or pair of feeders.

f) If confirmed in part e), please explain why the implementation of Distribution Automation cannot be better paced over a longer timeline if the benefits can be realized one feeder or pair of feeders at a time.

Response:

a) $18.36 million is related to the elements to enable distribution automation (excluding Project Management, Engineering and IT support costs).

b) No, these costs are not included in the Whitby Smart Grid cost. Table 5-2 of Appendix B-5 confirms that the devices are not included in the estimate.

c) The pilot is yet to be energized and therefore there are no results yet.

d) Elexicon has incurred $0.898 million to date. Once completed the full capital cost is forecast to be $1.106 million.

e) Yes, the benefits of DA can be realized on a feeder-pair basis. However, since the locations of future feeder outages are unknown, it cannot be assumed that a partial installation of a DA system will result in proportional benefits. For example, with a small sample size of a partial DA system, it is possible to accrue no benefits at all, or all the benefits could be achieved with a small installation. This is purely driven by the location of the outage and whether or not DA exists in that section.

f) There is no clear advantage to operating a hybrid system (i.e., partially automated). The DA system will provide an immediate net benefit, and the earlier the system is installed the sooner the benefits will be realized.

Elexicon Energy Inc.

Answer to Interrogatory from

OEB Staff

Interrogatory STAFF-9:

Whitby Smart Grid - NRCan

Ref 1: Appendix B-1 – Whitby Smart Grid Business Case, p.12

Elexicon Energy is proposing a $47.2 million Whitby Smart Grid project that includes an Advance Distribution Management System (AMDS), Volt/Var optimization, and distribution automation. The project is expected to be in service in 2025. Elexicon Energy has been granted $4.04 million from NRCan for the AMDS element of this project and stated that there is a delivery date of March 31, 2025, or the funding would be withdrawn.

a) Please provide the agreement Elexicon Energy has with NRCan to secure the grant. In a table format, please compare the items Elexicon Energy has to meet in the NRCan agreement and the scope of work on the AMDS portion of the project.

b) Please explain if the NRCan funding would be withdrawn if Elexicon Energy only completes the AMDS portion ($8.08 million) of the Whitby Smart Grid project.

Response:

a) Please refer to the NRCan Contribution Agreement, included as Attachment 1 - ‘SREPS-GM-015 Signed CA to this response.

   Please refer to ‘Schedule A’ of the above-mentioned document for the table with scope of work.

b) No, the funding will not be removed as long as the items in ‘Schedule A’ of the above-mentioned document are met.

STAFF – 9

Attachment 1

DEPARTMENT OF NATURAL RESOURCES

RENEWABLE ENERGY AND ELECTRICITY TECHNOLOGIES PROGRAMS

SMART RENEWABLES AND ELECTRIFICATION PATHWAYS PROGRAM

NON-REPAYABLE CONTRIBUTION AGREEMENT

THIS AGREEMENT is made in duplicate

BETWEEN:

HER MAJESTY THE QUEEN IN RIGHT OF CANADA ("Canada"), represented by the Minister of Natural Resources,

AND:

ELEXICON ENERGY INC. a crown corporation, incorporated under the laws of Ontario (the "Proponent").

WHEREAS Canada wishes to encourage the adoption of the **SMART RENEWABLES AND ELECTRIFICATION PATHWAYS PROGRAM** (the "Program");

WHEREAS the Proponent has submitted to the Minister a Proposal for the funding of a Project called "**PROJECT VERITAS – A HOLISTIC APPROACH TO DEMAND MANAGEMENT"** which qualifies for support under the Program;

WHEREAS Canada and the Proponent agree that in order for the Proponent to develop and implement the Project as described in Schedule A (Description of the Project), the Proponent will require financial assistance from Canada;

AND WHEREAS Canada is willing to provide financial assistance toward the Eligible Expenditures of the Project in the manner and upon the terms and conditions hereinafter set forth;

NOW, THEREFORE, Canada and the Proponent agree as follows:

1. INTERPRETATION

1.1 In this Agreement:

"Agreement" means this Agreement and the attached Schedules A and B;

"Claim Period" means the quarter to which each payment pertains;

"Completion Date" means the date that the Proponent shall complete the Project as specified in Paragraph 4.2;

"Contribution" means the funding provided by the Minister under this Agreement;

"Eligible Expenditures" means any expenditures Incurred by the Proponent, as set out in Schedule B (Budget and Eligible Expenditures), within the Eligible Expenditure Period in accordance with the terms and conditions of this Agreement; any Eligible Expenditures Incurred by the Proponent before this Agreement is signed by both Parties are limited to thirty percent (30%) of the Contribution;

"Eligible Expenditure Period" means the period from **April 1, 2022** to **March 31, 2025;**

"Fiscal Year" means the period beginning on April 1st of any year and ending on March 31st in the next year;

"Fixed Asset" means a tangible non-current asset, including buildings and equipment, acquired not for sale but for use for the Project during the Eligible Expenditure Period;

"Incurred" means, in relation to an Eligible Expenditure, an Eligible Expenditure or a portion thereof that is owing and due by the end of each Claim Period;

"Incurred and Paid" means, in relation to an Eligible Expenditure, an Eligible Expenditure that the Proponent has paid for;

"Intellectual Property" means any intellectual property recognized by law, including any intellectual property right protected through legislation including governing patents, copyright, trade-marks, and industrial designs;

"Interest Rate" means the Bank Rate, as defined in the *Interest and Administrative Charges Regulations*, in effect on the due date, plus 300 basis points, compounded monthly. The Interest Rate for any given month can be found at: http://www.tpsgc-pwgsc.gc.ca/recgen/txt/taux-rates-eng.html;

"Minister" means the Minister of Natural Resources and includes any duly authorized officers or representatives;

"Party" means either the Proponent or Canada;

"Project" means the Project described in Schedule A (Description of the Project);

"Proposal" means a written Proposal signed by the Proponent on **September 22, 2021** including at least a background, purpose, work description, results expected, and a budget, which is accepted by the Minister for the Project;

"Total Government Funding" means cash contributions provided by the federal government and other contributions from the provincial/territorial and municipal governments toward the Total Project Costs; and,

"Total Project Costs" means the Contribution and other verifiable cash or in-kind contributions either received or contributed by the Proponent and directly attributable to the Project from **February 1, 2022** to **March 31, 2025.**

1.2 The following schedules are attached to and made part of this Agreement:

a) Schedule A (Description of the Project); and
b) Schedule B (Budget and Eligible Expenditures).

1.3 In case of conflict between any provision in the main body of this Agreement and a provision in a schedule attached hereto, the provision in the main body of this Agreement shall take precedence.

1.4 Grammatical variations of the above defined terms have similar meanings. Words importing the singular number only shall include the plural and vice versa.

2. REPRESENTATIONS AND WARRANTIES

2.1 The Proponent represents and warrants that all factual matters contained in the Proposal and all supporting material submitted are true and accurate in all material respects, and that all estimates, forecasts and other related matters involving judgement were prepared in good faith and to the best of its ability, skill and judgement.

2.2 The Proponent represents and warrants that it is duly incorporated or registered and validly existing in good standing under the laws of Canada and has the power and authority to carry on its business, to hold property, and undertakes to take all necessary action to maintain itself in good standing and preserve its legal capacity during the term of this Agreement.

2.3 The Proponent represents and warrants that the signatory to this Agreement has been duly authorized to execute and deliver this Agreement on its behalf.

2.4 The Proponent represents and warrants that the execution, delivery, and performance of this Agreement have been duly authorized and when executed and delivered will constitute a legal, valid, and binding obligation of the Proponent enforceable in accordance with its terms.

2.5 The Proponent represents and warrants that it has not, nor has any person offered or promised to any official or employee of Her Majesty the Queen in Right of Canada, for or with a view to obtaining this Agreement any bribe, gift or other inducement and it has not nor has any person on its behalf employed any person to solicit this Agreement for a commission, fee or any other consideration dependent upon the execution of this Agreement.

3. DURATION OF THE AGREEMENT

3.1 This Agreement comes into force when signed by the Parties.

3.2 Except as otherwise provided in the articles below, this Agreement will expire on the latest of:

a) the Completion Date;
b) the completion of the Project to the satisfaction of the Minister; or
c) the date on which all amounts owed by the Proponent to the Minister under this Agreement have been paid in full.

3.3 The following clauses shall survive the expiration of this Agreement for an additional three (3) years:

a) Article 8 (Accounts and Audits);
b) Article 9 (Intellectual Property);
c) Article 10 (Indemnity);
d) Article 11 (Default);
e) Article 13 (Reports); and
f) Article 26 (Dispute Resolution).

4. CONDUCT OF PROJECT

4.1 The Proponent shall carry out the Project promptly, diligently and in a professional manner and in accordance with the terms and conditions of this Agreement.

4.2 The Proponent shall complete the Project by **March 31, 2025** unless terminated earlier pursuant to the provisions of this Agreement.

4.3 The Proponent shall comply with all applicable federal, provincial and municipal laws in relation to the Project.

4.4 The Parties are satisfied that any legal duty to consult with Aboriginal groups affected by the Project, and where appropriate, to accommodate Aboriginal groups' concerns has been met and continues to be met. If as a result of changes to the nature or scope of the Project Canada determines that a legal duty to consult is triggered, the Proponent agrees that all of Canada's obligations pursuant to this Agreement will be suspended from the moment that Canada informs the Proponent that a legal duty to consult arises.

In the event that a legal duty to consult arises, the Proponent agrees that:

a) Canada will withhold any payment of the Contribution toward Eligible Expenditures until Canada is satisfied that any legal duty to consult with, and where appropriate, to accommodate Aboriginal groups has been met and continues to be met;
b) if, as a result of such changes to the Project, Canada determines that further consultation is required, the Proponent will work with Canada to ensure that the legal duty to consult, and where appropriate, to accommodate Aboriginal groups, is met and continues to be met to Canada's satisfaction; and
c) it will consult with Aboriginal groups that might be affected by the changes to the Project, explain the Project to them, including Canada's role, and will provide a report to Canada, which will include:
    i) a list of all Aboriginal groups contacted;
    ii) a summary of all communications to date with the Aboriginal groups, indicating which groups support or object to the Project, and whether their positions are final, preliminary or conditional in nature;
    iii) a summary of any issues or concerns that the Aboriginal groups have raised and an indication of how the Proponent has addressed or proposes to address those issues or concerns; and
    iv) any other information Canada may deem appropriate.

5. IMPACT ASSESSMENT

5.1 The Proponent represents and warrants that the Project is not a "designated project" nor a "project" according to the *Canadian Environmental Assessment Act, 2012* or the *Impact Assessment Act*.

5.2 If, within the Eligible Expenditure Period, the Project becomes a "designated project" or a "project" carried out on federal land or outside of Canada according to the *Impact Assessment Act*, the Parties agree that Canada's obligations under this Agreement will be suspended until:

a) In the case of a "designated project":
    i) the Impact Assessment Agency of Canada makes a decision that no assessment of the "designated project" is required and posts that decision; or

ii) the decision statement with respect to the “designated project” that is issued to the Proponent sets out that the effects that are indicated in the report with respect to the impact assessment of the Project are in the public interest.

b) In the case of a “project”:

i) a determination indicating that the carrying out of the Project is not likely to cause significant adverse environmental effects by the Minister or another authority referred in the *Impact Assessment Act*; or

ii) if the carrying out of the Project is likely to cause significant adverse environmental effects, a decision of the Governor in Council indicates that those effects are justified in the circumstances.

5.3 It is understood, that, in the event that the Project becomes a “designated project” or a “project” as defined in Paragraph 5.2 above, the Minister has no obligation to request a decision by the Governor in Council, and may, terminate this Agreement with immediate effect by giving notice in writing to the Proponent. Following such termination, no further Contribution will be disbursed under this Agreement, and the Minister will not be liable for any direct, indirect, consequential, exemplary, or punitive damages, regardless of the form of action, whether in contract, tort, or extra-contractual liability, or otherwise, arising from the termination.

6. CONTRIBUTIONS

6.1 Notwithstanding any other provision of this Agreement, the Contribution shall not in any circumstances exceed the lesser of:

a) **Fifty percent (50%)** of Total Project Costs incurred; and
b) **Four Million Forty One Thousand Dollars ($4,041,000)**.

6.2 The Fiscal Year allocations for the Contribution are as follows:

2021-2022	Zero Dollars ($0)
2022-2023	One Million Three Hundred Six Thousand Six Hundred Seventy Three Dollars ($1,306,673)
2023-2024	One Million Six Hundred Thirty One Thousand Five Hundred Thirteen Dollars ($1,631,513)
2024-2025	One Million One Hundred Two Thousand Eight Hundred Fourteen Dollars ($1,102,814)

Any reallocation of the Contribution amounts in whole or in part from one Fiscal Year to another shall require a written amendment signed by the Parties.

6.3 In order to be eligible to receive payment for any remaining portion of the Contribution as described herein, the Proponent must submit its final claim for payment on or before **June 30, 2025.**

6.4 The Minister will not contribute to any Eligible Expenditure Incurred by the Proponent prior to or after the Eligible Expenditure Period.

6.5 If by the Completion Date, the Total Government Funding as set out in Schedule B (Budget and Eligible Expenditures) that the Proponent has received exceeds One Hundred percent (100%) of the Total Project Costs incurred, the Minister may require the Proponent to reimburse such excess back to Canada.

6.6 The Proponent represents that no other federal, provincial, territorial or municipal government assistance, other than those described below and listed in Schedule B (Budget and Eligible Expenditures), has been or will be provided in respect of the Total Project Costs incurred:

Canada: Four Million Forty One Thousand Dollars ($4,041,000)
Other Federal: Zero Dollars ($0)
Provincial: Zero Dollars ($0)
Territorial: Zero Dollars ($0)
Municipal: Zero Dollars ($0)
Total Government Funding: Four Million Forty One Thousand Dollars ($4,041,000)

The Proponent shall advise the Minister promptly of any change in the Total Government Funding listed above during the term of this Agreement.

7. METHOD OF PAYMENT

7.1 Subject to the terms and conditions of this Agreement, Canada shall make the Contribution toward the Eligible Expenditures Incurred for which the goods have been received or the services have been rendered.

7.2 Subject to the terms and conditions of this Agreement, Canada shall make the Contribution toward the Eligible Expenditures Incurred for which the goods have not been received or for which the services have not been rendered, provided that:

a) the Proponent has proper documentation, including a signed contract or a purchase order, establishing a legally binding financial obligation that the Proponent must meet during the Claim Period;

b) upon thirty (30) days written notice, the Proponent provide the Minister with the documentation outlined in paragraph 7.2 a) at the Proponent's own costs; and

c) the financial report in Paragraph 7.3 includes a declaration signed by the Chief Financial Officer or duly authorized officer, attesting that the Proponent has, at the time of the financial report, the proper documentation outlined in Paragraph 7.2 a), and that it will provide the Minister with such documentation in accordance with paragraph 7.2 b).

7.3 In order to receive payment of Eligible Expenditures, the Proponent shall submit claims for payment accompanied by a financial report, signed by the Chief Financial Officer or duly authorized officer, which outlines Eligible Expenditures Incurred by category of costs, and progress reports as required in Article 13 (Reports). All claims must be submitted no later than sixty (60) days after the end of each Claim Period, except the claim for the final payment.

7.4 The Minister shall withhold **Ten percent (10%)** from **each payment** until the Proponent has:

a) completed the Project to the satisfaction of the Minister;

b) submitted a final report documenting the completion of the Project as set out in Article 13 (Reports) and the Minister has approved said report;

c) certified, in the manner set out in Article 13 (Reports) , that the Proponent has Incurred and Paid all claims for the payment of Eligible Expenditures of the Project; and

d) submitted and the Minister has received and approved a final statement of Eligible Expenditures Incurred and Paid in respect of the Project.

7.5 Subject to the terms and conditions of this Agreement, if the Proponent cannot submit a claim for payment on or before March 31 of a Fiscal Year, the Proponent shall no later than April 5 provide the Minister with a signed statement of anticipated Eligible Expenditures Incurred up to March 31, in order for the Minister to establish a Payable at Year-End.

7.6 Notwithstanding Article 25 (Amendments), following receipt of a written request from the Proponent in accordance with Article 24 (Notices), the Minister may approve in writing at his sole discretion an extension to submit any claim or any report required to be submitted in accordance with this Agreement.

7.7 Where for any reason the Minister determines that the amount of the Contribution disbursed exceeds the amount to which the Proponent is entitled or the Proponent is not entitled to the Contribution, the Proponent must repay to Canada no later than thirty (30) days from the date of the Minister's notice, the amount of the overpayment or the amount of the Contribution disbursed. If the amount is not repaid by its due date, interest accrues at the Interest Rate for the period beginning on the due date and ending on the day before the day on which repayment to Canada is received. Any such amount is a debt due to Her Majesty the Queen in Right of Canada and is recoverable as such.

7.8 Without limiting the scope of the set-off rights provided for under the *Financial Administration Act*, it is understood that the Minister may set off against any amount that may be payable to the Proponent pursuant to this Agreement, any amounts owed and past due by the Proponent to Her Majesty the Queen in Right of Canada under any legislation or contribution agreements and the Proponent shall declare to the Minister all amounts outstanding in that respect when making any claim under this Agreement.

8. ACCOUNTS AND AUDITS

8.1 Prior to the Completion Date and for three (3) years after the expiration of this Agreement, as described in Article 3 (Duration of the Agreement), the Proponent shall, at its own expense.

a) keep proper and accurate books, accounts, and records of its revenue received and expenses Incurred and Paid in connection with the Project and shall keep its invoices, receipts, and vouchers relating thereto;

b) keep proper and accurate records of all data, analyses, and other scientific or technical assessments and reports, and any and all information relating to the outputs and outcomes of the Project ;

c) on demand, make available to the Minister such books, accounts, records, invoices, receipts, and vouchers referred to above and permit the Minister to examine and audit and take copies and extracts from such documents;

d) allow the Minister, at the Minister's own expense and discretion, to conduct a technical audit to verify that the proposed measures outlined in Schedule A (Description of the Project) were implemented in accordance with this Agreement; and

e) allow the Minister, at the Minister's own expense and discretion, to conduct an audit to verify the accuracy of reports submitted under Article 13 (Reports).

8.2 In respect of Eligible Expenditures related to professional, scientific and contracting services outlined in Schedule B (Budget and Eligible Expenditures), Canada's auditors may, acting reasonably, request that the Proponent's books, accounts and records be supplemented by information from the books, accounts and records of the subcontractors engaged by the Proponent having contracts in excess of twenty percent (20 %) of the Contribution for the purposes of the Project. The Proponent will use commercially reasonable efforts to obtain such information as is reasonably requested by Canada's auditors from the Proponent's subcontractors, subject to and to the extent permitted by terms of the applicable contracts and, in particular, the audit provisions of such contracts.

9. INTELLECTUAL PROPERTY

9.1 All Intellectual Property that arises in the course of the Project shall vest in the Proponent, or be licensed to the Proponent in the event that a Proponent's subcontractor retains title to such Intellectual Property.

9.2 The Proponent shall supply to Canada the reports and documents described in Article 13 (Reports), and the Proponent hereby grants to Canada a non-exclusive, irrevocable, world-wide, free and royalty-free license in perpetuity to use, modify, and, subject to the Access to Information Act, make publicly available such reports and documents for non-commercial governmental purposes.

10. INDEMNITY

10.1 Neither Canada, nor its employees, officers and agents, will have any liability in respect of claims of any nature, including claims for injury or damages, made by any person involved in the activities of the Project or as a result of or arising out of this Agreement, and the Proponent will indemnify and save harmless Canada, its employees, officers and agents, in respect of such claims.

11. DEFAULT

11.1 The Minister may declare that an event of default has occurred if:

a) the Proponent becomes insolvent or is adjudged or declared bankrupt or if it goes into receivership or takes the benefit of any statute from time to time in force relating to bankrupt or insolvent debtors;

b) an order is made which is not being contested or appealed by the Proponent or a resolution is passed for the winding up of the Proponent or it is dissolved;

c) in the opinion of the Minister, there has been a misrepresentation or breach of warranty under Article 2 (Representations and Warranties);

d) in the opinion of the Minister, acting reasonably, a material adverse change in risk affecting the fulfilment of the terms and conditions of this Agreement has occurred;

e) any term, condition or undertaking in this Agreement is not complied with, including, without limitation, any of those in Article 4 (Conduct of Project), Article 5 (Impact Assessment) or Article 7 (Method of Payment) and any such defect has not been cured by or remedied by the Proponent within thirty (30) days of written notice of such defect having been provided to the Proponent; or

f) the Proponent neglects or fails to pay the Minister any amount due in accordance with this Agreement.

11.2 If the Minister declares that an event of default has occurred, in addition to all other remedies provided under contract law, the Minister may exercise one or more of the following remedies:

a) suspend any obligation of Canada to contribute or continue to contribute to the Eligible Expenditures of the Project or a part of the Project, including any obligation to pay any amount owing prior to the date of such suspension;

b) terminate any obligation of Canada to contribute or continue to contribute to the Eligible Expenditures, including any obligation to pay any amount owing prior to the date of such termination;

c) terminate this Agreement; and

d) direct the Proponent to repay all or part of the Contribution which has been paid to the Proponent, together with interest from the date of demand at the Interest Rate, with the exception of an event of default listed in Paragraph 11.1(d). Any such amount is a debt due to Her Majesty in Right of Canada and is recoverable as such.

For greater clarity, all above remedies are cumulative.

11.3 The fact that the Minister does not exercise a remedy that the Minister is entitled to exercise under this Agreement will not constitute a waiver of such right and any partial exercise of a right will not prevent the Minister in any way from later exercising any other right or remedy under this Agreement or other applicable law.

12. ACCESS

12.1 Prior to the Completion Date and for three (3) years after the expiration of this Agreement, the Proponent shall provide the Minister or Minister's representatives reasonable access to any premises where the Project takes place to assess the Project's progress or any element thereof, subject to providing reasonable notice and complying with the Proponent's safety requirements for such access.

13. REPORTS

13.1 The Proponent shall submit, no later than sixty (60) days after the Claim Period, the following documentation as per the template provided by Canada.

a) an updated Project quarterly cash flow statement and budget;

b) a detailed breakdown of any capital equipment purchased;

c) where applicable, an explanatory note signed by the Chief Financial Officer or Duly Authorized Officer explaining what overhead expenditures were Incurred; and

d) a report of Project tasks to-date in sufficient detail, including outputs and key performance indicators, to allow progress to be evaluated.

13.2 The Proponent shall submit, no later than ninety (90) days after the Completion Date, a final report, as per a template provided by Canada, which includes the following:

a) a final narrative report to describe how its activities have contributed to the achievement of the objectives, the benefits, and the key performance measures of the Project as described in Schedule A (Description of the Project), including the results of the Project in comparison to the original task plan and outputs;

b) a financial report that shall demonstrate how the Contribution was spent, including a financial declaration as to whether the Proponent received contributions (including in-kind) or payments in respect of the Project in addition to, or from sources other than, those set out in Schedule B (Budget and Eligible Expenditures);

c) a certification that the claims for payment of Eligible Expenditures of the Project have been Incurred and Paid by the Proponent;

a) a declaration as to the total amount of contributions or payments, including Total Government Funding, received by the Proponent; and

b) a commissioning report, signed by a professional engineer or a duly authorized officer, that indicates the date of commissioning and rated capacity of the Project (if applicable).

14. DISPOSITION OF ASSETS

14.1 If, prior to the Completion Date and for three (3) years thereafter, the Proponent sells, leases or otherwise disposes of any Fixed Asset excluding Intellectual Property, where the cost of the Fixed Asset is part of the Eligible Expenditures under the Project to which Canada has contributed under this Agreement, and where the proceeds of the sale, lease or other disposition are not applied to acquire assets in replacement of the Fixed Asset, the Proponent shall immediately notify the Minister in writing of such sale, lease or disposition and, if the Minister so requires, the Proponent shall share with Canada the proceeds of the sale, lease or any other disposition in the same ratio as that of Canada's Contribution to the purchase of the Fixed Asset by the Proponent, except that Canada's share shall not exceed the Contribution.

15. SUBCONTRACTS

15.1 The Proponent shall not subcontract all or any part of the Project except as provided in the Proposal or as otherwise set forth below. The Proponent shall advise the Minister of any other new contract, not originally included in the Proposal, the Proponent enters into with a third party to undertake work on the Project where the estimate of the cost of the work to be performed exceeds twenty percent (20%) of the Contribution. The notice shall include a description of the extent and nature of the contracted work, the identity of the contractor, and the estimated cost of the contracted work. For greater certainty, for the purposes of this Article, there is no privity of contract between Canada and any of the Proponent’s subcontractors; as such, the selection and amendment of any of the Proponent’s subcontractors as may be listed in the Proposal is the sole responsibility of the Proponent and is not subject to the Minister’s consent.

16. LEGAL RELATIONSHIP

16.1 Nothing contained in this Agreement shall create the relationship of principal and agent, employer and employee, partnership or joint venture between the Parties.

16.2 The Proponent shall not make any representation that:

a) the Proponent is an agent of Canada; or

b) could reasonably lead any member of the public to believe that the Proponent or its contractors are agents of Canada.

17. ACKNOWLEDGEMENT

17.1 The Proponent shall acknowledge the financial support of Canada in all public information produced as part of the Project.

17.2 The Proponent will seek prior written consent of the Minister for any public acknowledgement of the financial support of Canada to this Project through news releases, public displays, and public and media events.

17.3 Except for releases of information required to comply with securities regulations or other laws, where media announcements and public events relating to this Project are to be made by a Party, the Party shall use commercially reasonable efforts to give to the other a three (3) weeks prior written notice of any media announcement or public event and a reasonable opportunity to review and comment thereon.

17.4 The Proponent acknowledges that the Proponent's name, the amount awarded, and the general nature of the activities supported under this Agreement may be made publicly available by the Government of Canada.

18. TIME OF ESSENCE

18.1 Time is of the essence with respect to all provisions of this Agreement that specify a time for performance.

19. MEMBERS OF PARLIAMENT

19.1 No Member of the House of Commons or Senate shall be admitted to any share or part of this Agreement or to any benefit arising therefrom that is not otherwise available to the general public.

20. CONFLICT OF INTEREST

20.1 It is a term of this Agreement that all current or former public servants to whom the federal *Values and Ethics Code* for the Public Sector, federal *Policy on Conflict of Interest and Post-Employment*, or *NRCan Values and Ethics Code* applies shall comply with the Codes or Policy, as applicable.

20.2 If any individual working for the Proponent formerly provided consultancy services to the Minister that are related to this Agreement, particularly any services associated with developing the Agreement or developing the Project which is the subject of this Agreement, the Proponent is considered to be in a real, perceived, or potential conflict of interest situation.

20.3 If a conflict of interest situation arises during the Agreement, the Proponent shall notify the Minister, in the manner prescribed in Article 24 (Notices). Upon request, the Proponent shall notify the Minister of all reasonable steps taken to identify, avoid, prevent, and where it exists, resolve any conflict of interest situation.

20.4 The Minister may investigate a real, perceived, or potential conflict of interest and take such steps and measures as the Minister considers appropriate, including without limitation: informing the Proponent that it is in a conflict of interest situation; requesting specific actions be taken to correct the situation; requiring the Proponent to withdraw any individual from participation in the Project for reasons of conflict of interest; suspending payments under the Agreement; or terminating the Agreement.

21. FORCE MAJEURE

21.1 The Parties shall not be in default or in breach of this Agreement due to any delay or failure to meet any of their obligations caused by or arising from any event beyond their reasonable control and without their fault or negligence, including any act of God or other cause which delays or frustrates the performance of this Agreement (a “force majeure event”). If a force majeure event frustrates the performance of this Agreement, Canada will only be liable for its proportionate share of the Eligible Expenditures Incurred and Paid to the date of the occurrence of the event.

21.2 The performance of the obligation affected by a “force majeure event” as set out above shall be delayed by the length of time over which the event lasted. However, should the interruption continue for more than thirty (30) days, this Agreement may be terminated by Canada.

21.3 Should either Party claim the existence of a “force majeure event” as above, prompt notice thereof shall be given to the other Party and the Party claiming the existence of a “force majeure event” shall have the obligation to provide reasonable satisfactory evidence of the existence of such event and use its best efforts to mitigate any damages to the other Party.

22. GOVERNING LAW

22.1 This Agreement shall be interpreted in accordance with the applicable federal laws and the laws in force in the Province of Ontario.

23. ASSIGNMENT

23.1 No benefit arising from this Agreement shall be assigned in whole or in part by the Proponent without the prior written consent of the Minister and any assignment made without that consent is void and of no effect.

24. NOTICES

24.1 The claims for payment, requests, reports, notices, repayments and information referred to in this Agreement shall be sent in writing or by any method of telecommunication and, unless notice to the contrary is given, shall be addressed to the Party concerned at the following address:

To Canada:

Abigail Lixfeld
Senior Director, Renewable and Electrical Energy Division
Smart Renewables and Electrification Pathways Program
Natural Resources Canada
580 Booth Street, 17th Floor
Ottawa, Ontario
K1A 0E4
Telephone: (613) 293-7746
E-mail: sreps-erite@nrcan-rncan.gc.ca

To the Proponent:

Emmanuveal Arulseelan
Grid Advancement Engineer
Elexicon Energy Inc.

55 Taunton Road East
Ajax, Ontario
L1T 3V3
Telephone: (905) 427-9870 ext. 2257
E-mail: earulseelan@elexiconenergy.com

24.2 Requests, notices and documents are deemed to have been received, if sent by registered mail, when the postal receipt is acknowledged by the other Party; by facsimile or electronic mail, when transmitted and receipt is confirmed; and by messenger or specialized courier agency, when delivered.

24.3 The Minister and the Proponent agree to notify each other in writing if the above contact information changes. This requirement will not cause an Amendment.

25. AMENDMENTS

25.1 No amendment of this Agreement or waiver of any of its terms and conditions shall be deemed valid unless effected by a written amendment signed by the Parties.

26. DISPUTE RESOLUTION

26.1 If a dispute arises concerning the application or interpretation of this Agreement, the Parties will attempt to resolve the matter through good faith negotiation, and may, if necessary and the Parties consent in writing, resolve the matter through mediation by a mutually acceptable mediator.

27. APPROPRIATION

27.1 The payment of monies by Canada under this Agreement is subject to there being an appropriation by Parliament for the Fiscal Year in which the payment of monies is to be made.

27.2 Notwithstanding any other provision of this Agreement, Canada may reduce or cancel the Contribution to the Project upon written notice to the Proponent in the event that the funding levels for the Department of Natural Resources are changed by Parliament during the term of this Agreement. In the event that Canada reduces or cancels the Contribution, the Parties agree to amend the Project and the Eligible Expenditures of the Project, namely this Agreement, to take into account the reduction or cancellation of the Contribution.

28. LOBBYING ACT

28.1 The Proponent shall ensure that any person lobbying on behalf of the Proponent is registered pursuant to the *Lobbying Act* and that the fees paid to the lobbyist are not to be related to the value of the Contribution.

29. SUCCESSORS AND ASSIGNS

29.1 This Agreement shall inure to the benefit of and be binding on the Parties and their respective representatives, successors and assigns.

30. OFFICIAL LANGUAGES/LANGUES OFFICIELLES

30.1 This Agreement is drafted in **English** at the request of the Parties. Les Parties ont convenu que le présent Accord soit rédigé en **anglais**.

30.2 All public information documents related to the Project prepared or paid for in whole or in part by Canada must be made available in both official languages, when the Department of Natural Resources judges that this is required under the *Official Languages Act*. Tout document d'information publique préparé ou payé en tout ou en partie par le Canada ayant trait au Projet doit être offert dans les deux langues officielles, lorsque le Ministère des ressources naturelles le juge pertinent, conformément à la Loi sur les langues officielles.

31. COUNTERPART SIGNATURE

31.1 This Agreement (and any amendments) may be signed in counterparts including facsimile, PDF and other electronic copies, each of which when taken together, will constitute one instrument.

32. SEVERABILITY

32.1 Any provision of this Agreement prohibited by law or otherwise ineffective, will be ineffective only to the extent of such prohibition or ineffectiveness and will be severable without invalidating or otherwise affecting the remaining provisions of the Agreement. The Parties agree to negotiate in good faith a substitute provision which most nearly reflects the Parties' intent in entering into this Agreement.

33. ENTIRE AGREEMENT

33.1 This Agreement constitutes the entire Agreement between the Parties with respect to the subject matter of this Agreement and supersedes all previous negotiations, communications, and other agreements, whether written or verbal between the Parties.

IN WITNESS THEREOF, this Agreement is duly executed on behalf of Her Majesty the Queen in Right of Canada by an officer duly authorized by the Minister of Natural Resources and on behalf of the Proponent, by an officer duly authorized on its behalf.

HER MAJESTY THE QUEEN IN RIGHT OF CANADA

Date

Debbie Scharf
Assistant Deputy Minister
Energy Systems Sector

ELEXICON ENERGY INC.

August 4, 2022

Date

~~Falguni Shah~~ Indrani Butany-DeSouza
~~VP – Technology and Innovation~~ President & CEO

SCHEDULE A

To the Agreement between

HER MAJESTY THE QUEEN IN RIGHT OF CANADA

And

ELEXICON ENERGY INC.

DESCRIPTION OF THE PROJECT

PROJECT TITLE:	PROJECT VERITAS – A HOLISTIC APPROACH TO DEMAND MANAGEMENT
PROJECT OBJECTIVE:	The objective of this Project is to deploy distribution management systems to create a more efficient and resilient electricity grid system for the province of Ontario.
PROJECT SUMMARY:	Under this Project, the Proponent will deploy hardware and software systems across the Proponent's service area in Ontario. The Project will upgrade their control systems, distribution systems and improve their ability to manage electricity outages.
BENEFITS:	**<u>Benefits to Canada / Canadians:</u>** The Project will reduce greenhouse gas (GHG) emissions and support the expansion of renewables and distributed energy resource assets. **<u>Benefits to Stakeholders:</u>** The Project will increase electric system visibility, control, and safety while customers benefit from improved hazard reduction, while creating new employment opportunities during construction. The Project will also modernize Ontario's electricity grid while increasing stability and energy security.

PROJECT TASKS:

	Project Tasks	Description	Outputs
1.0	**Phase 1: ADMS & OMS Implementation**		
1.1	Technical Design and Implementation, People, Process and System Design, System Integration and Operator Training June 30, 2024	Under this task, the Proponent will complete the design, integration, configuration, testing and commissioning of the onsite hardware and software systems. The Proponent will perform Permanent Process Updates to the existing system's operational process (remote operation of circuit breakers, switches, reclosures, etc.). The Proponent will also perform the integration between the Order Management System (OMS) and the Advanced Distribution Management System (ADMS), and carry out end user training.	• Technical design, detailed project and implementation plan/schedule complete. • New processes and procedures introduced. • Near 'real time' information exchange between ADMS and OMS systems. • Trained system users. • OMS and ADMS systems in operation. • Additional modules available for operational use.
1.2	OMS Commissioning May 31, 2023	Under this task, the Proponent will put the OMS system into operation.	
1.3	ADMS Commissioning December 31, 2023	Under this task, the Proponent will put the ADMS system into operation.	

	Project Tasks	Description	Outputs
1.4	Implementation and Commissioning of additional modules June 30, 2024	Under this task, the Proponent will integrate additional system modules.	
2.0	**Phase 2: DERMS Implementation and Active Demand Management Program Design**		
2.1	Technical Design and Implementation, People, Process and System Design, System Integration, Operator Training and DERMS Commissioning August 31, 2024	Under this task, the Proponent will complete the design, integration, configuration, testing and commissioning of the onsite hardware and software systems. The Proponent will perform Permanent Process Updates to the existing system's operational process (coordination with system operations, feedback processes for operational planning, etc.). The Proponent will also perform the intergration with the OMS and ADMS, and carry out end user training. The Proponent will then put the Distributed Energy Resource Management System (DERMS) into operation.	• Technical design, detailed project and implementation plan/schedule complete. • New processes and procedures introduced. • Near 'real time' information exchange between ADMS and OMS systems. • Trained system users. • DERMS system in operation. • Suitable programs identified (with their segments and impact). • Value-prioritized roll out scenarios. • Program Design Report complete.
2.2	Program Modeling, Segmentation Recommendations, Roll out Scenarios and Program Design Report Delivery December 31, 2023	Under this task, the Proponent will model the high impact program, enabling system-wide capacity relief and identify target areas for potential trial programs within Elexicon Energy's Service Territory. The Proponent will provide suggested programs by customer type, controllable assets and outcomes. The Proponent will determine potential program roll-out scenarios (customer engagement methods, incentives, and suggested program administration/management methods), and will also submit the completed report to Elexicon.	
3.0	**Phase 3: Communication Infrastructure Implementation**		
3.1	Technical Design and Implementation, People, Process and System Design, System Integration, Employee Training and Communication Infrastructure Commissioning March 31, 2025	Under this task, the Proponent will complete the planning, design, integration, configuration, testing and commissioning of all network infrastructure. The Proponent will perform Permanent Process Updates to the existing process (cybersecurity profile for networks, system monitoring, etc.). The Proponent will perform the integration of field devices into OMS, ADMS and DERMS. The Proponent will perform end user training for operations, maintenance, troubleshooting and deployment, and finally, will put the system into commissioning.	• Technical design, detailed project and implementation plan/schedule complete. • New processes and procedures introduced. • Near 'real time' information exchange between field devices and control systems. • Trained employees. • Operational end-to-end communication network.

PERFORMANCE INFORMATION:

Key Performance Indicators:
1. Number of job years of employment.
2. Number of greenhouse gas emission reductions.
3. Number of equity, diversity and inclusion plans and/or activities.

SCHEDULE B

To the Agreement between

HER MAJESTY THE QUEEN IN RIGHT OF CANADA

And

ELEXICON ENERGY INC.

BUDGET AND ELIGIBLE EXPENDITURES

1. Subject to the limitations set out in Article 6 (Contributions), Eligible Expenditures shall be associated with the execution of the various activities as described in Schedule A (Description of the Project).

Approved Budget ($)	2021-22	2022-23	2023-24	2024-25	TOTAL ($)
Canada's Contribution	**$ -**	**$ 1,306,673**	**$ 1,631,513**	**$ 1,102,814**	**$4,041,000**
ELIGIBLE EXPENDITURES					
Salaries and Benefits	$ -	$ 712,200	$ 888,200	$ 763,200	$2,363,600
Overhead	$ -	$ 150,000	$ 150,000	$ 37,500	$337,500
Professional, Scientific, Technical and Contracting	$ -	$ 951,146	$ 1,594,826	$ 774,928	$3,320,901
Travel, including Meals and Accomodations	$ -	$ -	$ -	$ -	$0
Capital Expenditures for Equipment and Products	$ -	$ 800,000	$ 630,000	$ 630,000	$2,060,000
Other Expenses	$ -	$ -	$ -	$ -	$0
Total by Fiscal Year:	**$0**	**$2,613,346**	**$3,263,026**	**$2,205,628**	
Total Eligible Expenditures					**$8,082,001**

INELIGIBLE COSTS					
INELIGIBLE EXPENDITURES					
Salaries and Benefits	$ 40,023	$ -	$ -	$ -	$40,023
Overhead	$ 37,500	$ -	$ -	$ -	$37,500
Professional, Scientific and Contracting Services	$ 5,115				$5,115
Equipment and Products	$ 238,733	$ -	$ -	$ -	$238,733
Total Ineligible Expenditures					**$321,371**
IN-KIND COSTS					
Total In-Kind Costs					**$0**
Total Ineligible Costs					**$321,371**
TOTAL PROJECT COSTS					**$8,403,371**

Source of Contributions:	Percentage (%)	Cash ($)	In-Kind ($)	Total ($)
Canada	**48%**	4,041,000	N/A	**4,041,000**
The Proponent	**52%**	4,362,371	0	**4,362,371**
TOTAL	**100%**	**$8,403,371**	**$0**	**$8,403,371**

NOTE: the following limitations apply to the approved budget above:

a) In accordance with the departmental GST/PST/HST certification form, the reimbursable Provincial Sales Tax, the Goods and Services Tax and Harmonized Sales Tax costs must be net of any tax rebate to which the Proponent is entitled.

b) "Salaries and benefits" costs are for employees on the payroll of the Proponent for the actual time spent by the employees on the Project.

c) Overhead expenditures directly related to the conduct of the Project, such as office operating expenses (e.g. telephone, internet, heat, electricity), are limited to fifteen percent (15%) of total Eligible Expenditures.

d) "Capital expenditures for equipment and products" include the purchase, installation, testing and commissioning of qualifying equipment, material and products, as well as diagnostic and testing tools and instruments, and original equipment manufacturer warranty (including extended warranties where deemed appropriate to mitigate risk and lack of capacity).

e) Ineligible costs, such as the reimbursable portion of Federal and Provincial Taxes and legal costs related to notarization requirements, may be considered towards Total Project Costs; however, they are not Eligible Expenditures.

f) In-kind costs are those contributions of goods or services provided by the Proponent or other contributors that are considered towards Total Project Costs; however; they are not Eligible Expenditures.

g) The following costs are not Eligible Expenditures, nor considered towards Total Project Costs:
   a. Land acquisition costs and associated real estate fees;
   b. Costs of leasing land, buildings and other facilities;
   c. Legal fees;
   d. Project Proposal preparation costs;
   e. Tax preparation costs;
   f. Financing charges and interest payments on Project loans;
   g. Costs that cannot be deemed necessary for the implementation of the Project;
   h. Salary benefits and incentives deemed unrelated to the Project (e.g., employee bonuses);
   i. Costs associated with the protection of Intellectual Property;
   j. Fossil fuel generation equipment; and
   k. Costs incurred before or after the Eligible Expenditures Period.

2. Notwithstanding Article 25 (Amendments), provided the Contribution for any given Fiscal Year is not exceeded, the Proponent may adjust any cost allocated by Eligible Expenditure as listed above by up to twenty percent (20%) of that cost without providing notice to Canada. At the time of submitting a claim for payment, the Proponent must provide Canada with a revised budget.

   The Proponent may submit a written request to Canada to make an adjustment greater than twenty percent (20%). The request must include a revised budget. This request is subject to the approval in writing by Canada's representative identified in Article 24 (Notices).

Elexicon Energy Inc.

Answer to Interrogatory from

OEB Staff

Interrogatory STAFF-10:

Whitby Smart Grid – Cost Allocation

Ref 1: Appendix B – Incremental Capital Module Whitby Smart Grid, p. 36

Ref 2: EB-2021-0015 – Distribution System Plan – Overview of Assets Managed

For the Whitby Smart Grid, $36.7 million was allocated to Whitby Rate Zone, and $6.43

million was allocated to Veridian Rate Zone. The Whitby Smart Grid involves the installation of a suite of proven smart grid technologies on Elexicon Energy's distribution system in the Whitby Rate Zone and Veridian Rate Zone. In reference 2, it shows that the Whitby Rate Zone has about one-third the number of customers as compared to the Veridian Rate Zone.

a) Please provide the allocation method of costs and calculations for the AMDS and SCADA between the Whitby Rate Zone and the Veridian Rate Zone.

b) Please confirm if the same smart grid technologies are installed in the Whitby and Veridian Rate Zones and whether both rate zones will have the same functionality. If so, please explain why the Whitby Rate Zone bears most of the costs.

c) If only the Whitby Rate Zone will see certain smart grid benefits as compared to the Veridian Rate Zone, please provide a list of differences.

d) Please provide a list of benefits the Veridian Rate Zone can expect from AMDS and SCADA.

Response:

a) The tables below show the allocation of costs between Veridian Rate Zone (VRZ) and the Whitby Rate Zone (WRZ). The costs were allocated based on a proration of customer counts between Elexicon's VRZ and WRZ:

Table 1 – Allocation of Costs between Veridian and Whitby Rate Zone

VRZ

WSG - SCADA	$1,281,502
WSG - ADMS - Computer Software	$579,138
WSG - ADMS - Computer Equipment	$89,562
WSG - ADMS - Communications Equipment	$419,231
Total	$2,369,433

WRZ

WSG - SCADA	$3,478,498
WSG - ADMS - Computer Software	$1,572,007
WSG - ADMS - Computer Equipment	$243,106
WSG - ADMS - Communications Equipment	$1,137,957
Total	$6,431,567

b) No. The ADMS includes modules that are required to operate VVO and FLISR systems. These ADMS modules will only benefit customers in the Whitby Rate Zone, since the VVO and FLISR field hardware will only be installed in the Whitby Rate Zone Therefore, the allocation of costs of the ADMS is greater to the Whitby Rate Zone.

c) The Veridian Rate Zone will only receive the ADMS benefits stated in Table 1 of Appendix B-1. The Whitby Rate Zone will see all the benefits stated in Table 1 of Appendix B-1.

d) Table 1 in Appendix B-1 states the benefits associated with ADMS implementation. Below is an extract of that Table listing only the ADMS benefits, which are what the Veridian Rate zone can expect as well as the Whitby Rate Zone.

Table 2 – Extract of ADMS Benefits

System	Expected Benefit
ADMS	• Leverage the existing metering, Infrastructure Technology, other system software, and communication systems to effectively regulate voltage, mitigate outages, and Distributed Energy Resources (DER). • Increased safety and operational situational awareness for field crews. • Reduction of restoration time. • Increased efficiency through the reduction of overhead costs. • Advanced real-time load flow calculations and load transfer. • Streamlining of switch order and execution. • Improved asset management of devices through the inherent switch operation logging ability of the ADMS system.

Elexicon Energy Inc.

Answer to Interrogatory from

OEB Staff

Interrogatory STAFF-11:

DER Enabling Program and Local Capacity Market

Ref 1: Appendix B-3 DER Enabling Program and Local Capacity Market

Elexicon Energy stated that in connection with the projects, Elexicon Energy is considering two programs to incent DER capacity: 1) CDM marketing, incentives, and on-bill financing (DER Enabling Program) and 2) Creating local capacity and energy market (Local Capacity Market). Elexicon Energy stated it is still considering whether to file an application with the OEB and has provided only preliminary details on the program.

a) Please provide the impact on the Whitby Smart Grid project if these proposed programs are not approved.

b) If the success of the Whitby Smart Grid is dependent on the approval of these programs how does Elexicon Energy justify approval of the Whitby Smart Grid without the details and cost of the proposed programs?

c) When would Elexicon Energy be in a position to provide specifics for each of these programs?

d) Please provide additional information on the York Region Non-Wires Alternatives Demonstration Project.

Response:

a) If the OEB does not approve Elexicon's application for a DER Enabling Program and Local Capacity Market, Whitby Rate Zone customers will continue to receive the immediate benefits of the Whitby Smart Grid; namely energy savings and improved reliability. In the long term, DER uptake is expected to be less than would otherwise be the case (in the event the programs had been implemented), reducing opportunities to defer material infrastructure investments in the 2030's.

b) The success of the Whitby Smart Grid ("WSG") is not predicated on the DER Enabling Program. Elexicon expects the WSG project to provide approximately $673K in net benefits as show in Table 1: WSG Net Benefits[1]. Elexicon's prospects to defer material

[1] Appendix B – Incremental Capital Module Whitby Smart Grid & Sustainable Brooklin, Page 11 of 56

capital investments in the 2030's will be improved via approval of the programs, when filed.

c) Elexicon expects to file its application for the DER Enabling Program in the first half of 2023, contingent on OEB approval of the WSG project and guidance provided in its Decision and Order.

d) Please see below links to additional information regarding the York Region Non-Wires Alternatives Demonstration Project **:**

- Project Rules
- Contract (Direct Participant)
- Contract (Aggregator)
- Pre-Auction Report
- Post-Auction Report
- Resource Videos
- Journey Map
- Terms and Conditions

Elexicon Energy Inc.

Answer to Interrogatory from

OEB Staff

Interrogatory STAFF-12:

1-Staff-12

North Brooklin Development Feeder Expansion - Feeders

Ref 1: Appendix B-2 – Sustainable Brooklin Business Case

Ref 2: EB-2021-0015 – Distribution System Plan – A3 – Feeder Expansion

Ref 3: EB-2021-0015 – Distribution System Plan – Figure 5.3-9 Municipal Station in the Whitby Area

Elexicon Energy stated that the first phase of this project requires Elexicon Energy to construct two new 27.6kV feeders connecting the North Brooklin development to Whitby TS. It is anticipated that the Brooklin Developers will construct 10,000 energy-efficient homes in the North Brooklin area over the next 20 years. The Brooklin Developers are proposing to build 700 DER/EV-ready homes per year for the next 20 years.

a) Please provide any additional information Elexicon Energy has for future phases for this development and Elexicon Energy's future system plans for the Brooklin area.

b) Please provide the regular estimated loading per home Elexicon Energy uses for planning purposes and the estimated loading per home from the Brooklin Developers (ie. Including DER, EV, and solar). If the net loading per home is higher for the homes proposed by Brooklin Developers, please provide support on how they are energy efficient.

c) With recent economic developments, has this affected Brooklin Developers' forecast to construct 700 DER/EV-ready homes per year? Please provide any communications between Elexicon Energy and the developer on updated load forecasts.

Figure 1 in reference 1 shows the location of Whitby TS and the two feeders proposed to supply the Brooklin area.

d) Please add to the figure the approximate boundary of the subdivisions proposed by the Brooklin Developers along with the phase and year the subdivision is anticipated to be constructed.

e) Based on the notes attached in the figure it appears that there is an existing pole line for portions of these two new feeders. Please highlight sections that are rebuilds of the existing line and sections that are greenfield. For the green field sections please provide the distribution map of feeders in the surrounding area.

f) Please explain Elexicon Energy's decision to construct two separate pole lines for two circuits now in an ICM instead of one line double circuit to minimize cost.

g) In reference 3, MS9, MS11, and MS14 are in the surrounding area. Please add the location of these MSs and associated feeders to figure 1.

h) Please provide the station and feeder loading on MS9, MS11, and MS14.

i) Please confirm if the station transformer or the insulation on the poles is suitable for voltage conversion to 27.6kV. If not please explain why (i.e., provide the current rating of transformer and insulator insulation rating).

Elexicon Energy provided three levels of DER penetration which could be used to defer station upgrades.

j) Please provide the current thermal and short circuit capacity of upstream equipment in the Brooklin area.

k) Please provide any upstream equipment that would need to be upgraded to allow for each level of DER penetration, if any.

Response:

a) Elexicon has no detailed additional information on future phases of the North Brooklin development beyond that provided in its application and evidence.

b) Elexicon's load forecasting model estimates peak load using the average kW per residential customer in the Whitby Rate Zone ("WRZ"). The summer peak load is calculated to be 4.5 kW, winter peak is 3.9 kW for winter peak.

c) Elexicon has not received any notification of change to the Brooklin Developer's current forecast of construction in North Brooklin.

d) Elexicon is awaiting a revised construction schedule from the Brooklin Developer's. The most recent plan provided to Elexicon is included as Attachment 1 to this response.

e) The final detailed design for the Sustainable Brooklin project is being developed at this time. Elexicon expects that its final design will identify sections that are rebuilds of any existing line and sections that are greenfield.

f) Elexicon has one circuit per pole-line to minimize the risk of a wholesale area outage in the event of a storm or any one pole being taken out of service (e.g. vehicle collision). Elexicon submits this is sound, best practice. Elexcion is planning for its future needs to add more circuits as the surrounding area experiences customer growth. To be efficient and prudent with respect to future needs and construction costs, Elexicon is constructing two separate pole lines now as part of its Sustainable Brooklin project.

g) Please see Attachment 2 to this response for locations of MS9, MS11, and MS14.

h) Please see Attachment 3 to this response for MS9, MS11, and MS14 station and feeder loading.

i) Elexicon is not converting its existing voltage 13.8kV to 27.6kV as suggested in the question. Elexicon is introducing 27.6kV into the Whitby area in the North Brooklin area where new development will be constructed. Given the electricity requirements of this new construction, Elexicon's planning has identified the 27.6kV infrastructure as the preferred option.

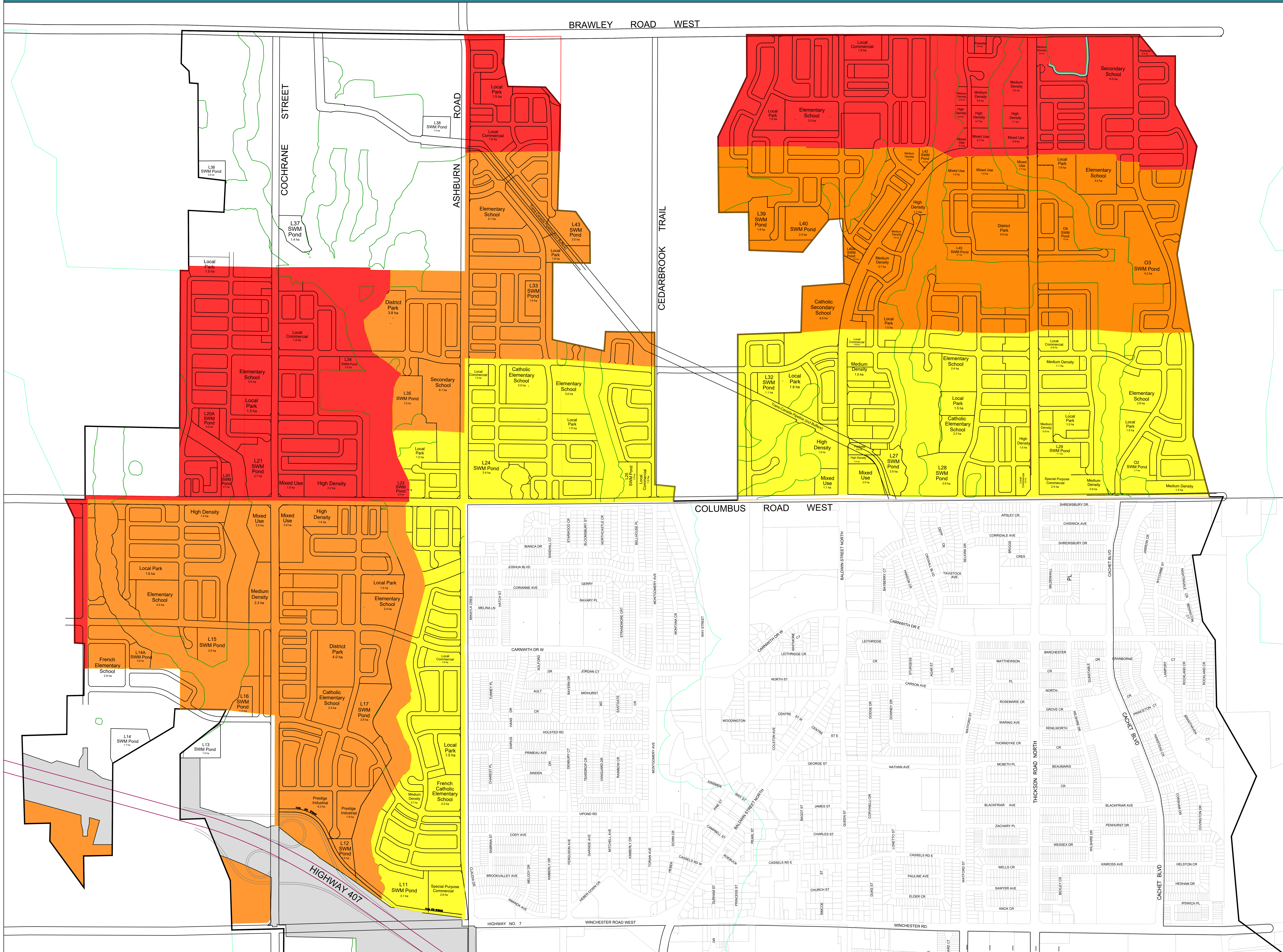
j) Elexicon is introducing a 27.6kV system which is a requirement for Elexicon to determine the thermal and short circuit capacity of upstream equipment on the 27.6kV system.

k) Please see response to part e) above.

STAFF – 12

Attachment 1

BROOKLIN PHASING PLAN



PHASING LEGEND

Phase One (2021)
2,130 Low Density Residential Units
1,350 Medium Density Residential Units
740 High Density Units
4,220 Total Residential Units
11,770 Population

Phase Two (2023)
2,960 Low Density Residential Units
1,520 Medium Density Residential Units
1,300 High Density Units
5,780 Total Residential Units
15,970 Population

Phase Three (2026)
2,040 Low Density Residential Units
860 Medium Density Residential Units
910 High Density Units
3,810 Total Residential Units
10,570 Population

Notes: This preliminary draft concept is high level and without prejudice. The final road network, land use pattern, and location of community / SWM facilities are subject to further review and will be determined through the Draft Plan of Subdivision process.

SWM Ponds located within the intensification Corridor are subject to Policy 11.5.6.5 of the Brooklin Secondary Plan. Best efforts shall be made through future study work (e.g. Functional Servicing Reports) to locate these facilities outside of the Intensification Corridor.

0 500m

Date: March 2, 2020

File No. 17-2667

Prepared by:

MGP Malone Given Parsons.

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BROOKLIN LANDOWNERS GROUP

STAFF – 12

Attachment 2

Please note that this map is work in progress (please check the GIS Viewer). Data extracted from GIS in July 30, 2021.

STAFF – 12

Attachment 3

LOADING PEAKS FOR JULY 9TH 2020 @ 17:00

ALL VALUES IN AMPS

ANY VALUES OF ZERO DO NOT MEET THRESHOLD TO REPORT

MS5	R	W	B
F1	287	259	321
F2	179	217	228
F3	230	239	240

MS6	R	W	B
F1	171	238	191
F2	269	207	215
F3	197	185	186
F4	230	168	152

MS7	R	W	B
F1	80	104	155
F2	131	137	136
F3	71	79	104
F4	212	218	206

MS8	R	W	B
F1	228	195	213
F2	103	105	87
F3	16	28	31
F4	260	267	257

MS9	R	W	B
F1	79	110	119
F2	0	0	0
F3	84	61	105
F4	304	253	241

NO REPORTING AVAILABLE FOR MS16

MS10	R	W	B
F1	204	198	255
F2	79	93	72
F3	173	171	184
F4	247	263	235
F6	294	318	224

MS11	R	W	B	
F1	284	298	304	0.94
F2	338	317	289	0.91
F3	217	206	191	0.91
F4	289	335	318	0.92

MS12	R	W	B
F1	0	0	32
F2	232	222	248

MS13	R	W	B
F1	128	90	111
F2	117	82	138

MS14	R	W	B
F1	122	115	114
F2	210	222	220
F3	209	207	204

MS15	R	W	B
F1	87	64	89
F2	133	114	128
F3	262	255	244

Feeder	Jul 09 20 17:00	KW	p.f
5F1	7051443	7051	
5F2	5044793	5045	
5F3	5729147	5729	
6F1	5025204	5025	
6F2	5715546.5	5716	
6F3	4668497.5	4668	
6F4	4436765	4437	
7F1	2760980.25	2761	
7F2	3342975.25	3343	
7F3	2160510	2161	
7F4	5401948.5	5402	
8F1	5210315	5210	
8F2	2347836.25	2348	
8F4	6564046.5	6564	
9F1	2523116.25	2523	
9F2	12663.19	13	
9F3	2081894.38	2082	
9F4	6559365	6559	
10F1	5335400	5335	
10F2	2001441.25	2001	
10F3	4334448.5	4334	
10F4	6056340.5	6056	
10F6	6805149.5	6805	
11F1	7170265	7170	0.94
11F2	7684573	7685	0.91
11F3	4984957	4985	0.91
11F4	7713357.5	7713	0.92
12F1	436805.09	437	
12F2	5573204	5573	
13F1	2679983.75	2680	
13F2	2711008.25	2711	
14F1	2810823.25	2811	
14F2	5321182.5	5321	
14F3	5020712	5021	
15F1	1951476.13	1951	
15F2	3117818.75	3118	
15F3	6252893.5	6253	

	B	R	W
40M5			
40M6			
40M7	294	309	296
40M8	455	456	444
40M21	189	189	185
40M22	200	201	196
40M23	347	345	329
40M24	299	297	279
40M25			
40M26	198	196	204
40M27	430	428	446
40M28	375	374	382
52M1	53	53	53
52M6	95	95	95
52M7	430	430	430
52M8	106	106	106

SCADA PEAK MAX AMPS July 9

	B	R	W
40M5			
40M6			
40M7	294	309	296
40M8	455	456	444
40M21	213	213	210
40M22	225	224	220
40M23	371	375	357
40M24	327	322	306
40M25			
40M26	214	215	219
40M27	459	461	476
40M28	402	402	410
52M1	57	57	57
52M6	102	102	102
52M7	431	431	431
52M8	106	106	106
	456	10945.37	
	457	10969.37	
	473	11353.42	

Elexicon Energy Inc.

Answer to Interrogatory from

OEB Staff

Interrogatory STAFF-13:

North Brooklin Development Feeder Expansion - Costs

Ref 1: Appendix B-2 – Sustainable Brooklin Business Case

In table 1 of reference 1, Elexicon Energy estimated a cost of $10.3 million for the underground portion and $16.4 million for the overhead portion of the project.

a) Please provide the number of kilometers of overhead/underground line construction for each section provided in table 1 and show the average cost per kilometer.

b) Please compare the cost per kilometer in part A to Elexicon Energy's typical cost per kilometer. For higher unit costs, please explain.

Response:

a) Please see below:

Table 1 Updated with Average Cost per Kilometer

UG PORTION	Elexicon Estimate				
Location	Distance [m]	Cable (Circuits)	Concrete duct	DUCT BANK /CABLE	cost
Whitby TS to Egress of HONI ROW - UG	650	2	6	Cable only	$ 1,950,000
Lakeridge- under tower line 1- UG	475	2	6	Ductbank with Cable	$ 1,425,000
Lakeridge- under tower line 2- UG	294	2	6	Ductbank with Cable	$ 882,000
Columbus (Country Lane to Ashburn)- UG	2000	2	6	Ductbank with Cable	$ 6,000,000
SUB TOTAL					$ 10,257,000
	Total length [m]	3419			
	Unit Cost	$ 3,000			

OH PORTION					
Location	Number of Poles	number of circuits	Number of Poles	cost	
Lakeridge - Between two Tower line-OH		6	36	$	1,800,000
Lakeridge - North of HONI ROW to South of HWY407- OH	59	2	118	$	5,900,000
Lakeridge - South of HWY 407 crossing to Columbus - OH	35	2	70	$	3,500,000
Columbus(from Lakeridge to Country Lane)- OH	90	6	98	$	4,900,000
SUB TOTAL				$	16,100,000
	Total Length	11500			
	Unit Cost	$ 1,400			

b) The Asset Performance Benchmark costs are an average cost for all assets regardless of height & class of Poles, area (rural vs. urban), type of underground crossing (Highway versus Local Road), and number of circuits. The proposed costs for the Sustainable Brooklin project are reflective of the latest costs to install the required assets, in the required locations.

Elexicon Energy Inc.

Answer to Interrogatory from

OEB Staff

Interrogatory STAFF-14:

North Brooklin Development Feeder Expansion – Voltage Conversion

Ref 1: Appendix B-2 – Sustainable Brooklin Business Case

Ref 2: EB-2021-0015 – Distribution System Plan – A3 – Feeder Expansion

Ref 3: EB-2021-0015 – Distribution System Plan – Figure 5.3-9 Municipal Station in the Whitby Area

Elexicon Energy plans to install two new 27.6kV feeders from Whitby TS to supply the Brooklin area.

a) Please explain Elexicon Energy's decision to supply the Brooklin area with 27.6kV instead of 13.6kV, which appears to be the standard voltage in the area. If the plan is to evolve the distribution system to 27.6kV in the long run, please explain why Elexicon Energy has not started with voltage-converting existing stations.

b) Please provide the additional capacity that will be supplied to the area if all the existing 13.6kV supply was converted to 27.6kV.

c) Does Elexicon Energy have plans to transfer 13.6kV loads on this new 27.6kV feeder over the next five years? If so, how much 13.6kV load would be transferred?

d) In Elexicon Energy's list of project alternatives, it does not discuss the possible alternative of voltage conversion. Did Elexicon Energy consider this option and provide a high-level cost estimate if this option was considered

Response:

a) Elexicon's decision to supply Brooklin with 27.6kV is detailed in section 4.1 Alternative Descriptions and Comparative Analysis[1]. Additionally Elexicon submits the following rationale for its decision to introduce 27.6kV to the area:
   - It is more economical and efficient to install 27.6kV directly from the TS and step down to 240V 1PH or 600V 3PH with distribution transformers. Additionally, the Whitby TS has existing capacity and breakers to support two 27.6kV feeders.

[1] Appendix B-2 Sustainable Brooklin Business Case, Page 18 of 37

- Elexicon will have more capacity to supply Brooklin and the surrounding area through the coupling of a 27.6kV line with the Seaton TS which is currently in construction. This overall system planning introduces substantive redundancy for a more reliable system.
- There is no need to conduct voltage conversion, which can be costly, given the 13.8kV system remains operational and reliable.
- 44KV feeders cost more to build and Elexicon will need stepdown stations 44/13.8 to service residential customers (i.e. additional cost).

b) Elexicon's proposal does not entail converting the existing 13.8kV system to 27.6kV. Elexicon's system planning shows that the current 13.8kV system is still reliable, used and useful. Providing "additional capacity that will be supplied to the area if all the existing 13.6kV supply was converted to 27.6kV", as suggested in the question, would require expenditure of millions of dollars and leave substantial portions of the 44kV system a stranded asset.

c) No. Elexicon's system planning expects the two voltage systems to co-exist. As elaborated in part b of this interrogatory response, Elexicon does not see sufficient advantage in converting any of its 13.8kV to 27.6kV at this time.

d) No. Please see the responses to part b) and c) above.

Elexicon Energy Inc.

Answer to Interrogatory from

OEB Staff

Interrogatory STAFF-15:

North Brooklin Development Feeder Expansion – New TS

Ref 1: Appendix B-2 – Sustainable Brooklin Business Case

One of the alternatives considered and rejected was to build a new TS. Elexicon Energy stated that Whitby TS has a 90MW LTR and to construct a new TS it would take a minimum of 5 years.

a) Please provide the current loading on Whitby TS and the forecasted load to when the station LTR is anticipated to be exceeded.

b) Please confirm if the 90MW LTR is the 10-day LTR for one of the station transformers.

c) When was Elexicon Energy first aware of the Brooklin Developers' plans for the North Brooklin subdivision development?

Response:

a) The table below shows the loading for Whitby TS from January 2021 through April of 2022 on the 27.6 kV and 44 kV systems, respectively.

Table 1 – Whitby TS Loading January 1, 2021 to April 30,2022

TS	DESN	Year	Peak Month	Peak Day	Peak Hour	Non-coincident Peak [MW]
Whitby TS	T1/T2 27.6	2021	1	31	19	31.91319
Whitby TS	T1/T2 27.6	2021	2	7	19	32.71603
Whitby TS	T1/T2 27.6	2021	3	7	20	30.26427
Whitby TS	T1/T2 27.6	2021	4	25	20	26.99736
Whitby TS	T1/T2 27.6	2021	5	21	21	34.82364
Whitby TS	T1/T2 27.6	2021	6	28	18	48.49107
Whitby TS	T1/T2 27.6	2021	7	14	18	41.90672
Whitby TS	T1/T2 27.6	2021	8	23	16	47.48865
Whitby TS	T1/T2 27.6	2021	9	18	15	32.55372
Whitby TS	T1/T2 27.6	2021	10	11	19	28.61597
Whitby TS	T1/T2 27.6	2021	11	28	19	31.03169
Whitby TS	T1/T2 27.6	2021	12	19	19	31.8737
Whitby TS	T1/T2 27.6	2022	1	15	19	34.81204
Whitby TS	T1/T2 27.6	2022	2	13	19	34.08676
Whitby TS	T1/T2 27.6	2022	3	27	20	31.50597
Whitby TS	T1/T2 27.6	2022	4	3	20	28.48941
Whitby TS	T1/T2 44	2021	1	31	19	51.49772
Whitby TS	T1/T2 44	2021	2	1	19	48.76251
Whitby TS	T1/T2 44	2021	3	1	19	34.75927
Whitby TS	T1/T2 44	2021	4	30	20	38.99979

Whitby TS	T1/T2 44	2021	5	2	17	41.47508
Whitby TS	T1/T2 44	2021	6	28	18	57.09243
Whitby TS	T1/T2 44	2021	7	25	18	50.54772
Whitby TS	T1/T2 44	2021	8	23	16	56.17871
Whitby TS	T1/T2 44	2021	9	27	19	56.56036
Whitby TS	T1/T2 44	2021	10	12	19	32.10975
Whitby TS	T1/T2 44	2021	11	28	18	51.87738
Whitby TS	T1/T2 44	2021	12	5	18	53.18234
Whitby TS	T1/T2 44	2022	1	29	19	56.16003
Whitby TS	T1/T2 44	2022	2	13	19	40.78102
Whitby TS	T1/T2 44	2022	3	3	20	36.72101
Whitby TS	T1/T2 44	2022	4	18	20	34.62696

Elexicon forecasts exceeding 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. Please see section 2.1.4.2. Defining the System Needs with the Greatest Potential for CDM Opportunities for details on the potential deferral of future capacity upgrades.

b) Yes, Elexicon confirms the 90MW LTR is the 10-day LTR of one station transformer.

c) Initial consultations with with the North Brooklin Developers began in 2020, and as further described in Section 5.2.2.3 of the Elexicon's Distribution System Plan filed April 1, 2021 (the "DSP") the consultations were ongoing at that time and the scope of the project was still subject to change. Commencement of earnest discussions narrowing the scope of the project with the North Brooklin Developers began in Q4, 2021.

Elexicon Energy Inc.

Answer to Interrogatory from

OEB Staff

Interrogatory STAFF-16:

North Brooklin Development Feeder Expansion – Base Rates

Ref 1: Appendix B-2 – Sustainable Brooklin Business Case

Ref 2: EB-2009-0274 – Exhibit 2 – Capital Expenditures by Projects

Ref 3: EB-2021-0015 – Distribution System Plan – A3 – Feeder Expansion

In reference 2, in 2010, Whitby Hydro Electric Corporation had capital additions of $1.12 million (10% of the total capital additions) for customer demand, $1.91 million (17% of the total capital additions) in subdivision development, and total capital additions of $11.0 million. The customer demand investments include projects for line extensions and investments in subdivision development include projects for secondary services.

a) For the Brooklin Feeder expansion, please separate the scope and costs that would be considered expansion and subdivision development.

b) Please explain why Elexicon Energy believes that this project cannot be funded through the existing rate base.

Response:

a) The costs for the Sustainable Brooklin Project ($26.657MM) related entirely to infrastructure required to extend the Whitby distribution grid and capacity to the area. There are no costs or infrastructure associated with the development or connection of North Brooklin developments in this project. As those plans are developed, Elexicon will use the Economic Evaluation model to determine the appropriate expansion costs to provide new homes with electricity service.

b) The Sustainable Brooklin project is a significant one-time expenditure as noted in B-2 Sustainable Brooklin Business Case, Page 23 of 37 of Elexicon's application. Elexicon's existing WRZ rates cannot support the required investment without risking negative impacts on other important outcomes (e.g. reliability, customer connections) through untenable levels of capital re-allocation away from existing projects and programs.

Elexicon Energy Inc.

Answer to Interrogatory from

OEB Staff

Interrogatory STAFF-17:

North Brooklin Development Feeder Expansion – Capital Contribution

Ref 1: Appendix B-2 – Sustainable Brooklin Business Case

Ref 2: Elexicon Energy Energy's Condition of Service

Elexicon Energy stated that the Brooklin Developers would no longer be willing to commit to investing in building DER and EV-ready homes in North Brooklin if they were required to pay a capital contribution. Elexicon Energy also stated that if the Brooklin Developers do not install a DER and EV-ready home they would be required to pay a capital contribution of $2,260 per home.

a) Please provide the discounted cash flow used to calculate the capital contribution required by Brooklin Developers and include an explanation of all assumptions.

b) Please provide the calculation for the $2,260 capital contribution per home, including all assumptions upon which the calculation is based.

c) Elexicon Energy stated that the Brooklin Developers would commit through a binding agreement or conditions in related regulatory approvals. Please provide all communications, including any binding agreement, discussed with the Brooklin Developers.

d) How can Elexicon Energy be certain that the cost of installing DER/EV-ready homes will not be passed to the future homeowners (i.e., included in the cost of the home)? Please explain why it would be reasonable for Elexicon Energy ratepayers to subsidize the cost of capital contributions to the Brooklin Developers.

e) In the event that Brooklin Developers are required to provide a capital contribution to Elexicon Energy, does Elexicon Energy have any information as to whether the DER/EV rough-ins will be provided an optional upgrade?

f) Please state if construction of the subdivision has commenced and confirm that Elexicon Energy expects to energize the project in Q3 of 2023.

Response:

a) The capital contribution is calculated through the economic evaluation model. An economic evaluation is only carried out if there is revenue associated with the connection, which is not applicable in the case of the Brooklin Line.

b) $2,260 is the estimated cost per home for the installation of rough-ins to enable DER-and-EV-ready homes, as provided by the Brooklin Developers. A breakdown of this cost is provided in the answer to Staff-18 part a). Understanding the complexity of managing dynamic capital contribution calculations in a growing development area over the course of twenty years, Elexicon proposes that this amount or a similar amount be prescribed as the standard capital contribution required in the event a developer of a new residential unit has failed to construct a DER-and-EV-ready home. No contractual agreements are in place between Elexicon and the developers

c) No contract or binding agreement has been signed. Elexicon proposes that an agreement be executed prior to beginning work to connect a customer, which is to include the commitment to build DER-and-EV-ready homes in exchange for eligibility for exemption to section 3.2. of the Distribution System Code if approved by the OEB. Elexicon has requested that the OEB's Decision and Order in this proceeding would require as a condition of approval that Elexicon's agreement for developers in the affected area include this provision.

d) Elexicon Energy cannot be certain that the cost of installing DER/EV-ready homes will not be passed to the future homeowners.

e) No, Elexicon Energy does not have any information as to whether the DER/EV rough-ins will be provided as an optional upgrade.

f) It is Elexicon Energy's understanding that no construction of the homes has commenced, but land permits have been obtained. Elexicon Energy can confirm that the Brooklin Developers expect the two new 27.6kV lines to be energized in Q3 of 2023.

Elexicon Energy Inc.

Answer to Interrogatory from

OEB Staff

Interrogatory STAFF-18:

North Brooklin Development Feeder Expansion – Capital Contribution

Ref 1: Appendix B-2 – Sustainable Brooklin Business Case, pp. 4 and 11

Elexicon Energy noted that the Developer estimated a cost of $23M to install standard rough-ins.

a) Please provide a breakdown of the $23M between rough-ins for rooftop solar, battery storage, and EV charging.

b) Please provide the developer's cost for the rough-ins per home.

c) Please state if developers are required or incented to provide these DER/EV rough-ins for new construction under any other regulatory instruments (e.g. Ontario building code etc.).

d) Please confirm if there are any differences in scope for the feeders with and without DER/EV-ready homes.

e) Please confirm if the breakers installed in the homes are suitable for bi-directional power flow.

Response:

a) Elexicon obtained an estimate of the average cost of planned and in-scope rough-ins to be $2,260 per home from the North Brooklin developers. Elexicon anticipates that the precise cost per home will vary based on the characteristics of the home in question. Elexicon does not have a separation of these largely similar costs across the technologies listed.

b) The developers provided Elexicon with an estimate of the cost for the rough-ins per home of $2,260. It is Elexicon's understanding that the several developers obtained quotes directly from their trades and then used those different quotes in order to inform their estimate.

c) No. There are currently no requirements for developers to provide DER/EV rough-ins for new construction in Ontario. To Elexicon's knowledge, developers are not incented to provide DER/EV rough-ins.

d) No, there are no differences.

e) Elexicon understands that typical breakers installed in new construction homes are two-way, as defined by the Ontario Electricity Safety Code.

Elexicon Energy Inc.

Answer to Interrogatory from

OEB Staff

Interrogatory STAFF-19:

METSCO Load Forecast

Ref 1: Appendix B-4 METSCO Elexicon Energy 2022-2041 Peak Load Forecast, p. 29

In reference 1, it states that based on the load forecast the 27.6kV and 44kV systems for Brooklin are expected to reach capacity constraints in either 2031 or 2037, depending if the load could be balanced between the 27.6kV and 44kV systems.

a) Please provide the econometric model used for the load forecast in reference 1.

b) Please confirm whether the Brooklin Feeders are required to balance the load between the 27.6kV and 44kV systems. If so, please provide the capacity that will be moved between the two systems.

c) Reference 1 states that the capacity constraint would require the construction of a new TS for $40 million and by deferring this investment it would have a benefit of $0.39 to $9.94 million. Please provide the net present value calculation for the expected benefit.

d) Please provide the expected scope of work used to estimate $40 million for the new TS (i.e., number/size of transformers, auxiliary equipment, and number of feeders).

e) Please provide the expected scope of work and costs for rooftop solar, 50-50 mixed infrastructure, and rooftop solar with battery energy storage system (i.e., number of solar panels, number of batteries, and auxiliary equipment).

f) Please provide the following information for the transformer and distribution stations in the Brooklin area. The station name, station capacity, station voltage, number of transformers, age of transformers, and asset condition assessment of transformers.

Response:

a) The methodology underpinning the load forecast referenced is described in Section 3 of Appendix B-4. The methodology is not an econometric modelling approach; rather, it is a bottom-up load forecasting methodology for the Ajax, Pickering, and Whitby portions of Elexicon's service area. Conversely, econometric modelling represents a top-down methodology used by Elexicon to predict the peak of the entire system. Briefly summarized, the load forecasting model takes historical household estimates (Ajax-Pickering and Whitby), average household sizes (Region of Durham), and historical peak weather data from Elexicon as inputs to calculate the average MW per customer. The peak load forecast for each year can then determined using annual household forecasts, household size forecasts, and the calculated average MW per customer.

b) No, the Brooklin feeders are not required to balance the load between the 27.6kV and 44kV systems. The Brooklin feeders are required to serve the new development in the North Brooklin area, which is a greenfield development. This load is not currently connected to the system; thus, this is not a feeder transfer. Please also see STAFF-14 part b).

c) The Net Present Value of the expected benefit compares the present value of constructing a station for $40 million and the present value of deferring that investment for a variable number of years, using a variable discount rate, and an assumed increase in station costs of 2% per year. The discount rate is varied between 3% and 8% and the deferral period is varied between one year and five years. The expected benefit with a net present value of $0.39 million is calculated based on deferring a station for one year with a 3% discount rate. The expected benefit with a net present value of $9.94 million is calculated based on deferring a station for five years with an 8% discount rate.

By way of example, the $9.94 million net present value is calculated as the difference in the present values of constructing a station in year 0 and construction of a station in year 5. The corresponding cash flows for these two options are $40.00 million in year 0 or $44.16 million in year 5. The present value of these cash flows with an 8% discount rate are $40.00 million for the year-0 option and $30.06 million for the year-5 option. The net present value of the expected benefit in this case is the difference of $40.00 million and $30.06 million, which is $9.94 million.

d) The $40 million rough cost estimate for a new TS is based on the gross cost of Seaton TS, estimated at $40.76 million in EB-2021-0015. No engineering work for a future TS has been completed. For comparison, Seaton TS has two 75/125 MVA transformers and twelve 27.6-kV feeders.

e) Installations of rooftop solar and battery energy storage systems would be owned and paid for by the homeowner. Elexicon has not prepared a detailed forecast of these costs.

f) The closest Transformer Station (“TS”) to the Brooklin area is Whitby TS owned by Hydro One Networks Inc. (“HONI”). HONI determines available capacity as the summer ten-day limited time rating (“LTR”) in MW at the TS bus level. Specifically, Whitby TS has three buses which are each a Dual Element Spot Network (“DESN”). Four transformers supply these three buses at Whitby TS. Table 1 summarizes the voltage levels and ratings of these buses. Since the transformers are HONI-owned, Elexicon does not track their age or condition, nor are those parameters reported during the Regional Planning Process.

Table 1: Whitby TS bus ratings and voltage levels

Station ID	DESN ID	Summer 10-day LTR	Incoming Voltage (kV)	Outgoing Voltage (kV)
Whitby TS	T1/T2 (27.6 kV)	90	230	27.6/16.0
Whitby TS	T1/T2 (44 kV)	90	230	44
Whitby TS	T3/T4	187	230	44

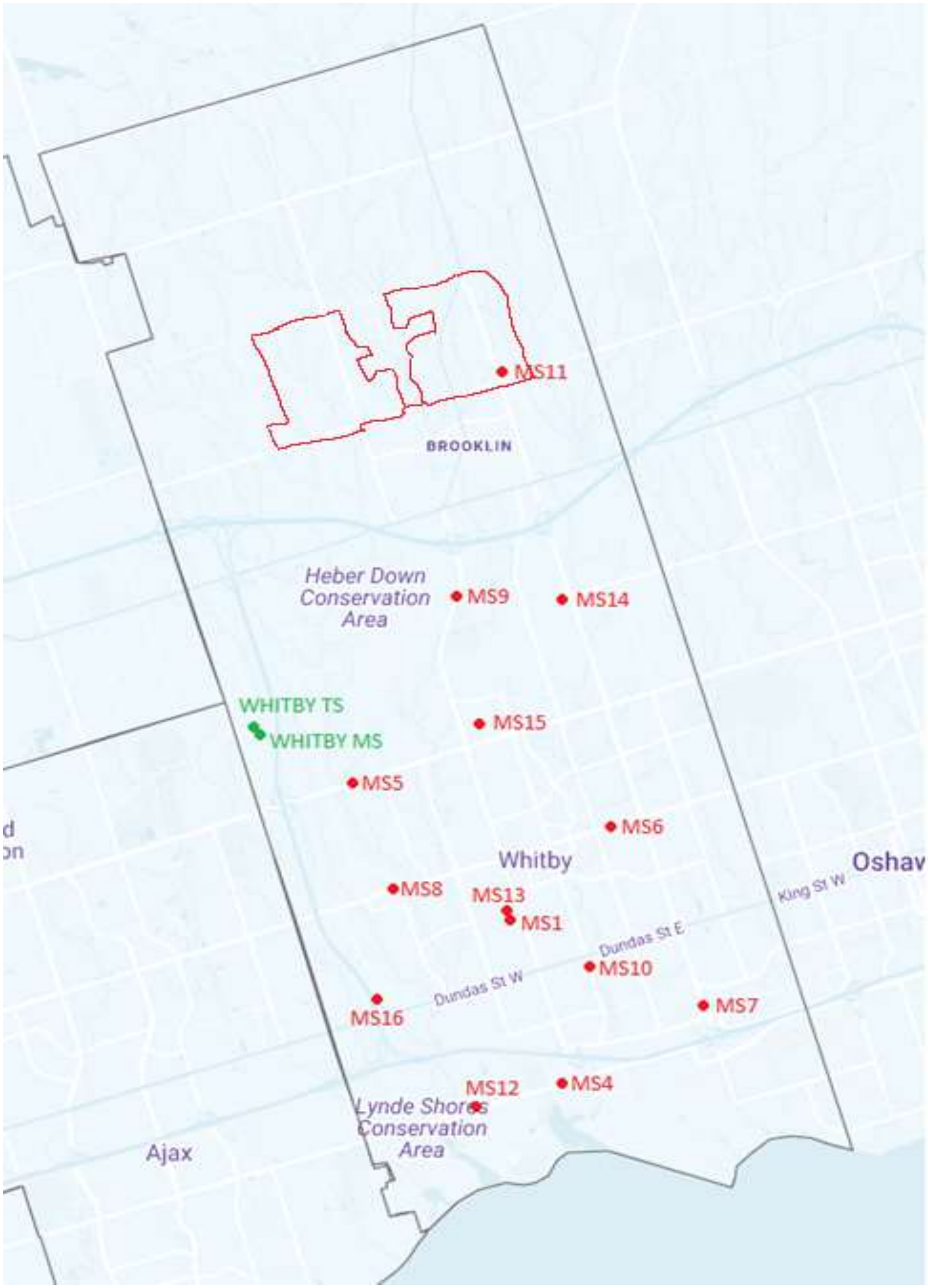
There is no Municipal Substation (“MS”) currently supplying the North Brooklin greenfield development, with the nearest MS being MS 11 and MS 9, both in the Town of Whitby. Table 2 summarizes the transformer ratings, age, and Health Index (“HI”) for the three transformers within these two MS.

Table 2: MS transformer ratings, age, and HI in the Brooklin area

Station ID	Transformer ID	Maximum Capacity (MVA)	Incoming Voltage (kV)	Outgoing Voltage (kV)	Age	HI
MS 9	T1	20	44	13.8/8.0	4	92%
MS 11	T1	33.2	44	13.8/8.0	25	46%
MS 11	T2	15	44	13.8/8.0	1	92%

Figure 1 shows a map of the MS and TS within the Whitby Rate Zone and depicts the proposed North Brooklin development area for new housing projects in red, as adapted from Map 2 of the *Brooklin Study Secondary Plan*.

Figure 1: North Brooklin development area relative to existing MS and TS in Whitby


MS11
BROOKLIN
Heber Down
Conservation
Area
MS9
MS14
WHITBY TS
WHITBY MS
MS15
MS5
MS6
Whitby
Oshav
King St W
MS8
MS13
MS1
Dundas St E
MS10
Dundas St W
MS16
MS7
MS12
MS4
Lynde Shores
Conservation
Area
Ajax

Elexicon Energy Inc.

Answer to Interrogatory from

OEB Staff

Interrogatory STAFF-20:

North Brooklin Development Feeder Expansion – Exemption from s. 3.2 of the Distribution System Code

If the exemption from section 3.2 of the DSC is granted and the Brooklin Landowners Group Inc. is not required to make capital contributions, please provide the following:

a) Does this provide an economic advantage to the members of the Brooklin Landowners Group Inc. relative to developers that are not members and may be building or planning to build developments elsewhere in Elexicon Energy's service territory, or even elsewhere in Ontario? If not, please explain why not?

b) Does Elexicon Energy propose that it would seek similar arrangements with other developers, and with other requests for similar funding treatment as it is proposing here?

Response:

a) The economics of the innovative Sustainable Brooklin project have Brooklin Landowner's Group ("Brooklin Developers") committing to spend approximately $23 million to $30 million in return for approval of the requested DSC exemption. This expenditure is an equivalent expenditure to the cost of the infrastructure to extend the electricity grid to North Brooklin. Further, the Brooklin Line does not represent the full assets and costs required to serve development in the region; representing only the upstream investment required to bring capacity to the region (i.e. it does not include standard subdivision and connection assets). While a definitive determination cannot be made without a comparison of specific developments, Elexicon does not believe the economic outcomes of the Sustainable Brooklin/ DSC exemption materially alter the economic circumstances of affected developers relative to others.

b) Elexicon has proposed an innovative approach to an infrequent infrastructure circumstance, as infrastructure needs similar to the Sustainable Brooklin are not commonplace. Elexicon believes that its proposal is consistent with the OEB's mandate to facilitate innovation. To that end, Elexicon will continue to explore opportunities to bring forward prudent and innovative approaches that further grid modernization, enable proliferation of DERs, and support the OEB and Ministry of Energy mandates.

Consideration of future, similar arrangements will be informed both by the circumstances in place at that time, and the OEB's determination in this proceeding, among other factors.

Elexicon Energy Inc.

Answer to Interrogatory from

OEB Staff

Interrogatory STAFF-21:

Ref. 1: Appendix B Incremental Capital Module: Whitby Smart Grid & Sustainable Brooklin, p. 8 of 56

Elexicon Energy "requests that a condition of the OEB's approval of the DSC Exemption be that all developers that may stand to benefit from the Brooklin Line will construct DER and EV-ready homes or buildings as specified in Appendix B-2 of this Application. Should a developer fail to deliver on the construction of DER-and-EV-Ready homes or buildings, that developer or property owner will be required to pay an appropriate capital contribution to Elexicon in support of the Brooklin Line."

a) Is it Elexicon Energy's position that the OEB has jurisdiction to impose a condition on all developers that may stand to benefit from the Brooklin Line construct DER and EV-ready homes or buildings? If so, please explain the basis for that position?

b) In the event that the OEB does not have the jurisdiction to impose the condition sought in part a, what measure has, or will, Elexicon Energy take to ensure that all developers follow through on the construction of DER-and-EV-Ready homes or buildings?

Response:

a) The Ontario Energy Board ("OEB" or the "Board") has asserted its jurisdiction in this area pursuant to the Distribution System Code ("DSC"). Specifically, pursuant to Section 3.2.27 of the Distribution System Code, the OEB imposes a condition that all unforecasted customers that connect to the distribution system during the five-year customer connection horizon that will benefit from an earlier expansion "*should contribute their share".*

   Notably, the OEB's jurisdiction is limited to imposing requirements on Elexicon Energy Inc. ("Elexicon"). However, similar to the Distribution System Code, the requirements imposed on Elexicon can (and often do) restrict what Elexicon may and may not do concerning all customers and developers.

   Elexicon's recommendation is for approval of the requested DSC exemption to be accompanied by a condition of approval requiring Elexicon's connection agreements in the affected area require either i) the construction of Distributed Energy Resource ("DER")-

and Electrical Vehicle ("EV")-ready homes, or ii) payment of a capital contribution as described in section 1.1 Application Overview[1] of Elexicon's evidence.

As noted in pre-filed evidence, Elexicon would follow the standard provisions of the DSC for non-residential customers with respect to capital contributions relating to the Brooklin Line.

b) Elexicon will pursue execution of a binding agreement, ideally the relevant connection agreements, to ensure developers follow through on the construction of DER and EV-ready homes. Elexicon notes that it has agreement in principle from the Brooklin developers to execute a binding agreement.[2] In addition to the execution of said agreement, Elexicon anticipates requiring basic documentation (e.g., plans and designs) confirming intent to construct homes DER-and-EV-ready. Elexicon anticipates that the binding agreement, be it a connection agreement or otherwise, will provide the opportunity for 'spot check' inspections to confirm that construction proceeds in accordance with documentation provided.

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[1] Appendix B – Incremental Capital Module Whitby Smart Grid & Sustainable Brooklin, Page 8 of 56
[2] Appendix B – Incremental Capital Module Whitby Smart Grid & Sustainable Brooklin, Page 25 of 56

Elexicon Energy Inc.

Answer to Interrogatory from

OEB Staff

Interrogatory STAFF-22:

Leveraging Private Capital

Ref. 1: Appendix B Incremental Capital Module: Whitby Smart Grid & Sustainable Brooklin, p. 10 of 56

On page 10, Elexicon Energy states that “the commitment by the Developers to invest approximately $30.4 million over a 20-year period in DER and EV-enabling infrastructure in newly constructed homes in North Brooklin will lower barriers to entry for customers wishing to install DER and EV infrastructure in their newly purchased homes. ICM funding for the Sustainable Brooklin Project will guarantee this investment of private sector capital.”

a) To whom and in what form have the Brooklin Developers made the referenced “commitment”?

b) Please explain, including whether the dollar figures are expressed in nominal (dollars of the day) or constant (e.g.; 2021 dollars) terms the relationship between the requested ICM funding of $26.7 million dollars and the Brooklin Developers’ "investment" of $30.4 million dollars spread over 20 years.

c) Please explain exactly how Elexicon’s funding of the project will “guarantee" the Brooklin Developers’ investment.

d) Please explain how, if at all, the “commitment” will be kept if, in future, the Brooklin Landowners Group Inc. is wound up.

e) Please explain how Elexicon plans to monitor compliance with the “commitment”.

f) Please indicate whether it is Elexicon’s expectation that the expenditure of $2,260 per home, described as the Developers’ “capital contribution” and “investment” on p. 8 and p. 44 of Appendix B respectively, will not be recouped by the Developers from the sale proceeds of each home.

g) Please explain why the expenditure is described as both a “capital contribution” and an “investment”.

Response:

a) The Brooklin Developers have made the commitment to Elexicon, and by extension to the OEB as per Elexicon's pre-filed evidence.[1] Elexicon has, in-turn, requested a condition of the OEB's approval of the DSC Exemption be that Elexicon be ordered to ensure that all developers that may stand to benefit from the Brooklin Line would construct DER and EV ready homes or buildings, failing which the property owner would be required to pay an appropriate capital contribution equal to $2,260 per home.

b) The cost estimate of the commitment of the Brooklin Developers to construct DER and EV ready homes of approximately $2,260 per home is in nominal dollars (i.e. today's dollars), and the cost risk associated with future costs to construct DER and EV ready homes is borne by the Brooklin Developers. The requested ICM funding is of $26.7 million is also in nominal dollars (i.e. dollars of the day).

c) Please see Elexicon Energy's response to STAFF-21 parts a) and b

d) As provided in response to STAFF-21 parts a and b, Elexicon has explained its reasoning for why it believes the OEB can establish a condition requiring Elexicon to confirm the commitment of the Brooklin Developers to construct DER and EV ready homes has been fulfilled, or, in the alternative, to charge an appropriate capital contribution. With respect to the Brooklin Developers entity being wound up, the OEB can set guidance in its condition of approval with sufficient detail on how Elexicon is to handle this circumstance.

e) Please see response to CCMBC-4 part b and c.

f) The reference to the Developers' "capital contribution" at page 8 of Appendix B is different from the reference to the Developers "investment" on page 44 of Appendix B. The Developers "investment" refers to their commitment to install solar PV rough-ins, EV rough-ins and a battery energy storage system rough in at an estimated cost of $2,260 per home. By contrast, the "capital contribution" refers to remedy Elexicon has proposed should the Developer fail to deliver on their proposed investment by way of the condition that is more fully described in Staff-21.

   Elexicon has no authority to set out or enforce a sale price of the DER and EV ready homes that the Brooklin Developers will construct in North Brooklin. Elexicon believes that an OEB approval of a DSC exemption will foster the Brooklin Developers to inform prospective purchasers of the homes about its DER and EV readiness, and the approximate $2,260 per home investment.

g) See the response to part (f).

[1] Appendix B – Incremental Capital Module Whitby Smart Grid & Sustainable Brooklin, Page 25 of 56

<u>Elexicon Energy Inc.</u>

Answer to Interrogatory from

<u>OEB Staff</u>

<u>Interrogatory STAFF-23:</u>

Customer-Specific Benefits

Ref. 1: Appendix B Incremental Capital Module: Whitby Smart Grid & Sustainable Brooklin, p. 10 of 56

Elexicon Energy states that "greater access to DERs and EVs will create customer-specific benefits including opportunities for rate arbitrage, reduced electricity consumption at the meter, provision of back-up power and a buffer against the volatility of gasoline prices;… ."

a) To clarify, will the customer-specific benefits mentioned above accrue to individuals who purchase a DER and EV-ready home built by the Brooklin Developers only if they invest in solar/batteries and an EV?

b) What percentage of Sustainable Brooklin homebuyers does Elexicon expect to invest in solar/batteries and an EV?

Also on page 10, Elexicon Energy lists the following as one of the benefits of the WSG and Sustainable Brooklin projects:

"GHG Reductions: Reduced electricity consumption will decrease the use of natural gas-fired generation for marginal electricity generation, resulting in GHG reductions of approximately [202,977] T CO2e over the next twenty years."

The footnote to this statement refers to p. 9 of Appendix B-1, which is entitled 'Whitby Smart Grid Business Case'.

c) Are the GHG reductions claimed on p. 10 of Appendix B those referred to in the entry on 'Table 1 – Expected Benefits' at the location mentioned in the footnote, which are ascribed to the VVO/CVR component of the WSG project? Staff notes that the number of T CO2e referenced on p. 10 is derived on Table 16 of Appendix B-1 (p. 34).

<u>Response:</u>

a) Not confirmed. Some of these benefits would also accrue if they chose to invest in one or more of solar (PV), batteries, <u>**or**</u> an EV. Elexicon further notes that major automotive manufacturers, including GM, have announced plans to electrify their entire fleet by 2030.

b) As explained in response to [OEB Staff #], one of the key benefits of the Sustainable Brooklin project is that it will create a baseline of quantifiable evidence on DER/EV uptake in North Brooklin vs. in the rest of the Town of Whitby. Elexicon's hope is that this quantitative evidence, together with demonstrable system benefits may in-turn inform future regulatory changes at the OEB as well as future building code amendments to make DER ready homes a standard feature for all new construction in Ontario.

As described on page 24 of Appendix B-4, Table 15, there is a wide range of potential DER uptake, both in type and quantity, which could facilitate the deferral of a material infrastructure investment, such as a new Transformer Station. On the lowest end, 12% penetration of rooftop solar with battery energy storage could defer capacity needs by 1 year, with 53% penetration of the same technology combination creating a 5-year deferral opportunity. Elexicon is hopeful to reach the ranges modelled as necessary to defer traditional infrastructure investment. Elexicon plans to provide a forecast of potential DER and EV uptake by customers in Whitby Rate Zone as part of its DER Enabling Program application, which all else equal stands to increase customer uptake of the technologies required to defer traditional investments.

c) Confirmed.

Elexicon Energy Inc.

Answer to Interrogatory from

OEB Staff

Interrogatory STAFF-24:

Customer-Specific Benefits

Ref. 1: Appendix B, s, 4.1.2. Sustainable Brooklin, pp. 41-50 of 56

"Elexicon Energy identified 4 alternatives with respect to the Sustainable Brooklin Project:

1. Extend feeders from Whitby TS DESN 1 to serve the North Brooklin area, with funding through this ICM, and with the WSG enabling DER integration capability (preferred);

2. Proceed with system enhancement by extending the feeders from Whitby TS DESN 1 to serve the North Brooklin area with developers paying a capital contribution as per the DSC, with the extension of the duration of capital contribution period from 5 years to 15 years…."

a) Please confirm that the phrase "capital contribution period" used in the above sentence refers to the "customer connection horizon" parameter described on p. 4 of Appendix B of the DSC. If otherwise, please explain by reference to one of the parameters described in the DSC, Appendix B.

"Option 1 is the preferred option for Sustainable Brooklin. Participation by the Developers in the design of Elexicon Energy's distribution system to facilitate the development of a DER-and-EV-Ready community is a highly innovative and unique opportunity. Electing this option would result in over 10,000 concentrated residential units which could have been future-proofed for DERs and EVs, being constructed status quo; meaning future uptake of these technologies would require costly retrofits paid for by customers." (p. 41 of 56)

b) Please confirm that "this option" in the sentence that begins "Electing this option…" refers to Option 2 and not Option 1.

c) Regarding the "costly retrofits" mentioned above, please confirm that this refers to the estimated $20K - $30K retrofit cost per home referenced on p. 10 of Appendix B-2, and explain what is included in a typical retrofit and the particulars of the previous experience on which this estimate is based, according to the footnote provided.

On page 42, Elexicon Energy states that "Option 2 was rejected as suboptimal for two reasons. First, absent the DSC section 3.2 exemption, the Developers would otherwise be required to pay a capital contribution for the construction of the Brooklin Line and the developers would no longer be willing to commit to invest in building DER and EV-ready homes across all of North Brooklin. This will likely result in lower DER and EV penetration rates and may be a lost opportunity for

Elexicon Energy, the OEB and other LDCs to observe and gather information about the ICM Projects to defer or avoid future material capital expenditures through greater uptake of DERs."

d) Please confirm that, as presented above, Option 2 was rejected for only one reason, that is: "…the developers would…be required to pay a capital contribution for the construction of the Brooklin Line and developers would no longer be willing to commit to invest in building DER and EV-ready homes across all of North Brooklin.

e) Please confirm that under Option 2, the developer will build homes identical in design and construction in every way to those built under Option 1, save those elements described in the application as making the homes "DER and EV-ready".

f) Given the "parameters of DER and EV-ready homes" described on p. 46 of Appendix B, and Elexicon Energy's statement on p. 47 of the same document that "Absent the DSC Exemption, … the Developers would no longer be willing to commit to invest in building DER and EV ready homes across all of North Brooklin", please provide the basis of the statement and confirm Staff's understanding that this means the Developers will build homes in North Brooklin that will NOT include:

- "two spare breaker slots" that could be used for a DER
- "sufficient space on the wall next to the circuit panel" to install solar controls and an inverter"
- "room on the wall for the [EV] charger", and
- "appropriate room in the circuit panel for a breaker" that could be used for an EV charger

On page 46, Elexicon Energy states that where "the roof size and orientation is suitable, developers will offer customers the option to purchase and install solar panels and related inverter and controls."

g) Please confirm Elexicon Energy's understanding that not all of the homes the Developers will build in North Brooklin will be suitable for solar panels.

h) Please provide any information that Elexicon Energy has as to the percentage of the 10,000 to 11,200 homes in North Brooklin that will not be suitable for solar panels.

i) Please confirm that where a home is not suitable for solar panels, the home will not be made 'DER-ready' by the Brooklin Developers and whether those homeowners will receive a discount for their home not being made 'DER-ready'?

On page 47, Elexicon Energy states that absent "the DSC Exemption, the Developers would otherwise be required to pay a capital contribution for the construction of the Brooklin Line and the Developers would no longer be willing to commit to invest in building DER and EV-ready homes across all of North Brooklin. This would be a lost opportunity for WRZ customers to save on electricity costs, for Elexicon Energy's operations and engineering teams to learn from the mass deployment of innovative technologies, and for Ontario's electricity sector to gain from the learnings achieved by the Sustainable Brooklin Project."

j) OEB Staff understands from the above that, absent the DSC exemption sought, Whitby Rate Zone customers will lose an opportunity "to save on electricity costs". Please explain the nature and quantum of electricity cost savings that would otherwise accrue if the exemption is approved, and if not evident from that explanation, why none of these savings would be available if the exemption is not approved.

k) Please explain how approving the exemption will ensure the "mass deployment of innovative technologies" mentioned above, and whom Elexicon Energy expects will be deploying those technologies.

On page 50, Elexicon Energy states that the "size and upstream nature of the Brooklin Line creates further issues of basic fairness. The Developers, being a first mover, will pay all the costs of the Brooklin Line and unforecasted customers connected after 5 years can avoid any contributions due to the limitations found in Section 3.2.27 of the DSC."

l) Please confirm that the phrase "all the costs of the Brooklin Line" in the above statement refers to the capital contribution calculated by Elexicon Energy according to Appendix B of the DSC. If the phrase refers to some other costs, please explain.

<u>Response:</u>

a) Yes.

b) Yes, Elexicon Energy confirms that "this option" in the sentence that begins "Electing this option…" refers to Option 2 and not Option 1.

c) Yes, the statement in the question is correct. The following items would be involved in a retrofit:

- Conduit would need be run from the roof to the electrical panel. Normally this would be down the outside of the house and into the basement.
- The electrical panel would require modification, including an external breaker box and additional wiring to connect it to the existing panel.
- If the DER includes battery storage, space will need to be created to mount this.
- The installation of solar panels and battery storage would also be required.

d) Elexicon's selection of Option 2 was primarily driven by the two reasons noted in the question. Elexicon notes that there are additional benefits to Option 2 which include potential opportunities to defer infrastructure investments as highlighted in section 5.2 Opportunities to Defer Infrastructure Investments of the application, and to facilitate Greenhouse Gas reductions highlighted in section 5.4.Facilitating GHG Emission Reductions.

e) It is Elexicon's understanding that the developers would build homes that would not be DER and EV-ready if Option 1 is not approved by the OEB.

f) Elexicon is not privy to the exact assets that would not be installed. It is Elexicon's understanding that if a DSC exemption is not allowed, the Developers would not install the DER and EV rough-ins.

g) Elexicon's understanding is that some homes may not have roof orientation which would logically facilitate solar panel installation.

h) See response part g.

i) The Developers have indicated that all homes will be DER and EV-ready. This may in some circumstances not include solar rough-ins, however battery and EV rough-ins would continue to be included. Elexicon is not involved in the sale price of homes, whether they include some or all of the specific rough-ins contemplated.

j) With respect to quantum of outcomes, Elexicon does not have a specific forecast for individual customer savings resulting from solar PV, battery storage, EV's, or a combination thereof. Elexicon is confident energy savings and back-up power benefits can be achieved through these technologies for individual customers, but has not conducted analyses to quantify the various scenarios which an individual customer may face in accruing such benefits. With respect to probability of these outcomes, customers can currently elect to install these technologies in their homes. However, the incremental cost and disruption of installing such technologies in a home that is not roughed-in for them will act as a disincentive for most customers. Elexicon is confident that uptake of DERs and EVs will be higher in a community where homes have been constructed for lower cost and less disruptive installation.

k) A DSC exemption will facilitate innovation, specifically the creation of a DER and EV ready community in Brooklin, ON (on both the customer and utility sides of the connection point) and a DER and EV ready grid in the balance of the WRZ as more fully outlined in section 5.1 of Appendix B. Combined with the proposed WSG, Elexicon expects the DSC Exemption will facilitate an accelerated penetration of DER's and EVs in North Brooklin by removing barriers to entry on both the customer and Elexicon side of the connection point. Beyond North Brooklin, Elexicon will gain the experience required to facilitate broader deployment of DERs and EVs across its service area and optimize the operation of its distribution system long-term.

l) Yes, this is statement is correct.

Elexicon Energy Inc.

Answer to Interrogatory from

OEB Staff

Interrogatory STAFF-25:

Ref. 1: Appendix B-2 Sustainable Brooklin Business Case, p. 4 of 37

On page 4, Elexicon Energy refers to "the fairness principle", and states that this principle "justifies this quid-pro-quo treatment to exempt the Brooklin Developers from paying a capital contribution to construct the Sustainable Brooklin project".

a) Please explain what Elexicon means by "the fairness principle" and indicate who and under what circumstances this principle should be applied.

Response:

Please see section 5.3. Fairness Issues Raised with Respect to the Brooklin Line[1] for submissions regarding the fairness principle and to whom it applies. In summary, there are two areas fairness brought forward to Elexicon by the Brooklin Landowners Group: a purported inconsistency between the Distribution System Code and the Transmission System Code with respect to TS cost recovery in comparison to other significant upstream distribution investments (such as the Brooklin Line), and the circumstance in which first-movers pay all required capital contributions for the Brooklin Line while customers connected after 5 years avoid contributions.

[1] Appendix B – Incremental Capital Module Whitby Smart Grid & Sustainable Brooklin, Page 49 of 56

Elexicon Energy Inc.

Answer to Interrogatory from

OEB Staff

Interrogatory STAFF-26:

Ref. 1: Appendix B-2 Sustainable Brooklin Business Case, p. 5 of 37

On page 5, Elexicon Energy states that over the next twenty years, “the Brooklin Developers have plans to provide affordable and energy-efficient homes to approximately 10,000 homes in a new residential community in the North Brooklin area.”

a) On what basis does Elexicon Energy believe it can rely on the Brooklin Developers’ plans? For example, has Elexicon Energy confirmed that the Brooklin Developers have the required the necessary permitting to continuously build homes in the above-mentioned area for 20 years at the rate described?

b) Over the last five years, has Elexicon Energy extended offers to connect to other developers who planned or built DER and EV-ready homes?

c) Is Elexicon Energy aware of any other developers, other than the Brooklin Developers, who are planning to offer DER and EV-ready homes?

Response:

a) The Brooklin Developers are not unlike any other developers with whom Elexicon has to work. Elexicon has a legal obligation to connect new customers pursuant to the terms of its distribution license, and when new property developers are proposing major new developments Elexicon routinely works with those developers to ensure the local distribution system has sufficient capacity available. In this context, the Brooklin developers have produced plans for the building of, on average, 700 DER and EV-ready homes for the next 20 years. It is Elexicon’s understanding the Brooklin Developers submitted such plans to the town council to obtain the relevant permitting. Elexicon also notes that the expedient development of additional residences is consistent with the policies of both the Region of Durham and the Government of Ontario, as described in Appendix B, page 21.

b) Not to Elexicon’s knowledge**.** The circumstances of the Sustainable Brooklin Project are unique in that Elexicon has engaged in discussions regarding construction design (i.e. for DER-and-EV-ready homes) with developers. This is not a standard practice to facilitate offers to connect.

c) See b) above.

Elexicon Energy Inc.

Answer to Interrogatory from

OEB Staff

Interrogatory STAFF-27:

Ref. 1: Appendix B-2 Sustainable Brooklin Business Case, p. 6 of 37

"It is expected that the Brooklin Developers will incur a capital expenditure of around $23 MM to install standard rough-ins to make the homes DER and EV-ready. If a capital contribution is required, this would be the equivalent of the proposed capital expenditure requested in this ICM ($26.6 MM)."

a) Please provide a numerical comparison of the net present value of the capital expenditure to install standard rough-ins to make the homes DER and EV-ready versus the proposed $26.6 MM capital expenditure.

Response:

Please see below the NPV, assuming 10,000 homes over 20 years, and a standard rough-in cost of $2,260 per home, totalling $22.6MM, and a discount rate of 3%.

Table 1 – 20 Year NPV of Standard Rough-In Cost and Low Total Investment Estimate

	NPV Inflation Adjusted	ICM Request- Project Cost
At 3% discount rate	$21,328,717.80	$26,657,000

Please see below the NPV, assuming 700 homes a year for the next 20 years, and a standard rough-in cost of $2,260 per home, totalling $31.64MM, and a discount rate of 3%.

Table 2 – 20 Year NPV of Standard Rough-In Cost and High Total Investment Estimate

	NPV Inflation Adjusted	ICM - Project Cost
At 3% discount rate	$29,860,204.91	$26,657,000

Elexicon Energy Inc.

Answer to Interrogatory from

OEB Staff

Interrogatory STAFF-28:

Ref. 1: Appendix B-2 Sustainable Brooklin Business Case, p. 14 of 37

On page 14, Elexicon Energy states that the Brooklin Developers "will invest their own capital in the creation of a new, innovative community wherein DER and EV uptake can significantly exceed business-as-usual; with resulting benefits for both the residents of North Brooklin and the broader Whitby rate zone customer base."

a) Please define "business-as-usual" DER and EV uptake and describe the difference between that level of uptake and the expected level of uptake with DER and EV rough-ins.

b) Please describe and compare the benefits for the broader Whitby rate zone customer base of the expected level of uptake versus the business as usual level.

Response:

a) "Business-as-usual" DER and EV uptake refers to a scenario in which a homeowner does not have DER and EV rough-ins installed as part of a new property. In order to install these technologies, such a homeowner will be required to undertake some combinations of drywall demolition and repair, conduit installation, and potential replacement of electrical panels to facilitate required breakers. The expected level of uptake is likely to be higher in the Brooklin Development given DER and EV rough-ins will be complete, increasing the likelihood a customer will purchase a solar panel/battery and EV than if they did not already have a rough-in.

b) The potential level of DER and EV uptake will allow Elexicon to credibly pursue opportunities to potentially defer or avoid material capital investments in the future. In a business as usual scenario it would be less likely that there would be enough DER and EV uptake to enable Elexicon to potentially defer or avoid material capital expenditures in the future, particularly in the early to mid 2030's.

Elexicon Energy Inc.

Answer to Interrogatory from

OEB Staff

Interrogatory STAFF-29:

Ref. 1: Appendix B-2 Sustainable Brooklin Business Case, p. 15 of 37

On page 15, Elexicon Energy states that "investments made by the Brooklin Developers to create a DER and EV-ready community will incur capital costs on their part, for which recovery at the time of home sale is highly uncertain. Given the high and increasing cost of residential development and construction, the Brooklin Developers would be otherwise unlikely to assume the business risk of constructing DER and EV-ready homes in North Brooklin. This outcome is highly sub-optimal, as the costs and challenges of DER and EV retrofits are significantly greater than the inclusion of these technologies in the design and construction phases. All else equal, failing to incorporate these technologies into front-end development will result in a community of North Brooklin that has low or average levels of DER and EV uptake."

a) Regarding the first sentence in the above passage, please confirm that the "capital costs" incurred by the Brooklin Developers the recovery of which is "highly uncertain" is the estimated $2,260 cost of making each home "DER and EV-ready".

b) Please confirm that where the term "rough-ins" is used in the application, Elexicon Energy is referring to one or more of the "parameters of DER and EV-ready homes" listed on p. 46 of Appendix B.

c) Regarding the last sentence in the above passage, please explain why Elexicon Energy expects that homes in North Brooklin that are not "DER and EV-ready" would be expected to engender "low" and not "average" levels of DER and EV uptake compared to other new homes not so equipped.

Response:

a) Yes, Elexicon can confirm this is correct.

b) Yes, Elexicon can confirm this is correct.

c) For clarity, the reference intends to equate "low" and "average" levels of DER and EV uptake as being one and the same. Both technology sets have low uptake in the broader population (i.e. the average uptake is low). Elexicon's intent via this application is to improve and increase levels of uptake.

Elexicon Energy Inc.

Answer to Interrogatory from

OEB Staff

Interrogatory STAFF-30:

Ref. 1: Appendix B-2 Sustainable Brooklin Business Case, pp. 15-16 of 37

"Elexicon [Energy] intends to build the new distribution assets servicing Sustainable Brooklin to incorporate innovative functions and features such as VVO, FLISR/DA, and a supporting ADMS. On the back of these technologies, Elexicon [Energy]'s assets in North Brooklin will be capable of automatically monitoring and managing the distribution system. The end-state will be the promotion and wide adoption of DERs while maintaining the service and reliability of the distribution system expected by customers."

a) Regarding the last sentence in the passage above, is it Elexcon Energy's expectation that a distribution system capable of "automatically monitoring and managing the distribution system" will cause the "wide adoption of DERs" in North Brooklin as distinct from facilitating the adoption of DERs?

b) Either way, please provide a quantitative analysis showing the predicted incremental increase in homeowner purchases of solar panels/batteries and EV chargers where the purchaser has an "DER and EV-ready" home vs. an identical home that does not have the standard rough-ins described on p. 46 of Appendix B.

Response:

a) No. Elexicon enabling the automatic monitoring and management of the distribution system will enable DERs to be connected to the grid. Elexicon expects its proposed DER Enabling Program (see Appendix B-3 of the evidence) to facilitate wider adoption of DERs.

b) One of the purposes of both the Whitby Smart Grid and Sustainable Brooklin Projects is to quantitatively measure and report on the adoption of DERs and/or EV chargers at "DER and EV-ready" homes in North Brooklin versus DER and/or EV charger adoption in the balance of the Town of Whitby. This is why Elexicon notes in its evidence that "[a]s a first-of-its-kind project, Sustainable Brooklin may also inform future amendments to the Ontario Building Code – potentially making DER and EV ready homes standard for all new housing into the future" (p. 12 of Appendix B).

Elexicon Energy Inc.

Answer to Interrogatory from

OEB Staff

Interrogatory STAFF-31:

Distribution System Code Exemption

Ref. 1: Appendix B-2 Sustainable Brooklin Business Case, p. 16 of 37

"Elexicon and the developers are seeking a temporary exemption from Section 3.2 of the DSC."

a) Please explain the meaning of the word "temporary" in relation to the scope of the requested relief.

b) Elexicon has requested an exemption from Section 3.2 of the DSC in its entirety. Please provide a list of each subsection in section 3.2 and explain why an exemption from that section is required.

Response:

a) The full scope of the exemption from Section 3.2 of the DSC can be found in Section 1.1 and Section 5 of Appendix B of the IRM Application. The scope of the exemption is limited to the Brooklin Line (as more fully described in Appendix B), and is specific in scope to the Sustainable Brooklin Project which is expected to span over the course of 20 years.

b) Elexicon has requested an exemption from the treatment of the Brooklin Line (as more fully described in Appendix B) as an "expansion" within the meaning of the DSC. Once that exemption is granted, the entirety of Section 3.2 (all subsections) would not be applicable to the project. If the Brooklin Line is funded through ICM funding, some of the provisions in Section 3.2 that would not apply to the project include:

3.2.1 – An initial economic evaluation is not required.

3.2.2 - A final economic evaluation is not required.

3.2.3, 3.2.8, 3.2.14, 3.2.16, 3.2.18, 3.2.24 - An alternative bid option will not be available, an offer to connect will not be provided and a final economic evaluation is not required.

3.2.4, 3.2.6, 3.2.7 & 3.2.12 - A capital contribution is not required.

3.2.20, 3.2.21, 3.2.22, 3.2.23, 3.2.25, 3.2.26 – An expansion deposit is not required.

3.2.27 – Unforecasted customers that connect to the distribution system during the five year customer connection horizon will not be required to contribute their share.

3.2.30 – The definitions for “an expansion of the main distribution system” do not apply.

Elexicon Energy Inc.

Answer to Interrogatory from

OEB Staff

Interrogatory STAFF-32:

Distribution System Code Exemption

Ref. 1: Appendix B-2 Sustainable Brooklin Business Case, pp. 18-25 of 37

On p. 19 of Appendix B-2 Elexicon describes the same "Project Scope" for the Brooklin Line under Option 1 (DSC exemption) and Option 2 (no DSC exemption), i.e., "…two new 27.6kV feeders and the associated assets that will connect the Brooklin development to the Whitby TS". On p. 20 of Appendix B-2, Elexicon identifies the "Total Gross Capex" of the Brooklin Line as $26.6 million for Option 1 and $35.5 million for Option 2.

a) Section 3.2.4 of the DSC states that a customer's contribution "shall be equal to that customer's share of the difference between the present value of the projected capital costs and on-going maintenance costs for the facilities and the present value of the projected revenue for distribution services provided by those facilities". Please explain why 'Total Gross Capex' is higher for Option 2 than for Option 1.

On p. 25 of Appendix B-2, Elexicon states in relation to Option 2 (no DSC exemption) that "Approval of a change to capital contributions would have to be sought, which has typically been rejected in the past by the OEB."

b) Please confirm that the "change" referred to is "the extension of the duration of Capital Contribution period from 5 years to 15 years" as stated under 'Option 2' on pp. 18-19 of Appendix B-2.

Response:

a) This is an error. The cost in Option 2 would be the same as Option 1, $26.6 million.

b) Yes, that is correct.

Elexicon Energy Inc.

Answer to Interrogatory from

OEB Staff

Interrogatory STAFF-33:

LRAMVA

Ref 1: LRAMVA Workform, Tab 2 – LRAMVA Threshold (Table 2-a)

Ref 2: 2023 IRM Rate Application, Page 41 of 474, Table 15 & 16

Values per Table 2-a LRAMVA threshold of the LRAMVA Workform agrees with values per Table 16: LRAMVA Threshold-VRZ of the IRM application with the exception of the following rate classes where kW savings matched the CDM load forecast adjustment – VRZ in Table 15 of the IRM application:

- GS 50 to 2,999 kW – VRZ
- GS 3,000 to 4,999 kW – VRZ
- Large Use – VRZ

a) Please clarify why the LRAMVA threshold for the 3 aforementioned classes reflects the CDM load forecast adjustment for VRZ in Table 15 as opposed to the LRAMVA threshold in Table 16 of the IRM application. Where applicable, please update the LRAMVA workform accordingly.

Response:

a) Elexicon confirms that the values in Table 20a of the workform are consistent with the values in Table 16 of the application. No change is required.

Elexicon Energy Inc.

Answer to Interrogatory from

OEB Staff

Interrogatory STAFF-34:

LRAMVA

Ref 1: LRAMVA Workform, Tab 3 – Distribution Rates (2019 and 2020 VRZ)

Ref 2: Draft Rate Order EB-2018-0079 & EB-2019-0252

Values reported per Tab 3 Distribution Rates of the LRAMVA Workform can be reconciled to the corresponding Draft Rate Order for VRZ and WRZ for 2021 and 2022 and 2020 for WRZ only.

a) Please clarify why the values reported for 2019 and 2020 do not correspond with the Draft Rate Order under EB-2018-0079 and EB-2019-0252 for VRZ. If this was done in error, please update the LRAMVA form accordingly. If it was not, please provide the calculation and/or reference support for the reported values.

Response:

EB-2018-0079 is the application for Whitby for 2019. Since Whitby is on a Jan-Dec rate schedule, 2019 rates are not needed to calculate the calendar year rates in 2020. This is noted in cell B116 of the worksheet.

The corresponding file for VRZ is EB-2018-0072. EB-2018-0072 was effective from May 1 2019 to April 30 2020. VRZ EB-2019-0252 was effective May 1, 2020. On April 21, 2020, Elexicon filed a letter with the OEB seeking authorization to postpone the implementation of the new VRZ rates in EB-2019-0252 until January 1, 2021, due to the pandemic, and the plan to change the rate year to the calendar year. On April 28, 2020, the OEB granted this request and issued a Vary Order to that effect. Therefore, the rates in EB-2018-0072 were effective for all of 2020. The Board approved a rate rider to adjust for revenues lost due to the rate deferral, and this rate rider is included in the 2021 rates in column O of the work form.

Elexicon Energy Inc.

Answer to Interrogatory from

OEB Staff

Interrogatory STAFF-35:

LRAMVA

Ref 1: LRAMVA Workform, Tab 4 – 2011-2014 LRAM

2012

a) Please provide the calculation support and/or verify which report, tabs and cell references Elexicon Energy is able to tie the savings reported under Table 4-b. 2012 Lost Revenues Workform from 2022 onwards for the Veridian Rate Zone for the following programs:

- HVAC Incentives (verified and true-up savings)
- Conservation Instant Coupon Booklet
- Bi-Annual Retailer Event
- Retrofit (verified and true up savings)
- Direct Install Lighting
- New Construction
- Home Assistance Program (verified and true up savings)
- High Performance New Construction

b) Please confirm the savings in VRZ for the New Construction program from 2016 to 2021. The values reported do not coincide with the savings reported in prior year LRAMVA workforms. Please provide the calculation support and/or the report, tabs and cell references to reconcile the savings reported.

2013

c) Please provide the calculation support and/or verify which report, tabs and cell references Elexicon Energy is able to tie the savings reported under Table 4-c. 2013 Lost Revenues Workform from 2023 onwards for the Veridian Rate Zone for the following programs:

- HVAC Incentives (true-up savings)
- Conservation Instant Coupon Booklet (true up savings)
- Bi-Annual Retailer Event
- Residential New Construction (true up savings)

- Retrofit (true up savings)
- Direct Install Lighting
- New Construction (true up savings)
- Energy Manager (true up savings)
- Home Assistance Program (verified and true-up savings)
- High Performance New Construction (true up savings)

2014

d) Please provide the calculation support and/or verify which report, tabs and cell references Elexicon Energy is able to tie the savings reported under Table 4-d. 2014 Lost Revenues Workform from 2024 onwards for the Veridian Rate Zone for the following programs:

- HVAC Incentives
- Conservation Instant Coupon Booklet
- Bi-Annual Retailer Event
- Residential New Construction
- Retrofit (verified)
- Retrofit (streetlights)
- New Construction
- Home Assistance Program (verified and true-up savings)

e) Please confirm the savings in VRZ for the Energy Manager program from 2015 to 2023. The values reported do not coincide with the savings reported in prior year LRAMVA Workforms. Please provide the calculation support and/or the report, tabs and cell references to reconcile the savings reported.

Response:

a and b)

Excel workbook "*EE_IR_Response_Staff35_20221013_Persistence*" was submitted with the IR Responses. This workbook includes data provided by the IESO on persistence from 2011, 2012, 2013 and 2014 reports (which include persistence of true-up results from previous years where relevant). These are consolidated on the "All" tab, and the analysis is on the 1-Staff-35 tab. These results are consistent with the values reported in the LRAMVA worksheet. In preparing this it was noted that persistence from 2023 onwards was missing for HVAC incentives, Conservation Instant Coupons, and Retrofit. These have been included in the updated LRAMVA workform submitted with the IR Responses. See: "*EE_IR_Response_PWU9_Staff35_20221013_LRAM Model*". Please note that all updates to the LRAM workform amounted to a change of $4 to the total claim.

The persisting values for New Construction in the workform were incorrect and have been corrected in the updated workform. This change does not affect the value of the LRAMVA claim.

c) These are provided as described above for 2012. These results are consistent with the values reported in the LRAMVA worksheet with three exceptions: the worksheet missed persistence of 2013 results in HVAC, Coupon and retrofit energy savings for 2023 and later. These have been added back into the updated LRAMVA workform.

d) These are provided as described above for 2012.

e) The savings in VRZ for the Energy Manager program from 2015 to 2023 are from the 2017 final results report for Veridian, Tab "LDC progress" cells CG85:CQ85 for energy and on the same tab, cells DT85:EB85.

<u>Elexicon Energy Inc.</u>

Answer to Interrogatory from

<u>OEB Staff</u>

<u>Interrogatory STAFF-36:</u>

LRAMVA

Ref 1: LRAMVA Workform, Tab 5 – 2015-2027 LRAM

2015 (VRZ) - Table 5-a

a) Please provide the supporting calculations and/or methodology used in arriving at the unverified adjustment to 2015 savings post P&C for the Save on Energy Retrofit program. Please also provide the rationale as to why the values slightly differ from those reported in prior year LRAMVA workform.

b) Please provide the supporting calculations and/or methodology used in arriving at the unverified adjustment to 2015 savings in P&C for the Save on Energy High Performance New Construction program from 2021 to 2028. Savings reported from 2015 to 2020 agrees with prior year's LRAMVA workform.

2016 (VRZ) - Table 5-b

c) Please provide the supporting calculations and/or methodology used in arriving at the unverified adjustment to 2016 savings in April 2019 P&C for the Save on Energy Heating and Cooling program.

d) Please provide the supporting calculations and/or methodology used in arriving at the following values for the Save on Energy Retrofit program – Excluding ST:

- unverified adjustment to 2016 savings in P&C
- unverified adjustment to 2016 savings Post P&C

Please also provide the rationale as to why the values slightly differ from those reported in the prior year's LRAMVA workform.

2016 (WRZ) - Table 5-b

e) Please provide the supporting calculations and/or methodology used in arriving at the following values for the Save on Energy Retrofit program – Excluding ST:

- unverified adjustment to 2016 savings in P&C
- unverified adjustment to 2016 savings Post P&C

Please also provide the rationale as to why the values slightly differ from those reported in prior year LRAMVA workform.

2017 (VRZ) - Table 5-c

f) Please provide the supporting calculations and/or methodology in arriving at the true up savings for the following programs:

- Save on Energy Coupon Program
- Save on Energy Heating and Cooling Program
- Save on Energy Retrofit Program – Excluding Streetlights
- Save on Energy Small Business Lighting Program
- Save on Energy Energy Manager Program

2017 (WRZ) - Table 5-c

g) Please provide provide the supporting calculations and/or methodology used in arriving at the following values for the Save on Energy Retrofit program – Excluding Streetlights:

- adjustment to 2017 savings in P&C
- adjustment to 2017 savings Post P&C

h) Please provide the supporting calculations and/or methodology used in arriving at the adjustment to 2017 savings P&C values for the Save on Energy Retrofit program –Streetlights (row 571)

2018 (VRZ) – Table 5-d

i) Please provide the supporting calculations and/or methodology used in arriving at the unverified and true up savings (where applicable) for the following programs:

- Save on Energy Instant Discount
- Save on Energy Heating and Cooling
- Save on Energy New Construction
- Save on Energy Smart Thermostat
- Save on Energy Retrofit
- Save on Energy Small Business Lighting
- Save on Energy High-Performance New Cosntruction
- Save on Energy Energy Manager

- Business Refrigeration Local
- Swimming Pool Efficiency

2018 (WRZ) – Table 5-d

j) Please provide the supporting calculations and/or methodology used in arriving at the unverified and true-up savings (where applicable) for the following programs:

- Save on Energy Retrofit (excluding ST)
- Save on Energy Retrofit (ST)
- Save on Energy Small Business Lighting

2019 (VRZ) – Table 5-e

k) Please provide the methodology and supporting calculations in arriving at the unverified and true-up savings (where applicable) for the following programs:

- Save on Energy Heating and Cooling
- Save on Energy New Construction
- Save on Energy Retrofit (excluding ST)
- Save on Energy Small Business Lighting
- Business Refrigeration Local

2019 (WRZ) – Table 5-e

l) Please provide the supporting calculations and/or methodology used in arriving at the unverified and true-up savings (where applicable) for the following programs:

- Save on Energy Heating and Cooling
- Save on Energy New Construction
- Save on Energy Retrofit (excluding ST)
- Save on Energy Retrofit (ST)
- Save on Energy Small Business Lighting
- Save on Energy High Performance New Construction
- Save on Energy Process & Systems Upgrade

2020 (VRZ) – Table 5-f

m) Please provide the supporting calculations and/or methodology used in arriving at the verified savings for the following programs:

- Save on Energy New Construction
- Save on Energy Retrofit

2020 (WRZ) – Table 5-f

n) Please provide the supporting calculations and/or methodology used in arriving at the savings for the following programs:

- Save on Energy Retrofit

2021 (VRZ) – Table 5-g

o) Please provide the supporting calculations and/or methodology used in arriving at the verified savings for the following programs:

- Save on Energy Retrofit
- Save on Energy Process & Systems Upgrade

2021 (WRZ) – Table 5-g

p) Please provide the supporting calculations and/or methodology used in arriving at the verified savings for the following programs:

- Save on Energy Process & Systems Upgrades

Response:

a) This is provided on Tab 3-a of the workform. There were two projects completed in 2015 for which data only became available after the P&C report. These are identified in B29:I30. The net savings were calculated from the reported gross savings, using the NTG and RR values for 2015 in the 2017 verified results report. Persistence for post P&C projects is estimated based on the persistence rate for that program in that year reported by the IESO for other projects. In the 2022 filing, only 2015 final results and 2015 true-ups in 2016 were used in calculating the persistence. In the 2023 filing, 2015 verified true-ups in 2017 were also included in the calculation of persistence. These formulae are shown on the workforms.

b) The supporting calculations are already built into the workform. The persistence in 2020 is provided in the P&C report. The rate of loss in persistence in subsequent years is estimated based on the loss of persistence seen for that program in that year in the verified results. In 2015, Veridian had no other HPNC projects, therefore the provincial results for HPNC in 2015 were used. The calculation of unverified persistence in 2021 is (verified persistence in 2021)/(verified persistence in 2020) * unverified persistence in 2020. Minor corrections were made to the workform that result in slightly higher energy savings.

c) The unverified adjustment to the 2016 savings for the Save on Energy Heating and Cooling program are from the April 2019 P&C report, tab “LDC Progress”, Cell AY6. The 2020 value is from Cell CC6. As in the verified results, no loss of persistence is expected over the time horizon reported.

d) Unverified adjustment to 2015 savings in the P&C is from Tab “LDC progress” Cell AY15 for 2016 and cell CC15 for 2020.

   Unverified adjustment to 2016 savings Post P&C is from Tab 3a of the work form, Cell E35+ E119 +E252:E257.

   For reviewer’s convenience a Pivot table summarizing results has been added to the LRAMVA workform at N47 of Tab 3a.

   Projects in E252:E257 were not available at the time of the previous LRAMVA filing, as indicated in the difference between the Tabs 3-a on the current and previous year workform.

e) Unverified adjustment to 2016 Retrofit savings in the P&C are from the tab “LDC Progress” Cell AY15

   Unverified adjustment to 2016 Retrofit savings Post P&C are from Tab 3-b of the workform, Cell K71. The calculations are shown in that cell.

   Projects identified in C86:H128 of Tab 3-b of the worksheet were not available at the time of the previous filing.

f) True up savings are of two types: P&C and Post P&C. P&C savings are from the Participation and Cost report, Tab “LDC Results” Column BB.

   For the Retrofit program, there are results after the P&C report. These are provided on Tab 3-a of the workform.

g) Adjustments to 2017 savings in the P&C are from the P&C report, Tab “LDC Progress”, Cell BB15

Adjustments to 2017 savings Post P&C are from K72 on Tab 3-b of the workform, which aggregates all Post P&C projects from the table at C59.

h) This was addressed in EB-2020-0012 in the response to the interrogatory from OEB staff number 12b:

"As per Tab 8 of the LRAMVA Workform, the street light retrofitting was done from July 2015 until November 2016 and again from October 2017 to November 2018. There was a one year period between the two stages. There were no street lighting savings in the 2017 and 2018 IESO reports because the payouts were in 2019 and 2020. The last application was paid out in 2020 pending final review from the technical evaluator."

The energy savings reported in the adjustment to 2017 savings P&C values for the Save on Energy Retrofit program –Streetlights are actually Post P&C and the label has been corrected in the updated work form. Reported savings were converted to net savings using the values in the 2017 final verified report, as recommended in the CDM Guidelines. The savings persist at 100% for 12 years. This is consistent with persistence rates reported for other street lighting projects by IESO in verified program results, and with the IESO's 2020 Prescriptive Measure Assumptions List.

i) All results reported are from the P&C report for Veridian, Tab "LDC Results", Column BD.

j) Save on Energy Retrofit (ST) are from the Elexicon CDM database for Application 160646 with reported gross savings of 1,814,696 kWh and calculated net savings of 1,630,535 kWh using 2017 NTG and RR values.

Save on Energy Retrofit (excluding ST) is from the P&C report Tab "LDC Progress" Cell BD15 minus the amount for Save on Energy Retrofit (ST). The Post P&C value is from Tab 3-b, K73. That cell shows how it is calculated from the Table at C59.

Save on Energy Small Business Lighting is from the P&C report Tab "LDC Progress" Cell BD18.

k) Results are of two types: those from the P&C report ("LDC Progress" Column BQ) and post P&C results which are described on Tab 3-a.

l) The P&C values are from the P&C report, column BQ on the LDC Progress tab.

Retrofit post P&C values are from Tab 3-b of the workform, cell C73

Retrofit (ST) HPNC and PSU savings are from the Elexicon CDM database for the following projects:

Table 1 – HPNC and PSU Savings

Program	Application number	Reported gross kWh	Reported gross kW	Net kWh	Net kW
Retrofit - SL	160642	357,981	-	321,652	see Tab 8
HPNC	WBH-HPCC-18-S00001	2,916	4	1,817	3
PSU	601397	1,042,000	87	1,058,550	82

Heating and Cooling savings are from Elexicon databases for the following projects

Table 2 – Heating and Cooling Savings

Reporting Month	Project size				Total reported savings	Net energy savings (kWh)
	132 kWh	732 kWh	864 kWh	1310 kWh		
Aug-2019	0	7	1	13	23,018	19,579
Sep-2019	0	7	0	5	11,674	9,930
Oct-2019	1	5	1	6	12,516	10,646
Nov-2019	0	0	0	3	3,930	3,343
Dec-2019	0	5	0	1	4,970	4,227
Total projects	1	24	2	28		
Total savings (	**132**	**17,568**	**1,728**	**36,680**	**-**	**47,725**

m) The calculations for these are on Tab 3-a. Net results shown for projects are calculated using 2017 NTG and RR factors in 2017 verified results for Veridian applied to reported gross savings.

n) The calculations for these are on Tab 3-b. Net results shown for projects are calculated using 2017 NTG and RR factors in 2017 verified results for Whitby applied to reported gross savings.

o) The calculations for these are on Tab 3-a. Net results shown for projects are calculated using 2017 NTG and RR factors in 2017 verified results for Veridian applied to reported gross savings.

p) The results shown are from Elexicon database for the following projects:

Table 3 – Elexicon Project Results

Application	Reported kWh	Reported kW	Net kWh	Net kW
PI-601799	1,349,000	154	1,370,426	145
PI-601769	2,562,000	292	2,602,692	274
Total	**3,911,000**	**446**	**3,973,118**	**419**

Elexicon Energy Inc.

Answer to Interrogatory from

OEB Staff

Interrogatory STAFF-37:

LRAMVA

Ref 1: LRAMVA Workform, Tab 5 – 2015-2027 LRAM, Prospective Disposition of Persisting CDM Savings

To comply with OEB's guidance on prospective disposition of LRAM-eligible amounts for future years until the next rebasing period, Elexicon Energy has applied for "approval of the 2023 to 2028 LRAM-eligible amounts" and has correctly kept this separate from the LRAMVA amounts through 2022, which are proposed for disposition. However, it appears that Elexicon Energy has not proposed disposition of the LRAM-eligible 2023 amount calculated at: (2023 LRAM-eligible amount shown in Table 1-C of LRAMVA workform) * (2023 OEB-approved inflation minus X-factor).

a) Please confirm if Elexicon Energy is applying for disposition of the LRAM-eligible 2023 amount. If not, please provide the reasoning as to why Elexicon Energy is not seeking disposition of the LRAM-eligible 2023 amount.

Response:

a) Elexicon confirms it is updating its request and applying for disposition of the LRAM-eligible 2023 amount to be included as below:

Table 1 – Updated 2023 LRAM Calculation

	Original Request 2020-2022	Eligible Amount 2023	Price Cap Index	2023 Including Price Cap	Revised Disposition Request
VRZ	2,637,195	812,773	3%	837,156	3,474,351
WRZ	1,150,038	372,558	3%	383,735	1,533,773
Total	3,787,233	1,185,331		1,220,891	5,008,124

The IRM models have been updated accordingly and will be submitted with the IR Responses. See "EE_VRZ_2023_IRM-Rate-Generator-Model_20221013" and "EE_WRZ_2023_IRM-Rate-Generator-Model_20221012"

Note, the 2023 eligible amount will need to be updated once the 2023 inflation factor is finalized from the OEB, similar to tab 16 of the IRM model.

Elexicon Energy Inc.

Answer to Interrogatory from

OEB Staff

Interrogatory STAFF-38:

LRAMVA

Ref 1: IRM Rate Application, Section 3.2.6, Table 18: LRAMVA Rate Riders – WRZ

a) As noted per Elexicon Energy's IRM Application, Elexicon proposes a 3 year recovery for LRAMVA Rate Riders in WRZ for rate mitigation purposes. Please provide the rationale as to why a period of 3 years was chosen.

Response:

WRZ chose a period of 3 years of recovery because the claim is for 3 years of LRAMVA (2020-2022)

As per Staff-37, WRZ is updating its request to include the 2023 eligible amounts. The recovery period will likewise be changed to 4 years.

Elexicon Energy Inc.

Answer to Interrogatory from

OEB Staff

Interrogatory STAFF-39:

Veridian RZ Account 1589

Ref 1: Manager's Summary, p.16

Elexicon Energy indicated that there was an error relating to the Veridian RZ's 2019 Account 1589 balance that was previously disposed on an interim basis, and Account 1595 (2019) which is proposed for disposition in the current rate application. Elexicon Energy indicated that the impact of the error is that 16 transition customers were undercharged in the 2022 rate application and 10 transition customers will be under-credited in the current rate application. Elexicon Energy proposes that it will conduct a manual adjustment to refund the 10 transitioning customers the $5,914 if the OEB so orders.

a) Please confirm that the refund will not affect the related deferral and variance account balances and that the amount will be funded from Elexicon Energy's return on equity. If not confirmed, please clarify how the refund will be accounted for.

Response:

Elexicon confirms that the $5,914 refund will not affect the related deferral and variance account balances and that the amount will be funded from Elexicon Energy's return on equity.

Elexicon Energy Inc.

Answer to Interrogatory from

OEB Staff

Interrogatory STAFF-40:

Veridian RZ Account 1589

Ref 1: Manager’s Summary, p. 15-16

Ref 2: 2023 VRZ IRM Rate Generator Model – Tab 3

Ref 3: 2023 VRZ GA Analysis Workform – Principal Adjustments tab

Ref 4: EB-2018-0072, Decision and Rate Order, March 28, 2019

Elexicon Energy indicated that there was an error relating to Veridian RZ’s 2019 Account 1589 balance and Account 1595 (2019), where $220,827 was incorrectly posted to a GA revenues account instead of Account 1595 (2019).

a) Please confirm that the incorrect journal entry referred to was the journal entry to record the rate riders collected. If not confirmed, please clarify the nature of the incorrect journal entry and provide the incorrect journal entry.

b) Please confirm that the correcting journal entry and the principal adjustments made to the DVA Continuity Schedule (Tab 3 Rate Generator Model) is as shown below. If not confirmed, please provide the correcting journal entry and associated principal adjustments.

Dr. Account 1589	$220,827	
Cr. Account 1595 (2019)		$220,827

Response:

a) Elexicon confirms that the incorrect journal entry referred to was the journal entry to record the rate riders collected.

b) Elexicon confirms that the correcting journal entry and the principal adjustments made to the DVA Continuity Schedule (Tab 3 Rate Generator Model) is as shown below.

Dr. Account 1589	$220,827	
Cr. Account 1595 (2019)		$220,827

Elexicon Energy Inc.

Answer to Interrogatory from

OEB Staff

Interrogatory STAFF-41:

Veridian and Whitby RZ Account 1589

Ref 1: 2023 Veridian GA Analysis Workform

Ref 2: 2023 Whitby GA Analysis Workform

In the Verdian RZ's and Whitby RZ's GA 2021 tabs of the GA Analysis Workforms, the difference between the calculated loss factor and the approved loss factor for secondary metered customers is greater than 1%. For both rate zones, Elexicon Energy indicated that the difference is due to unbilled to actual revenue differences (reconciling item 2).

The calculated loss factor is calculated as the Non-RPP Class B including loss adjusted consumption (cell F53) divided by the Non-RPP Class B consumption excluding loss adjusted consumption (cell D18). Under Note 4a, for both rate zones, the Non-RPP Class B including loss-adjusted consumption (cell F53) is actual consumption by calendar month.

a) Please confirm that the Non-RPP Class B consumption excluding loss-adjusted consumption (cell D18) does not reflect the actual calendar year consumption, but includes estimated unbilled consumption. If not, please explain how the unbilled to actual revenue reconciling item results in the difference between loss factors.

b) If confirmed, please indicate the difference in loss factors after the Non-RPP Class B consumption excluding loss-adjusted consumption (cell D18) is trued up to reflect actual calendar year consumption.

i. If the difference after the adjustment in part b is still above 1%, please explain why.

Response:

a) Elexicon confirms that the Non-RPP Class B consumption excluding loss-adjusted consumption (cell D18) does not reflect the actual calendar year consumption, but includes estimated unbilled consumption.

b) The difference in loss factors after the Non-RPP Class B consumption excluding loss-adjusted consumption (cell D18) is trued up to reflect actual calendar year consumption is provided in the tables below:

Table 1 – Non-RPP Class B Loss Factor Difference

		2021 Actuals LA Consumption	2021 RRR Non-LA	VRZ Loss Factor
		671,115,180	629,699,584	1.0658
2a	-	3,555,863		
2b	-	3,745,137		
VRZ adjusted		663,814,180	629,699,584	1.0542
Approved				1.0482
Difference				0.0060

	2021 Actuals LA Consumption	2021 RRR Non-LA	WRZ Loss Factor
	230,048,972	222,548,654	1.0337
2a	53,466		
2b	921,685		
VRZ adjusted	231,024,123	222,548,654	1.0381
Approved			1.0482
Difference			-0.0101

i. The WRZ amount above 1% is .01 %. The sensitivty on this number is 35,000 kWh (or .016 % of 222,548,654) which Elexicon submits is not material.

Elexicon Energy Inc.

Answer to Interrogatory from

OEB Staff

Interrogatory STAFF-42:

Veridian RZ Account 1595 (2019)

Ref 1: Manager's Summary, p. 33

Ref 2: Chapter 3 Filing Requirements – 2022 Edition for 2023 Rate Applications, May 24, 2022 p.13-14

Per the Chapter 3 Filing Requirements, distributors only become eligible to seek disposition of Account 1595 residual balances two years after the expiry of the rate rider. Elexicon Energy is requesting Verdian RZ's Account 1595 (2019) for disposition. The rate riders associated with this sub-account expired on April 30, 2020. Therefore, Account 1595 (2019) would be eligible for disposition when 2022 account balances are requested for disposition in the 2024 rate application.

a) Please confirm that Elexicon Energy is still proposing to dispose Account 1595 (2019) in the current rate application.

b) If confirmed, please confirm that no further transactions have been recorded in the sub-account in 2022 as of now and no further transactions are expected to be recorded in the sub-account for the rest of 2022.

c) If not confirmed, please revise the DVA Continuity Schedule to remove the disposition request.

Response:

a) Elexicon confirms it is still proposing to dispose Account 1595 (2019) in the current rate application.

b) Elexicon confirms that no further transactions have been recorded in the sub-account in 2022 as of now and no further transactions are expected to be recorded in the sub-account for the rest of 2022.

c) Not applicable.

Elexicon Energy Inc.

Answer to Interrogatory from

OEB Staff

Interrogatory STAFF-43:

Veridian RZ Accounting Guidance

Ref 1: Manager's Summary, p. 20-23

Ref 2: EB-2021-0015 Decision and Rate Order, December 16, 2021

Ref 3: EB-2021-0015 Interrogatory Response – OEB Staff 18, November 8, 2021

As noted in Elexicon Energy's 2021 decision and rate order, the Veridian RZ's 2018 to 2020 Group 1 balances were requested for disposition on an interim basis as Elexicon Energy was undertaking a review of Veridian RZ's Accounts 1588 and 1589. Elexicon Energy identified an issue with the unaccounted for energy (UFE) used for Veridian RZ's settlement in 2020 and included principal adjustments in the 2020 balances accordingly. Elexicon Energy stated that the UFE issue was not expected to materially impact the 2018 and 2019 Account 1588 and Account 1589 balances.

a) In response to interrogatory noted in reference 3, Elexicon Energy indicated that an estimated adjustment for the UFE issue was made to the 2020 balances. Please explain whether any further changes were made to finalize the adjustment.

i) If yes, please indicate the additional adjustment and indicate whether the adjustment has been included in the 2021 Account 1588 and Account 1589 balances.

ii) If the additional adjustment has not been included in the 2021 Account 1588 and Account 1589 balances, please revise the DVA Continuity Schedule to include the adjustment in 2021 and explain why it was not initially included.

b) On page 21 of the Manager's Summary, it states that the UFE issue did not materially impact 2019 principal adjustments amounts for Account 1588 and 1589. The impact was $25,860 for Account 1588 and $11,460 for Account 1589

Please explain whether the 2019 impact was included as principal adjustments in the 2018 to 2020 balances that were approved for disposition in Elexicon Energy's 2021 rate proceeding or included in the 2021 balances requested for disposition in this proceeding.

i) If not included, please revise the DVA Continuity Schedule to include the adjustment in 2021 and explain why it was not initially included.

Response:

a) To clarify, in response to EB-2021-0015 Interrogatory Response – OEB Staff 18, November 8, 2021 parts (c) and (d) Elexicon stated the following: "*Elexicon has identified an issue related to the levels of unaccounted for energy used for VRZ settlement in 2020. An estimated adjustment for the impact was included as a placeholder in the VRZ IRM Rate Generator continuity schedule (1588 principal adjustments for VRZ in 2020) as well as the VRZ GA Analysis Workform filed in August 2021*". As noted, the estimated adjustment for the impact was a placeholder in the worksheets filed with the original application in August 2021

Subsequently, Elexicon re-ran metering data used in the 2020 settlement process (January to December) and re-calculated settlement and the resulting accounting entries. Elexicon provided summary tables outlining the impact of the revised calculations and the associated revisions to principal adjustments required in the VRZ IRM Rate Generator continuity and related sections in the VRZ GA Analysis Workform model. To ensure the most accurate and up-to-date balances were included in the interim disposition request for VRZ's Group 1 balances the following updated worksheets were submitted with the IR response: VRZ Accounting Guidance 2020 Analysis, VRZ IRM Rate Generator Model and VRZ GA Analysis Workfrom[1].

Therefore, the most accurate and up-to-date balances relating to 2020 were included in EB-2021-0015. No further changes were necessary to finalize 2020 and no revisions to the continuity schedule are required.

b) The UFE issue did not materially impact 2019 principal adjustments amounts for Account 1588 and 1589. The impact was $25,860 for Account 1588 and $11,460 for Account 1589. The 2019 impact was not included as principal adjustments in the 2018 to 2020 balances that were approved for disposition in Elexicon Energy's 2021 rate proceeding nor is it included in the 2021 balances requested for disposition in this proceeding.

The adjustments were not included in the Continuity Schedule due to the materiality level. In Elexicon's EB-2020-0012 Decision (page 15) the OEB findings were as follows regarding Group 1 Deferral and Variance Accounts "The OEB notes that these one-time historical adjustments should be made so that the customers' rates reflect the accurate pass-through commodity costs which are in line with the OEB's methodology". This was based on Elexicon's response to the OEB staff's questions, dated October 20, 2020, Question #2 in which Elexicon was asked to calculate the bill impacts for residential and GS<50 customers with respect to the adjustments.

Elexicon did an analysis prior to submitting the current application EB-2022-0024 and determined that these principal amounts are not significant enough to change the calculated GA or DV rate riders and therefore have no bill impact. Based on this, Elexicon submits it is not necessary to include the adjustments in the 2021 Continuity Schedule.

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[1] Elexicon_IRR_EE_VRZ_2022_Acctg Guidance 2020 Analysis_OEB Staff-25_20211108 (https://www.rds.oeb.ca/CMWebDrawer/Record/731319/File/document), Elexicon_IRR_EE_VRZ_2022_GA_Analysis_Workform_OEB Staff-25_20211108 (https://www.rds.oeb.ca/CMWebDrawer/Record/731323/File/document)

Elexicon Energy Inc.

Answer to Interrogatory from

OEB Staff

Interrogatory STAFF-44:

Veridian RZ Accounting Guidance

Ref 1: Manager's Summary, p. 20-23

Elexicon Energy undertook a final review of Account 1588 and Account 1589 prior to requesting final disposition of 2018 to 2021 balances in this rate application. Elexicon Energy indicate that has made one further refinement as of August 2021, Elexicon is now receiving revised SM Tiered & TOU reports from Elexicon's Operational Data Store provider on the 10th business day. This allows for any missing data (due to communication issues/edits/estimates/etc.) at the time of initial preparation to be updated.

a) Please confirm that the refinement did not result in any adjustments to the Account 1588 and 1589 balances for 2018 to 2021, as the refinement improved the accuracy of the initial recording of Account 1588 and 1589 journal entries.

b) If not confirmed, please explain the implication of the refinement on the Account 1588 and 1589 balances and confirm that any resulting adjustments have been included in the 2021 balances requested for disposition.

a. If any resulting adjustments to Account 1588 and 1589 balances have not been included in the 2021 balances requested for disposition in this proceeding, please revise the DVA Continuity Schedule to include the adjustment in 2021 and explain why it was not initially included.

Response:

a) Elexicon confirms that the refinement did not result in any adjustments to the Account 1588 and 1589 balances for 2018 to 2021. As explained in the Managers Summary, this was a prospective 'refinement' to the process. Elexicon provided this narrative to demonstrate its commitment to continually improving its processing of the settlement process.

Elexicon did peform a review of 2021 which showed the impact of the refinement to be .04%. This result has provided Elexicon assurance that the kWhs submitted prior to the refinement were acceptable.

b) N/A, see response to a)

Elexicon Energy Inc.

Answer to Interrogatory from

OEB Staff

Interrogatory STAFF-45:

Veridian and Whitby RZ Accounting Guidance

Ref 1: Manager's Summary, p.22-23, 27-28

Ref 2: EE_VRZ_2023_Acctg Guidance_2021 Analysis_20220727

Ref 3: EE_WRZ_2023_Acctg Guidance_2021 Analysis_20220727

Elexicon Energy indicated that the Veridian RZ and Whitby RZ's Account 1588 and 1589 transactions have been reviewed for reasonability and comparability against the regulatory accounting guidance in excel files noted in references 2 and 3.

a) For the Veridian RZ, please confirm that even though the Veridian RZ is in compliance with the Account 1588 and Account 1589 Accounting Guidance, the excel is intended to be a reasonability test that compares the expected account balance computed based on annual data, to the actual account balance.

b) For the Whitby RZ, please confirm that the excel is intended to be a reasonability test that compares the expected account balance computed based on annual data, to the actual account balance that has been recorded using Whitby RZ's modified approach for the Accounts 1588 and 1589.

c) If parts a or b above is not confirmed, please explain the purpose of the excel files.

d) In Table 7 of reference 1, principal adjustment for the Verdian RZ Account 1589 is $57,963. In the Veridian RZ DVA Continuity Schedule and GA Analysis Workform, the principal adjustment for Account 1589 is $278,790. Please confirm that the principal adjustment in Table 7 should be $278,790.

i) If not confirmed, please explain and revise the GA Analysis Workform and DVA Continuity Schedule as needed.

ii) If confirmed, the difference in table 7 is ($324,316). Please explain whether there are additional drivers causing the difference and comment on the materiality of this difference.

Response:

a) Elexicon confirms that even though the Veridian RZ is in compliance with the Account 1588 and Account 1589 Accounting Guidance, the excel is intended to be a reasonability test that compares the expected account balance computed based on annual data, to the actual account balance.

b) Elexicon confirms that the excel is intended to be a reasonability test that compares the expected account balance computed based on annual data, to the actual account balance that has been recorded using Whitby RZ's modified approach for the Accounts 1588 and 1589.

c) Not applicable.

d) In Table 7 of reference 1, principal adjustment for the Verdian RZ Account 1589 is $57,963. In the Veridian RZ DVA Continuity Schedule and GA Analysis Workform, the principal adjustment for Account 1589 is $278,790. The difference is $220,827 in cell J56 of the VRZ GA workform and labelled "2019 GL correction of posting to GA revenue account". File "EE_VRZ_2023_Acctg Guidance_2021 Analysis_20220727" is looking at 2021 in isolation so the 2019 GL correction has been excluded from the reasonability test.

Elexicon Energy Inc.

Answer to Interrogatory from

OEB Staff

Interrogatory STAFF-46:

Whitby RZ Accounts 1588 and 1589

Ref 1: Manager's Summary, p. 23-31

Ref 2: EB-2020-0012, Supplemental Evidence, Appendix J, p.7, Aug 11, 2020

Ref 3: EE_WRZ_2023_Acctg Guidance_2021 Analysis_20220727

Ref 4: EE_WRZ_2023_Acctg Guidance_2020 Analysis_20220727

Elexicon Energy indicated that in its 2020 to 2022 rate applications, it confirmed that for the Whitby RZ, the modified approach was used for Accounts 1588 and 1589.

It appears that some of the modifications were addressed in Elexicon Energy's 2021 rate application for the Whitby RZ as noted in reference 3, Elexicon Energy indicated it has adjusted the Whitby RZ process to incorporate a split of actual GA costs (CT 148) to reflect the proportional split of UFE so that they reflect the costs at a Wholesale kWh level for both RPP and Non-RPP. Elexicon Energy also indicated that it would complete a true-up review of the Whitby RZ methodology results as compared to the OEB methodology results based on actuals. Each review will result in a single journal entry to align the Whitby RZ methodology outcome with the OEB accounting guidance outcome.

Furthermore, in the current proceeding, Elexicon Energy requested an extension to the implementation of the Accounting Guidance for Accounts 1588 and 1589, noting that the extension will not impact customers, nor the outcome of account balances. The implementation is strictly process-driven changes.

a) Please confirm that a modified approach for Accounts 1588 and 1589 was also used for the 2021 balances requested for disposition in this proceeding. If not confirmed, please explain.

b) Regarding the modifications, please confirm that

i) the process change to split GA costs (CT 148) means that the balance recorded in Accounts 1588 and 1589 does not require a top-down journal entry to adjust the GA costs to be split based on wholesale consumption.

ii) The 2020 single journal entry for Account 1588, resulting from the "true-up review" is reflected in the excel noted in reference 4 as cell F14 "OEB Acctg (UFE)" in the WRZ Settlement Comparison tab.

iii) The 2021 single journal entry for Account 1588, resulting from the "true-up review" was completed but not filed as part of the excel noted in reference 3

iv) If parts I, ii and iii above are not confirmed, please explain and clarify how the adjustments to reflect the proration of GA costs and calculation of RPP settlement based on wholesale consumption has been accounted for.

c) Please confirm that adjustments to align to the OEB's Accounting Guidance for Accounts 1588 and 1589 have been already incorporated in the balances requested for disposition, and therefore, reconciling items in the GA Analysis Workform and principal adjustments to the account balances are not required. If not confirmed, please explain.

d) Please confirm that the implementation of the Accounting Guidance is strictly process-driven as adjustments to align to the OEB's Accounting Guidance for Accounts 1588 and 1589 have been already incorporated in the balances requested for disposition. If not confirmed, please explain.

Response:

a) Elexicon confirms that a modified approach for Accounts 1588 and 1589 was also used for the 2021 balances requested for disposition in this proceeding.

b)

i) Elexicon confirms that the process change to split GA costs (CT 148) means that the balance recorded in Accounts 1588 and 1589 does not require a top-down journal entry to adjust the GA costs to be split based on wholesale consumption.

ii) Elexicon commited to completing a true-up review of the WRZ methodology results as compared to the OEB methodology results based on actuals. Each review will result in a single journal entry to align the WRZ methodology outcome with the OEB accounting guidance outcome to ensure the treatment of UFE is incorporated into the 1598 Final Settlement calculation.

Elexicon confirms that the "true-up review" of the WRZ methodology in 2020 consisted of three reviews, each of which resulted in a single journal entry. The 225,465 reflected in the excel noted in reference 4 as cell F14 "OEB Acctg (UFE)" in the WRZ Settlement Comparison tab is made up of the following three reviews

January 2020 to April 2020
May 2020 to September 2020
October 2020 to December 2020

The journal entries related to the periods January 2020 to April 2020 and May 2020 to September 2020 are reflected in 2020 GL. For the period October 2020 to December 2020 a preliminary true up was done in 2020 and posted to the GL. A final true up entry was done in 2021 once all the

data was available for the period. The final true up amount is included in the WRZ GA workfrom as an principal adjustment.
See " EE_WRZ_2023_GA_Analysis_Workform_20220727" tab Principal Adjustments cell V55.

iii) Elexicon confirms that the "true-up review" of the WRZ methodology in 2021 consisted of three reviews, each of which resulted in a single journal entry.

January 2021 to April 2021
May 2021 to October 2021
November 2021 to December 2021

The journal entries related to the periods January 2021 to April 2021 and May 2021 to October 2021 are reflected in 2021 GL. For the period November 2021 to December 2021 a preliminary true up was done in 2021 and posted to the GL. A final true up entry was done in 2022 once all the data was available for the period. The final true up amount is included in the WRZ GA workfrom as a principal adjustment. See " EE_WRZ_2023_GA_Analysis_Workform_20220727" tab Principal Adjustments cell V81.

iv) N/A

c) As outlined above, Elexicon confirms that adjustments to align to the OEB's Accounting Guidance for Accounts 1588 and 1589 have been already incorporated in the balances requested for disposition.

d) Elexicon confirms that the implementation of the Accounting Guidance is strictly process-driven as adjustments to align to the OEB's Accounting Guidance for Accounts 1588 and 1589 have been already incorporated in the balances requested for disposition.

Elexicon Energy Inc.

Answer to Interrogatory from

OEB Staff

Interrogatory STAFF-47:

Whitby RZ's Account 1595 (2018), (2019)

Ref 1: 2023 Whitby RZ IRM Rate Generator Model – Tab 3

Ref 2: EB-2018-0079 Decision and Rate Order, December 20, 2018

Ref 3: EB-2017-0085/EB-2017-0292 Decision and Rate Order, December 15, 2017

For the Whitby RZ, the amounts in "OEB-Approved Disposition" during 2018 for Account 1595 (2018) (cell AA33) and during 2019 for Account 1595 (2019) (cell AK34) do not appear to agree to the principal amounts approved for disposition in the applicable decision and rate orders, which would have been transferred to the applicable Account 1595 sub-accounts. The differences are shown in the tables below.

Account 1595 (2018)	Approved for Disposition	Amount
2018 Decision and Rate Order	Group 1 DVAs	($1,706,481)
	Tax Sharing	($50,174)
	Group 2 DVAs	$804,664
	Total to transfer to 1595 (2019)	($951,991)
2023 IRM Rate Generator Model		$901,817*
Difference		($50,174)

*expected to be opposite sign as approved amount

Account 1595 (2019)	Approved for Disposition	Amount
2019 Decision and Rate Order	Tax sharing	($50,174)
	Transition Customers' portion of GA	$70,331
	LRAMVA	$336,327
	Total to transfer to 1595 (2019)	$356,484
2023 IRM Rate Generator Model		($336,627)*
Difference		$19,857
	(equal to sum of tax sharing and transition customer portion of GA)	

*expected to be opposite sign as approved amount

a) In the 2018 and 2019 decision and rate orders for the Whitby RZ, the approved settlement agreement noted that the tax sharing amount would be refunded to ratepayers, and that it would be recorded in Account 1595 for future disposition. From the tables above, it does not appear that the tax sharing amounts have been included in Account 1595 (2018) and (2019). Please explain how the tax sharing amount has been treated.

b) It does not appear the transition customers' portion of Account 1589 - Global Adjustment was included in Account 1595 (2019). Please explain how the amount was treated upon disposition and confirm that the amount has been removed from Account 1589.

c) Please explain and reconcile the differences in the above tables, and revise the evidence as needed.

Response:

a) In the 2018 and 2019 decision for the WRZ, the approved settlement agreement noted that the tax sharing amount would be refunded to ratepayers, and that it would be recorded in Account 1595 for future disposition. The tax sharing amounts were included in the Account 1595 (2018) and Account (2019) Transactions column (2018 cell Z33 & 2019 cell AJ34) rather than the OEB-Approved Disposition Column. The rationale is as follows: unlike the RSVA accounts that are being moved to 1595, the tax shared savings is a new entry that is recorded in the current year. The impact on the closing principal balance is the same regardless of which column is used

b) The transitioning customers' portion of Account 1589 - Global Adjustment was included in a 1595 (2019) Account. The amount of $70,331 was moved to a 1595 (2019) account and subsequently recovered in full from Elexicon's transitioning customers. Because the transactions were in and out in 2019 and the balance was $0 at the end of 2019 it was not included in the Continuity Schedule

c) Below are the revised tables with a summary of the explanation:

Table 1 – Revised Tables

Account 1595 (2018)	**Approved for Disposition**	**Amount**	
2018 Decision and Rate Order	Group 1 DVAs	-$1,706,481	
	Group 2 DVAs	$804,664	
	Total to transfer to 1595 (2019)	-$901,817	
2023 IRM Rate Generator Model		$901,817	
Difference		$0	
2018 Decision and Rate Order	Tax Sharing	-$50,174	Recorded in Transaction Column

Account 1595 (2019)	**Approved for Disposition**	**Amount**	
2019 Decision and Rate Order	LRAMVA	$336,627	
	Total to transfer to 1595 (2019)	$336,627	
2023 IRM Rate Generator Model		-$336,627	
Difference		$0	
2019 Decision and Rate Order	Tax sharing	-$50,174	Recorded in Transaction Column
	Transition Customers' portion of GA	$70,331	Recovered in full in 2019. Zero balance so not included in Continuity Schedule

Elexicon Energy Inc.

Answer to Interrogatory from

OEB Staff

Interrogatory STAFF-48:

Whitby RZ's Account 1595 (2018), (2019)

Ref 1: 2023 Whitby RZ IRM Rate Generator Model – Tab 3

Ref 2: 2021 Whitby RZ IRM Rate Generator Model – Tab 3 (EB-2020-0012)

Elexicon Energy was last approved disposition of its Whitby RZ's 2019 Group 1 balances in its 2021 rate proceeding. In the 2021 proceeding, the Account 1595 (2018) and (2019) closing balances as at December 31, 2019 were provided even though the sub-accounts were not yet eligible for disposition. The closing principal and interest balances in the 2021 DVA Continuity Schedule differ from that provided in the current 2023 DVA Continuity Schedule. The differences are as follows:

	1595 (2018) Principal	**1595 (2018) Carrying Charges**	**1595 (2019) Principal**	**1595 (2019) Carrying Charges**
2023 DVA Continuity Schedule	($12,421)	($25,708)	($71,423)	12,012
2021 DVA Continuity Schedule	($62,595)	($26,731)	($21,249)	$13,035
Diff	$50,174	$1,023	($50,174)	($1,023)

a) The differences appear to relate to the tax sharing amounts that were approved in Whitby RZ's 2018 and 2019 decision and rate orders. Please explain and reconcile the differences

Response:

Elexicon confirms that the difference between the 2023 and 2021 DVA Continuity Schedule for 1595 (2018) and 1595 (2019) is related to the shared tax savings amount approved for disposition. When these amounts were originally approved for disposition they were moved to a generic 1595 account. In the 2021 DVA Continuity Schedule this generic account was grouped together with 1595 (2018). This was subsequently corrected and the amounts in the generic account were broken down in to 1595 (2018) and 1595 (2019). The total amount in the 2023 and 2021 DVA Continuity Schedule related to these accounts is unchanged. The only change is the allocation between 2018 and 2019.

Elexicon Energy Inc.

Answer to Interrogatory from

OEB Staff

Interrogatory STAFF-49:

Whitby RZ Account 1584

Ref 1: 2023 Whitby RZ IRM Rate Generator Model – Tab 3

Transactions in Whitby RZ's Account 1584 for 2020 and 2021 were $94,645 and $1,439,360, respectively, resulting in a balance of $1,560,000 for disposition.

a) Please explain the significant increase in transactions in 2021 as compared to the transactions in 2020.

b) Please confirm that there was no prior-period adjustments recorded in 2021 transactions of $1,439,360 in Account 1584. If not confirmed, please provide the details of such adjustments.

Response:

a) The 2021 Network Service Rate was developed based on forecasted costs of $6,172,000. The actual network costs in 2021 were $7,746,000. This was due to an increase in the IESO UTRs and the HONI Sub-Tx rates as outlined below:

Table 1 – IESO UTRs and HONI Sub-Tx Rates Table

Network Rate	Forecasted	Actual 2021			%
		Jan - Jun	Jul - Dec	Avg	Increase
IESO	3.92	4.67	4.90	4.79	22%
HONI	3.3980	3.4778	3.4778	3.4778	2%

The increased costs of ~$1,575,000 were partially offset by a difference between the forecasted and actual billing determinants of ~$175,000. This resulted in an increase in WRZ Account 1584 of ~$1,400,000

b) Elexicon confirms that there were no prior-period adjustments recorded in 2021 transactions in Account 1584.

Elexicon Energy Inc.

Answer to Interrogatory from

OEB Staff

Interrogatory STAFF-50:

ICM Accounting

Ref 1: Appendix B, p.54

Ref 2: Appendix B-1, p.11

In reference 1, Elexicon Energy requested to record amounts relating to the ICM in the applicable 1508 sub-accounts for the Whitby and Veridian RZs.

In reference 2, it states

The implementation of the Whitby Smart Grid will be accompanied by a subsequent application to the OEB proposing efficient participant incentives funded through a Deferral or Variance account, that are expected to be paired with streams of funding from Natural Resources Canada ("NRCan"), the IESO, and potentially other entities.

Also, reference 2 notes that Elexicon Energy has been granted $4M of NRCan funding for Advanced Distribution Management System (ADMS) portion of the Whitby Smart Grid project.

a) In the quote referenced above, please explain how the Whitby Smart Grid will be funded through a deferral or variance account (DVA), the nature of this DVA, the estimated quantum of the funding and when Elexicon Energy will file the application for this DVA.

i) Please explain how this DVA will interact with the generic 1508 sub-accounts

b) Please explain how Elexicon Energy intends to account for the $4M of NRCan funding in its general ledger.

i) Please explain whether any new accounts would be needed to track the NRCan funding.

ii) If yes, please discuss the causation, materiality and prudence of any proposed account(s) and provide a draft accounting order.

Response:

a) Elexicon expects to file its DER Enabling Program in 2023 based on an OEB approval of the Whitby Smart Grid project. Elexicon will provide details on what Deferral or Variance accounts it is requesting as part of the application, and will also provide detail as to how the DVAs will interact with existing USoA.

b) Elexicon intends to account for the $4M of NRCan funding as a Capital Contribution in its general ledger.

Three new accounts will be needed to track the NRCan funding.

1) **Account 1508 Other Regulatory Assets, Sub-account Deferred Revenue – Contributed Capital**
This sub-account shall be used to record amounts received in contributed capital for the Project.

2) **Account 1508 Other Regulatory Assets, Sub-account Deferred Revenue Carrying Charges**
This sub-account shall be used to record carrying charges on Account 1508 Other Regulatory Assets, Sub-account Deferred Revenue – Contributed Capital. Carrying charges shall be calculated using simple interest applied to the opening balances in the account. The interest rate shall be the rate prescribed by the Board.

3) **Account 1508 Other Regulatory Assets, Sub-account Deferred Revenue Amortization**
This sub-account shall be used to record the amortization associated with the capital contribution amounts recorded Account 1508 Other Regulatory Assets, Sub-account Deferred Revenue – Contributed Capital.

These accounts meet the causation, materiality, and prudence criteria as described in the following sections:

Causation

These accounts meet the causation criteria. There is specific funding from NRCan that needs to be accounted for separate from other Capital Contributions.

Prudence

These accounts meet the prudence criteria. The accounts are necessary to track the Contributed Capital specific to the ICM. At the time of rebasing there are specific entries related to *Deferred Revenue Liability* and *Government and Other Assistance Directly Credited to Income* that will be impacted by these accounts.

Materiality

These accounts meet the materiality criteria as the NRCan funding amount of $4M is over Elexicon's materiality threshold.

A Draft Accounting Order has been included with the Interrogatory Responses. See: "EE_IR_Response_Staff50_20221013_Accounting Order"

Staff 50

DRAFT ACCOUNTING ORDER

ELEXICON ENERGY

EB-2022-0024

OCTOBER 13, 2022

Elexicon shall establish three (3) new sub-accounts to record amounts associated with capital contributions received for the Project. These three (3) new accounts will capture capital contributions, associated carrying charges and amortization, as described below.

1) Account 1508 Other Regulatory Assets, Sub-account Deferred Revenue – Contributed Capital

This sub-account shall be used to record amounts received in contributed capital for the Project.

2) Account 1508 Other Regulatory Assets, Sub-account Deferred Revenue Carrying Charges

This sub-account shall be used to record carrying charges on *Account 1508 Other Regulatory Assets, Sub-account Deferred Revenue – Contributed Capital*. Carrying charges shall be calculated using simple interest applied to the opening balances in the account. The interest rate shall be the rate prescribed by the Board.

3) Account 1508 Other Regulatory Assets, Sub-account Deferred Revenue Amortization

This sub-account shall be used to record the amortization associated with the capital contribution amounts recorded *Account 1508 Other Regulatory Assets, Sub-account Deferred Revenue – Contributed Capital.*

The following outlines the accounting entries in the year the Project assets are placed into service:

OEB #	Description
Dr: 1110	Account Receivable
Cr: 1508	Other Regulatory – Sub-account “Deferred Revenue – Contributed Capital”
To record the amount received in contributed capital for the Project.	
Dr: 1525	Misc. Deferred Debits/Credits
Cr: 1508	Other Regulatory - Sub-account "Deferred Revenue -Carrying Charges"
To record carrying charges on the contributed capital received for the Project.	
Dr: 1508	Other Regulatory – Sub-account “Deferred Revenue – Contributed Capital”
Cr: 1508	Other Regulatory - Sub-account "Deferred Revenue Amortization"
To record the amortization associated with contributed capital for the Project.	

The following outlines the entries upon approval of the ICM included with Elexicon’s next Cost of Service rebasing application planned for 2023:

OEB #	Description
Dr: 1508	Other Regulatory - Sub-account "Deferred Revenue -Carrying Charges"
Cr: 1525	Misc. Deferred Debits/Credits
To reverse carrying charges, which would be included in a revenue requirement true-up, as approved.	
Dr: 1508	Other Regulatory – Sub-account “Deferred Revenue – Contributed Capital”
Cr: 2440	Deferred Revenue Liability
To transfer contributed capital for the Project to deferred revenue.	
Dr: 1508	Other Regulatory - Sub-account "Deferred Revenue Amortization"
Cr: 4245	Government and Other Assistance Directly Credited to Income
To transfer the amortization of deferred revenue to income.	

Elexicon Energy Inc.

Answer to Interrogatory from

OEB Staff

Interrogatory STAFF-51:

ICM Accounting

Ref 1: Appendix B, p.52

Ref 2: EE_WRZ WSG_2023_ACM_ICM_Model_1.0_20220727

Ref 3: EE_WRZ WSG_2023_ACM_ICM_Model_1.0_20220727

Ref 4: EE_VRZ_2023_ACM_ICM_Model_1.0_20220727

Ref 5: Chapter 3 Filing Requirements for Electricity Distribution Rate Applications -2022

Edition for 2023 Rate Applications, May 24, 2022, Pages 29-30

Elexicon Energy indicated that the half-year rule is not applicable as neither the 2023 nor 2025 ICM requests coincide with the final year prior to rebasing.

The Accelerated Investment Incentive Program (AIIP) provides for a first-year increase in capital cost allowance (CCA). Under the AIIP, in 2023, accelerated CCA will be calculated by applying the CCA rate at 1.5 times for the additions in the year. From 2024 to 2027, accelerated CCA is being phased out, and accelerated CCA will be calculated by applying the CCA rate at one time for the additions in the year.

a) Please confirm that for the Sustainable Brooklin Project in 2023, accelerated CCA has not been reflected in the ICM PILs and that any accelerated CCA impacts will be reflected in Account 1592, Sub-account CCA Changes. If not confirmed, please explain.

b) Please confirm that for Whitby Smart Grid Project in 2025, no amounts are expected to be recorded in Account 1592, Sub-account CCA Changes as the calculation of CCA in the ICM PILs and actual CCA expected to be claimed are aligned. If not confirmed, please explain.

c) In the ICM models noted in references 2, 3 and 4, it appears that a CCA rate of 8% has been used for all asset classes, which appears to correspond to Class 47 for Distribution System assets.

i. If not confirmed, please provide a table showing the asset categories, asset classes and CCA rates.

ii. If confirmed, please explain why all assets use a CCA rate of 8%. Please also include an explanation on why the CCA classes 8, 12, 45, 46 have not been used for communication equipment, SCADA, computer software and computer equipment.

iii. Please revise the CCA amount with the appropriate CCA rates as necessary. Please provide a table showing the asset categories, asset classes, and CCA rates.

d) The Chapter 3 Filing Requirements indicate that the OEB may take accelerated CCA into consideration in assessing the impact of the proposed capital projects on the operations of the distributor in determining if ICM funding is warranted.

i. Please provide the calculation of the incremental revenue requirement if accelerated CCA is reflected for the Sustainable Brooklin Project ICM in 2023. Please also provide this calculation for the 2025 Whitby Smart Grid ICMs if accelerated CCA has not already been reflected in the ICM PILs.

ii. Please comment on whether the ICMs have a significant influence on the operation of the distributor and whether ICM funding is warranted after taking accelerated CCA into account for the ICMs.

<u>Response:</u>

Elexicon notes that the references below are duplicative

Ref 2: EE_WRZ WSG_2023_ACM_ICM_Model_1.0_20220727

Ref 3: EE_WRZ WSG_2023_ACM_ICM_Model_1.0_20220727

The file name in Ref 2: should be EE_WRZ_SB_2023_ACM_ICM_Model_1.0_20220727

a) and b)

Elexicon is submitting revised ICM models for Sustainable Brooklin and Whitby Smart Grid with the IR Responses to reflect changes to depreciation and CCA. See:

EE_WRZ_SB_2023_ACM_ICM_Model_1.0_20221018

EE_WRZ WSG_2023_ACM_ICM_Model_1.0_20221018

EE_VRZ_2023_ACM_ICM_Model_1.0_20221018

As per section 3.3.2.5 of the OEB's Chapter 3 Filing Requirements, the accelerated CCA has not been reflected in the ICM PILs of the revised models. Any accelerated CCA impacts will be reflected in Account 1592, Sub-account CCA Changes.

c)

i. Elexicon confirms that in the ICM models noted in references 2, 3 and 4 a CCA rate of 8% has been used for all asset classes, which corresponds to Class 47 for Distribution System assets.

ii. Elexicon appreciates the OEB's clarification. Elexicon has updated the CCA class for the assets. For Whtiby Smart Grid, Elexicon used CCA class 46 for the asset additions related to data network infrastructure equipment and systems software for the 2025 NRCan Smart Grid ICM and class 8 for SCADA. CCA classes were unchanged for Sustainable Brooklin.

iii. Please see the table below that summarizes the changes made to CCA classes

Table 1: Changes to CCA Classes

			Original		Revised	
VRZ - WSG						
Project Descriptions:		**Capital Project $**	**%**	**Class**	**%**	**Class**
WSG - SCADA	$	3,478,498	8%	47	20%	8
WSG - ADMS - Computer Software	$	1,572,007	8%	47	30%	46
WSG - ADMS - Computer Equipment	$	243,106	8%	47	30%	46
WSG - ADMS - Communications Equipment	$	1,137,957	8%	47	30%	46
	$	6,431,567				
WRZ - WSG						
Project Descriptions:		**Capital Project $**				**Class**
WSG - Wood Poles	$	6,630,000	8%	47	8%	47
WSG - OH Load Inter Switch	$	17,570,000	8%	47	8%	47
WSG - Tx Polemount	$	10,170,000	8%	47	8%	47
WSG - SCADA	$	1,281,502	8%	47	20%	8
WSG - ADMS - Computer Software	$	579,138	8%	47	30%	46
WSG - ADMS - Computer Equipment	$	89,562	8%	47	30%	46
WSG - ADMS - Communications Equipment	$	419,231	8%	47	30%	46
	$	36,739,433				

These changes have been included in the updated ICM models submitted with the IR Responses.

d)

i. In the table below Elexicon has provided the calculation of the incremental revenue requirement if accelerated CCA is reflected for the Sustainable Brooklin Project ICM in 2023 and the 2025 Whitby Smart Grid ICMs (column c)

Table 2: Incremental Revenue with accelerated CCA

	Project Costs	Revenue Requirement		
		Original Submission (a)	Revised Submission (b)	Accelerated CCA Scenario (c)
WRZ - SB	$ 26,657,000	$ 2,160,564	$ 2,545,005	$ 1,776,123
WRZ - WSG	$ 36,739,433	$ 4,120,100	$ 4,477,270	$ 3,876,554
VRZ - WSG	$ 6,431,567	$ 1,538,393	$ 1,161,935	$ 876,812

ii. The ICMs have a significant influence on the operation of the distributor and ICM funding is still warranted after taking accelerated CCA into account for the ICMs. The same reasoning applies as was laid out in Appendix B, 3.2 Need.