ONTARIO ENERGY BOARD

IN THE MATTER OF the Ontario Energy Board Act, 1998, S.O. 1998, c. 15, (Schedule B)(the "Act")

AND IN THE MATTER OF an Application by Elexicon Energy Inc. (Elexicon) for an Order or Orders approving or fixing just and reasonable rates and other service charges for the distribution of electricity as of January 1, 2023;

FINAL ARGUMENT
OF THE
SCHOOL ENERGY COALITION

May 4, 2023

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1 GENERAL COMMENTS

1.1 *Introduction*

1.1.1 On July 22, 2022 the Applicant Elexicon Energy Inc. ("Elexicon", or the "Applicant") filed an IRM Application seeking approval for rates effective January 1, 2023. The Application included Incremental Capital Module ("ICM") claims.

1.1.2 By Order dated November 1, 2022, the Ontario Energy Board ("OEB") split the ICM claims and related items from the rest of the Application. Phase 1 Rates for 2023 were approved by Order dated December 8, 2022. The ICM claims, and related requests for exemptions from the Distribution System Code ("DSC"), were allocated to Phase 2.

1.1.3 The Application seeks approval of two ICMs – the Sustainable Brooklin "extension cord" project, and the Whitby Smart Grid ("WSG"). The latter ICM includes a number of elements, one of which includes other parts of the Applicant's service territory.

1.1.4 The case included interrogatories and a three-day technical conference. There was no ADR. A two-day oral hearing was held on March 31 and April 3.

1.1.5 School Energy Coalition ("SEC") notes that the evidence provided by the Applicant included three witnesses that are not utility employees: Mr. Mandyam from Utilis Consulting on regulatory issues, and Mr. Thompson and Mr. Martin-Sturmey of Metsco, an engineering firm. None of the three were qualified as experts, and SEC has treated their evidence as limited to factual matters. Where any opinions were stated or implied, we have assumed that these are not qualified opinion evidence, and will not be treated as such by the Commissioners.

1.1.6 The Argument-in-Chief was filed by the Applicant on April 18, 2023. This is the Final Argument of the School Energy Coalition.

1.1.7 The Commissioners will be aware that the intervenors have worked together throughout the proceeding to avoid duplication, including sharing ideas, positions, and drafts. That has continued in the argument phase. We have been assisted in preparing this Final Argument by that co-operation amongst parties.

1.1.8 There is no issues list in this proceeding. On April 11, 2023 the Commissioners provided guidance to the parties on topics to be addressed in their submissions. SEC has generally organized this Final Argument to follow that guidance. In order to maintain the appropriate flow of analysis, in some cases we have dealt with related issues together.

1.1.9 Where SEC does not state its position, approval of the Applicant's position or any other position should not be assumed. Silence is just silence.

1.2 ***Context – The Energy Transition***

1.2.1 The WSG project is being proposed in the context of the Energy Transition, which is an important – and very much live – issue for the OEB.

1.2.2 ***The Energy Transition.*** SEC has consistently taken the position that the Energy Transition, including both the wind down of fossil fuel combustion, and the ramp up of electrification of many end uses, is inevitable, and it may well happen faster than stakeholders currently expect. Our position in this respect has not changed. The writing is not only on the wall. The most recent information suggests that forecasts of the trajectory of this change may have had insufficient urgency[1].

1.2.3 The issue of the Energy Transition may be most urgent with respect to those in the business of fossil fuel combustion, like Enbridge Gas Inc. A current proceeding (EB-2022-0200) is wrestling with that problem in some detail.

1.2.4 ***Changes to the Electricity System.*** If, as is likely, the pivot in the next decade or more is to electrification[2], this will affect the regulated electricity sector as well. It is not just a question of ensuring that there is enough capacity and energy to meet expanding energy needs. It also involves a likely rethinking of electricity transmission and distribution, including a substantial expansion of distributed energy resources ("DER"). The OEB has been on top of this issue as well, with initiatives including the Framework for Energy Innovation, the DER Connections Review, and others.

1.2.5 Thus, it is possible that the Energy Transition will necessitate substantial investments by electricity distributors to reconfigure their systems over the next couple of decades. At a recent conference, OEB CEO Susanna Zagar noted that OEB policy is supportive of rational investment by distributors to make their systems more able to handle increased electrification and DERs, and to improve their resilience in the face of natural events driven by climate change[3].

1.2.6 SEC agrees with those policy directions.

1.2.7 ***Prudent Capital Spending Requires Pacing.*** On the other hand, it is important not

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[1] Remarks of Secretary General Antonio Guterres, April 20, 2023.
[2] Whether electrification is the main longer term solution, or there is a role for hydrogen and other options, is an issue for another forum.
[3] Remarks of Susanna Zagar, 2023 IGUA Spring Seminar, The Role of Utilities and Regulators, May 3, 2023.

to lose sight of key regulatory principles that have guided the work of the OEB for many years. That is why the emphasis on "rational" investment is so important. Rational investment balances the need to improve systems with the impacts of the spending on customers and utilities. Rational investment embraces the principle that a good capital investment plan includes careful pacing of spending.

1.2.8 In the WSG proposal, the Applicant proposes to spend what for their customers is an exceptional amount of money, and do so all at once. The precedent is the PUC Smart Grid[4], a plan in which bundling a project together was necessary to secure substantial federal government funding.

1.2.9 The WSG proposal seeks to build on that, asking for a comprehensive approval where there is no external funding that would be lost if the project was properly paced. There is little doubt that, if the OEB approves such a proposal, applications from Toronto Hydro, Alectra, Hydro Ottawa and others will come pouring in, continuing the theme of a massive and immediate rebuilding of the electricity distribution grids in Ontario. If the $43 million cost in Whitby is reasonable, then $500 million for Toronto Hydro and $600 million for Alectra should similarly be approved, some might say.

1.2.10 The Energy Transition may well involve significant change in the regulated energy sector, and that may include investments for the future. While there will likely be reductions in spending on fossil fuel infrastructure, that money, and maybe more, must be invested by the customers on the electricity side. Managing that shift in priorities will be a key challenge for the OEB in the coming years.

1.2.11 An overriding issue for the OEB to address as these electricity reconfiguration proposals start to come in will be rate impacts and affordability. Yes, improvements will need to be made to electricity distribution systems. But spending cannot be allowed to increase to a point where customers cannot afford the core service of electricity supply.

1.2.12 SEC thus believes that a key part of the OEB's role is to enforce principles like pacing of capital spending, given its mandate to be the protector of customers with respect to costs and prices. Impacts on customers are in many ways affected as much by the timing of spending as by the overall amounts to be spent.

1.2.13 It is predictable that the OEB will see many applications of this sort in the next few years. This panel of Commissioners is in this Application being given the opportunity to send a message to the sector: in responding to the requirements of the Energy Transition, utilities must produce (and customers and the OEB are entitled to see) comprehensive, balanced infrastructure spending plans that respect

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

the need to keep rate increases manageable.

1.3 *Summary of Submissions*

1.3.1 The positions of SEC as set out in this Final Argument can be summarized as follows:

1.3.2 ***Connection Between the Projects.*** SEC notes that the two ICM projects are not directly related to each other. In particular, approval of the WSG, in whole or in part, does not depend on approval of Sustainable Brooklin.

1.3.3 ***Sustainable Brooklin.*** SEC takes no position on this project.

1.3.4 ***Availability of Quid Pro Quo***. The Applicant proposes that new connections downstream from the "extension cord", other than those for the Brooklin Landowners Group Inc. ("BLGI") members and certain of their peers, will be assessed capital contributions related to the cost of that project.

1.3.5 SEC proposes, instead, that in the event that the OEB approves the Sustainable Brooklin project, or some variation on it, all new customers connecting downstream of that line should be granted similar incentives/subsidies for comparable upgrades to their new buildings, including solar, electric vehicle chargers ("EV"), storage, and any other such improvements beyond applicable codes. These incentives should be used, as with the Sustainable Brooklin proposal, to offset their capital contributions dollar for dollar.

1.3.6 ***Whitby Smart Grid.*** SEC agrees in principle with upgrading distribution infrastructure to be ready for a DER future. However, the principle of capital pacing should still apply.

1.3.7 SEC therefore proposes that the Advanced Distribution Management System ("ADMS") component of the WSG, net of the NRCan contribution, should be approved by the OEB, and an ICM rate rider for the VRZ authorized. The ADMS alone does not qualify in the WRZ.

1.3.8 However, the larger component of the project, the field devices, should not be approved at this time. The Applicant should, at a later date, set out a plan for rollout of those additional capital costs over a period of years, both to limit the rate impact, and to benefit from learnings from the PUC Smart Grid project.

1.3.9 In addition, the 2026 Distribution System Plan of the Applicant should include re-prioritization of spending, to ensure that, to the maximum extent possible, the planned spending on field devices is managed within the normal annual capital spending envelope.

2 GENERAL ISSUES

2.1 *Introduction*

2.1.1 Two issues have been raised related to these projects that are not internal to the individual projects:

(a) Are the two projects a package deal?

(b) Is the customer engagement, focused on outdated surveys and elected officials, appropriate?

2.2 *Are the ICM Projects Connected or Mutually Exclusive?*

2.2.1 ***Elexicon Position.*** The Applicant takes the position in some places that the Sustainable Brooklin proposal is a kind of related add-on to the WSG project.[5] However, when asked about it directly, Elexicon admitted clearly that, if the Sustainable Brooklin proposal is not approved, they still intend to proceed with WSG[6].

2.2.2 ***SEC Position***. It appears to us that, from the Commissioners' point of view, these two projects can be treated as two unrelated requests for approval. Even if Sustainable Brooklin is not approved, the costs and benefits of WSG are exactly the same as proposed, and the timelines are unchanged.

2.2.3 Put another way, if WSG were to be presented to the OEB in a standalone ICM application, neither the evidence nor the arguments related to that project would be different[7]. SEC's submissions on WSG have been prepared on that basis, i.e. without consideration of the Brooklin line and whether it will or should be approved.

2.3 *Customer Engagement*

2.3.1 Elexicon has submitted that its customer engagement for the ICM projects has been appropriate and indicates customer support.[8] SEC disagrees.

2.3.2 ***Survey Results.*** In connection with its 2022 IRM rate application, Elexicon filed a

[5] See Appendix B to the Application.
[6] Argument in Chief ("AiC"), Section 15.
[7] SEC cannot comment on whether Sustainable Brooklin stands alone in the same way, as we are not making submissions on that proposal.
[8] AiC, Sections 18 & 24

Customer Engagement Report on April 28, 2021.[9] Elexicon has relied on this engagement effort to identify customer needs and preferences and thus to inform the development of the ICM Projects in this Application**.**

2.3.3 The customer surveys were done in Q4 of 2020 as an input to preparing Elexicon's 2022-2026 Distribution System Plan ("DSP").[10] Elexicon claims that this customer engagement supports the ICM projects because the top two customer choices are 'improving the grid's resilience to major weather events' and 'preparing the grid for new types of uses, like electric vehicles and renewable generation'[11], both of which would be addressed by the WSG project.

2.3.4 SEC does not believe that the OEB should place any significant weight on these results, as the responses were obtained in the context of a total lack of bill impact information related to the WSG.

2.3.5 In fact, survey results indicate that 28% of customers agreed that the cost of their bill creates some form of hardship[12], and only 12% of respondents agreed with the statement 'Elexicon should invest more to improve reliability, and I would accept a larger increase to my monthly bill in the long term to achieve this.'[13]

2.3.6 Clearly, while Elexicon's customers would like to see reliability improved and the modernization of the grid, they have not had an opportunity to comment specifically on the proposed costs and bill impacts related to Elexicon's proposed ICMs, and they absolutely do not want large increases in their bills to achieve those goals.

2.3.7 ***Shareholder Approval.*** Part of Elexicon's claimed customer engagement involved a presentation[14] to the Whitby town council[15] and Elexicon puts great stock in the fact that the council unanimously approved both ICM projects.[16]

2.3.8 The argument that shareholder approval is customer engagement is, in our experience, a unique one. While it is true that the town council is elected by the residents of Whitby (a subset of the customers of Elexicon in Whitby), town council is also a shareholder of Elexicon, and the Town has a financial interest in investment decisions by the utility. There is no evidence before the OEB to indicate whether the town council approval was based on their perception of

[9] EB-2021-0015, Appendix B
[10] Appendix B-7, p.4
[11] Appendix B, p. 28
[12] *ibid*, p. 7
[13] *ibid*, p. 9
[14] SEC-11, October 18, 2022, Attachment 1
[15] Which Elexicon claim are the customers' representatives: Oral Hearing Transcript Vol. 1, p. 121, lines 17-19
[16] Oral Hearing Transcript Vol. 1, p. 113, line 16

constituents' concerns, or on the financial benefits to the Town of increasing rate base and utility revenue.

2.3.9 SEC believes that town council approval is not sufficient stakeholder engagement, and is not consistent with the OEB's expectations for regulated utilities to engage directly with their customers.

2.3.10 In addition, the total bill impact information provided in the presentation, was as follows for a typical residential customer:

- Sustainable Brooklin + Whitby Smart Grid ~ $5.19 / month
- Whitby Smart Grid (Full scope) ~ $2.59 / month

2.3.11 These impacts were net of benefits to be recovered from Whitby ratepayers, i.e. it was assumed that Elexicon's projection of a 3% reduction in voltage for all customers and improved reliability would fully materialize. Whitby town council was given no indication of how distribution rates would actually increase, nor any sensitivity analysis for scenarios where the benefits did not fully materialize.

2.3.12 SEC notes that these bill impacts are significantly different from those provided in Elexicon's response to JT2.6, which show notional total bill impacts of $15.11/month in 2023 due to Sustainable Brooklin and the Z factor claim and $12.22/month in 2025 for the WSG with the energy savings.

2.3.13 At no time were these much higher bill impacts disclosed to Whitby town council.

2.3.14 Consequently, SEC does not believe the OEB should give any weight to this 'unanimous support'.

3 THE SUSTAINABLE BROOKLIN PROJECT

3.1 *Introduction*

3.1.1 SEC did not intervene in this matter with respect to the Sustainable Brooklin Project, and will have no submissions on the Sustainable Brooklin proposal for which the OEB's approval is sought.

3.1.2 The Sustainable Brooklin Project may have implications for other customers that are not covered by the special treatment proposed in that project. The submissions of SEC, below, are limited to the situation in which:

(a) The OEB proposes to approve the Sustainable Brooklin Project, whether as proposed or in an alternative structure (on which SEC takes no position), and

(b) The Applicant continues to take the position that any subsidy by the ratepayers of the "extension cord" component should not be made available to reduce or eliminate the capital contributions of other customers connecting to the "extension cord" downstream of that project, regardless of the attributes of the buildings they are connecting.

3.1.3 Nothing in the submissions below should be interpreted as directly or indirectly supporting or opposing the Sustainable Brooklin ICM proposal, or any part of it.

3.2 *Exemptions from the Distribution System Code*

3.2.1 SEC takes no position on this issue for the Sustainable Brooklin Project, as proposed by the Applicant.

3.2.2 However, as it became apparent over the course of the proceeding, the proposal to reduce the obligation to make capital contributions as a *quid pro quo* for building DER-ready structures excludes customers connecting to the "extension cord" that are not either the developers, or persons in a similar position. Schools are a prime example of this.

3.2.3 SEC submits that this is not a fair approach, and is not consistent with good ratemaking.

3.2.4 ***The Proposal.*** The Sustainable Brooklin ICM has three key components:

(a) ***BLGI Landowners – Exempt.*** A developer or builder who spends incremental funds to build a home that is EV and solar ready – estimated to be $2,260 by

the Applicant[17] – will under the current proposal get a dollar for dollar credit against the cost of the expansion into the area[18]. Structurally, this amounts to a kind of grant or subsidy by the utility to the developer, which is then used to pay a portion of the expansion deposit. The evidence of the Applicant is that this *quid pro quo* with the BLGI landowners includes a commitment to continue building to this level for the full twenty years of planned new housing[19]. The number of homes these landowners are planning to build means, they say, that the incremental EV and solar ready costs will be sufficient to cover the full cost of the "extension cord"[20].

(b) ***Other Residential – Credit for Improvements.*** Other developers or builders of residential buildings who wish to connect downstream from the "extension cord" will be required to either meet the EV and solar ready requirement, or pay a $2,260 pro rata contribution to defray their share of the costs of the new line[21]. It is not clear to us based on our review of the record whether this continues for twenty years, or only for the first five, as set out under the DSC. On the one hand, the stated intention is to put those non BLGI landowners in the same position as the BLGI landowners, who have made a twenty year commitment. On the other hand, it does not appear that an order from the OEB requiring contributions beyond five years has been sought. From SEC's point of view, this is relevant because of (c) below.

(c) ***C&I Customers – No Credit for Improvements.*** Commercial, industrial and institutional customers who wish to connect downstream from the "extension cord" will be required to make a capital contribution for that line, calculated as if the *quid pro quo* proposal did not exist[22]. No amount of DER enabling investments in their new buildings will be available to commercial, industrial, or institutional customers to offset the capital contribution. The capital contribution will be in addition to any such costs incurred. Again, it is not clear from the Applicant's evidence whether this requirement is intended to continue only for the five year connection period in the DSC[23], or all the way through to the end of the twenty year period for which the BLGI landowners are giving a commitment, and getting a credit.

3.2.5 This proposal is particularly prejudicial to schools, since the 15-20 schools currently planned for the affected lands will almost certainly include not just rough-

[17] Appendix B, p. 8, lines 10-19
[18] Oral Hearing Transcript Vol. 1, p. 126, lines 16-21
[19] Technical Conference Transcript, Vol. 2, p.23, lines 20-28
[20] Total investment by landowners of between $23 and $30 million: Oral Hearing Transcript Vol. 1, p.21, line 7 and total cost of extension line $26.6 million: Oral Hearing Transcript Vol. 1, p. 41, line 6
[21] Oral Hearing Transcript Vol. 1, p. 128, lines 2-5
[22] Undertaking JT2.4, January 24, 2023
[23] Oral Hearing Transcript Vol. 1, p. 128, lines 13-15

ins, but banks of EV chargers in their parking lots, and for many of them actual solar panels on the roofs. Some of the EV chargers may be bidirectional and even dispatchable. In addition, those schools will have much higher levels of insulation, more energy efficient windows, and many other features that would be far beyond the requirements of any building code. The incremental cost of these beneficial improvements will in virtually every case be higher than the capital contribution. Yet the capital contribution – probably $200/300,000 per school[24] - will have to be paid on top of the cost of those improvements, and on top of the cost of the "extension cord" built into their rates (and the rates of existing schools in Whitby[25]).

3.2.6 For the new schools serving this growing community, which will be among the most energy efficient and DER-positive buildings in Brooklin, their total share of the cost of the Brooklin Line could easily exceed $2-3 million.

3.2.7 This is not fair.

3.2.8 No reason has been given by the Applicant, or any other witness, for one group of customers to get a subsidy for their DER-related spending, while another group of customers is offered no subsidy for similar, arguably more beneficial spending.

3.2.9 ***Potential Solution.*** SEC notes that this is not inherently a problem with the Sustainable Brooklin proposal itself. The essence of the Sustainable Brooklin proposal is that certain customers would, under the DSC, normally have to pay a capital contribution for the cost of an expansion into their area. The Applicant is proposing to subsidize 100% of the cost of certain improvements to their new buildings. In effect, a $2,260 per home capital contribution is being traded for an incentive cheque covering $2,260 of incremental spending on each new residential unit.

3.2.10 SEC is not raising any objection to this proposal, up to that point. Some parties may argue about how it is being structured, and the level of subsidy, and other things like that, but SEC is not commenting in any way on those things.

3.2.11 SEC's concern is that schools, and other non-residential customers, are ineligible for the same subsidy, even though they expect to do the same things that would warrant it (and more).

3.2.12 SEC believes that looking at this as an incentive program for construction of new buildings in a manner that is beneficial to the public interest (and the local distribution system) provides a solution to the unfairness. The unfairness can be

[24] Undertaking JT1.12, January 24, 2023
[25] *ibid*

removed by granting similar incentive eligibility to all customers connecting downstream from the new line. No change to the current proposal is required. Fairness simply requires that other customers be offered a similar *quid pro quo*.

3.2.13 This additional incentive eligibility does not need to be a complicated exercise:

(a) ***Customer Claim.*** A customer connecting downstream of this line would be able to declare to the Applicant the incremental cost of a list of improvements that are comparable to the EV and solar rough-ins. For example, that should include similar rough-ins, but also the actual cost of EV chargers and solar panels installed. It should also probably include several other items that are more likely to be seen in a commercial, industrial or institutional situation:

(i) geothermal heating or cold climate air source heat pumps,

(ii) energy storage systems,

(iii) high levels of insulation,

(iv) high efficiency windows,

(v) energy monitoring systems,

(vi) etc.

This does not need to require onerous paperwork, either for the customer or the Applicant. Just as the BLGI landowners do not need to provide evidence of spending, so too other eligible customers would simply declare the incremental cost they incurred, and the items on which it was spent.

(b) ***Calculation of Contribution***. The capital contribution would be calculated in the normal way. Then, at the end of the calculation, the incremental cost for improvements (the amount reported by the customer) would be deducted from the capital contribution to get the net amount. The reduction would, as with the Sustainable Brooklin proposal, be dollar for dollar, but the credit would be available only up to the total amount of the capital contribution otherwise calculated, just as is currently proposed for Sustainable Brooklin.

3.2.14 The interesting effect of this grant of similar eligibility is that the system benefits that Elexicon hopes will be achieved in Whitby through this project would be significantly greater as a result. Schools and commercial customers are not likely to build with EV and solar rough-ins unless they are actually going to install the end-uses that are being roughed in. Therefore, the Applicant doesn't have to just hope that building owners with rough-ins will "take the next step" and install EV or solar, as would be the case with residential homebuyers. In the case of commercial, industrial and institutional customers the end uses that actually produce the system benefits will in fact be installed in virtually every case.

3.2.15 SEC therefore submits that, if the OEB decides to approve the Sustainable Brooklin ICM proposal, in whole or in part, similar incentive eligibility should be granted to all new customers that incur incremental spending for comparable potential system benefits.

3.3 ***Timeline for Approval***

3.3.1 SEC takes no position on this issue for the Sustainable Brooklin Project.

3.4 ***ICM Criteria***

3.4.1 SEC takes no position on this issue for the Sustainable Brooklin Project.

3.5 ***Cost Allocation***

3.5.1 SEC takes no position on this issue for the Sustainable Brooklin Project.

3.6 ***Conditions of Approval***

3.6.1 Subject to our comments under para. 3.2.2 et seq, above, SEC takes no position on this issue for the Sustainable Brooklin Project.

3.7 ***Future Reporting and Metrics***

3.7.1 Subject to our comments under para. 3.2.2 et seq, above, SEC takes no position on this issue for the Sustainable Brooklin Project.

4 WHITBY SMART GRID

4.1 *Introduction and Background*

4.1.1 The WSG project includes an ADMS, plus devices to be installed in the field: voltage-VAR optimization technology ("VVO") and fault location isolation and service restoration ("FLISR"). The ADMS covers both the Whitby and Veridian service areas, whereas the field devices are to be installed only in the Whitby service area. The WSG is scheduled to be fully in-service by the end of 2025.

4.1.2 An ADMS will provide qualitative benefits such as leveraging the existing metering, infrastructure technology, other system software, and communication systems to regulate voltage more effectively, mitigate outages, and reduce restoration time.[26] It also includes the central software needed to benefit from the VVO and FLISR field devices.

4.1.3 The VVO devices will allow Elexicon to control the voltage on its distribution lines, reducing the amount of power a customer uses and therefore their energy bill. Elexicon has claimed that it will be able to reduce the voltage by 3% for <u>all</u> customers, resulting in a total annual cost of power savings by customers of \$3.4M.[27]

4.1.4 The FLISR devices allow for the rapid isolation of faulted sections, and restoration of non-faulted sections, improving reliability statistics by converting sustained outages to momentary outages. The annual savings from the improvements in reliability are calculated to be \$1.8M.[28] While the number of outages is not reduced, customers benefit from the duration of the outages being considerably shorter[29].

4.1.5 Elexicon has requested approval of \$43.171M for the WSG, allocated between the Whitby Rate Zone (WRZ) and the Veridian Rate Zone (VRZ) as follows:

$M	Total	WRZ	VRZ	NRCan
ADMS	12.842	2.369	6.432	4.041
Rest of WSG	34.370	34.370	0	0
Total	47.212	36.739	6.432	4.041

Elexicon has secured \$4.041M in funding from NRCan, representing 50 per cent of

[26] Staff-10, October 18, 2022
[27] Undertaking J2.8, April 12, 2023
[28] Undertaking J2.7, April 12, 2023
[29] Technical Conference Transcript Vol. 2, p. 92, lines 1-3

the cost of the ADMS, contingent on the ADMS being in service by June 30, 2024.[30] The ADMS is well under way, and will meet that deadline.

4.1.6 Elexicon has modelled its WSG project on PUC Distribution Inc.'s (PUC) OEB approved Smart Grid project, which was done as one large ICM project.[31] However, there are a number of notable differences between the two projects.

4.1.7 PUC's NRCan funding was for 25% of the whole project, so the federal funding would be lost unless the entire project was completed; unlike Elexicon, which has NRCan funding for only the ADMS portion.

4.1.8 In addition the majority of the work was to be done as an engineering, procurement, and construction ("EPC") contract, and therefore capped at a maximum amount.[32] Elexicon's proposed project is not an EPC contract with a cap. In fact, Elexicon's projected cost is a Class 4 estimate with an accuracy range of -30% to +50%.[33]

4.1.9 These differences make comparisons to PUC's ICM less useful than Elexicon would suggest.

4.1.10 Elexicon has primarily justified this project by pointing to the 'substantial net benefit' of $39.785M over the life of the assets.[34] Although Elexicon stated that it 'did not perform any sensitivity analysis with respect to customer benefit'[35], when asked by the Commissioners, it did determine the cost of power required to reduce the net benefits of the WSG to zero.[36]

4.1.11 What Elexicon did not provide was a sensitivity analysis if the benefits do not materialize as forecasted. What if the voltage reduction is not 3% for <u>all</u> customers, or the 3% reduction does not always occur consistently when the customers are consuming power, or the reliability savings are less than forecast? This information should have been provided to help the Commissioners reviewing Elexicon's proposal.

4.1.12 SEC is generally supportive of Elexicon's vision of enabling a grid of the future in its service territories. However, there are concerns with Elexicon's decision to do the proposed work as one large project over a compressed period of time, instead of pacing the spending over a period of time, as is the normal practice.

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[30] Oral Hearing Transcript, Vol. 1, p. 169, line 1
[31] EB-2020-0249, Decision and Order, April 29, 2021
[32] EB-2020-0249/EB-2018-0219, Decision and Order, April 29, 2021, p. 5
[33] Undertaking J2.8, April 12, 2023
[34] AiC, Section 6, Figure 1
[35] VECC-02c, October 18, 2022
[36] Undertaking J2.7, April 12, 2023

4.1.13 SEC believes that, once the ADMS is completed, the installation of the field devices can be done as part of Elexicon's regular capital program. Further details of this proposal are provided in Section 4.8 below.

4.2 ***Timeline for Approval – the Leave to Construct Model***

4.2.1 Elexicon has stated that the WSG will be in service by the end of 2025, and therefore is requesting that the ICM rider start in that year. Normally, a distributor would request approval of an ICM one year in advance of the project going into service, e.g., apply in 2023 for a 2024 in-service project or apply in 2024 for a 2025 in-service project.

4.2.2 Elexicon claims that it is necessary to apply early for a 2025 ICM because of '[t]he need for certainty of cost recovery regarding the WSG prior to significant investments being made.'[37] Elexicon also notes that the OEB approved similar ICM rate riders in advance for PUC's Smart Grid project.[38]

4.2.3 The only OEB procedural path that utilities have for receiving advance pre-approval of a large project outside of a cost-of-service application is the Leave to Construct process. This project clearly does not qualify for a Leave to Construct application.

4.2.4 Other parties in this proceeding have explored the idea that this ICM project was more akin to an Advanced Capital Module ("ACM"), because the in-service date is in 2025.[39]

4.2.5 SEC does not agree that the request for the WSG should be treated as an ACM, as ACM should only be approved as part of a cost-of-service application, which provides a detailed DSP outlining exactly how the ACM project fits with other planned capital expenditures over the five-year term of the application.

4.2.6 SEC is hesitant to support an early request for a 2025 ICM rate rider, as the details of the project, especially the final cost, are not available. In addition, early approval might encourage other distributors to follow suit. The PUC example cited by Elexicon is different from this project in that a significant federal government contribution required that the entire project be approved in advance. As the OEB noted in its Decision on PUC's Smart Grid ICM, 'Delaying the Project or executing it in phases would forgo the NRCan Contribution…'[40]

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[37] Appendix B, p.51
[38] *ibid*, p. 52
[39] In JT1.17 OEB Staff asked Elexicon to run the models as ACM models,
[40] EB-2020-0249/EB-2018-0219, Decision and Order, April 29, 2021, p. 11

4.2.7 SEC's proposal, below, would avoid this pre-approval problem through more appropriate pacing. If the OEB accepts the SEC approach, then the issue of whether an ICM for 2025 should be granted in 2023 does not need to be determined in this case.

4.2.8 In the alternative, if the OEB determines that it does wish to approve the full WSG project, SEC submits that it is important that the OEB set out the reasons why an exception to the normal rules is applicable in this case. That may include the magnitude of the cost of the entire WSG project compared to Elexicon's typical capital spend, and it may include the long lead times currently facing utilities for delivery of some materials.

4.2.9 Given that SEC's proposal does not raise this pre-approval issue, SEC takes no position on which factors should be necessary for an exception to the normal rules to be approved.

4.3 Timeline for Approval – Interim/Illustrative Rate Riders

4.3.1 Elexicon has requested that the January 1st, 2025 ICM riders for the WSG project be approved on an interim basis, and only updated as part of its 2025 rate application for the inflation factor, approved 2024 Rates, and 2023 billing determinants.[41] Any true up for costs would be done at the conclusion of the project.

4.3.2 As noted above, the cost forecast Elexicon has provided is Class 4, meaning that there is a -30%/+50% variance.[42] The OEB has stated that when a utility comes in with its cost-of-service application after it has completed an ICM, if there is a <u>material</u> difference between actual and forecasted costs and/or timing it may deny recovery.[43]

4.3.3 Should the OEB approve Elexicon's WSG as proposed, SEC believes that the OEB should consider the variance parameters of a Class 4 estimate to be material and therefore, before approving the 2025 riders, should require Elexicon to update its cost forecast and timing. Further, since it is Elexicon that is seeking early approval without reliable cost estimates, SEC believes that it should also take the risk of costs being materially higher. SEC therefore submits that any adjustment to the ICM rate riders should be asymmetrical, i.e. higher costs should not increase the rate riders, but lower costs should reduce the rate riders.

[41] Undertaking JT2.2
[42] Undertaking J2.8, April 12, 2023
[43] EB-2014-0219 Report of the OEB - New Policy Options for the Funding of Capital Investments: Supplemental Report, Appendix A

4.4 *ICM Criteria - Materiality*

4.4.1 In order to qualify for ICM funding, a distributor must satisfy the eligibility criteria of materiality, need and prudence.[44]

4.4.2 Elexicon has calculated the Materiality Thresholds for the WRZ at $11.6M and for the VRZ at $24.4M. Based on planned capital budgets in 2025 for these two rate zones, the available incremental capital is $63.8M and $16.2M, respectively.[45] The proposed WSG ICM budgets for Whitby and Veridian would therefore fit within the available capital[46].

4.4.3 In its response to J2.5, Elexicon indicated that the ADMS capital, by itself, does not exceed the materiality threshold for the WRZ, and therefore there would be no eligible ICM funding. Elexicon has refiled the ICM model for VRZ for only the ADMS coming into service in 2024, indicating a materiality threshold of $26,145k and maximum eligible incremental capital of $7,708k. This would indicate that the ADMS project costs of $6,432k would be eligible for ICM funding[47].

4.4.4 The OEB also has a project-specific materiality test, which states that minor expenditures in comparison to the overall capital budget should be considered ineligible for ICM treatment. Moreover, a certain degree of project expenditure over and above the OEB-defined threshold calculation is expected to be absorbed within the total capital budget.[48] The WSG project, as proposed by Elexicon, in comparison to its typical annual capital program of approximately $40M over the last two years[49], is not a minor expenditure and therefore would meet the project-specific materiality test.

4.4.5 SEC takes no issue with the calculated materiality threshold for the WRZ and the VRZ and the resulting maximum eligible incremental capital amount, and agrees that the WSG project meets the materiality criteria.

4.4.6 Under SEC's alternative proposal, the ADMS portion of the WSG, $6.4M compared to Veridian's typical capital program over the last two years of $29M[50] would also not be considered minor and therefore would meet the materiality criteria.

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[44] New Policy Options for the Funding of Capital Investments: The ACM Report, p.13
[45] AiC, Section 56, Figure 1
[46] Given the positions SEC is taking in this Final Argument on approvals, SEC takes no position on whether the underlying capital budgets used to calculate the materiality thresholds are appropriate.
[47] Note that the Model which was filed as part of J2.5 shows the Proposed ICM costs for the VRZ as $2,953k, which is actually the NRCan contribution as shown on the Attachment to J1.1.
[48] The ACM Report. p. 17
[49] Undertaking J1.1
[50] *ibid*

4.5 *ICM Criteria – Need*

4.5.1 In order to qualify for ICM funding a distributor must pass a Means Test, which states that if a distributor's most recent ROE exceeds 300 basis points above the deemed ROE embedded in the distributor's rates, then funding would not be allowed. Elexicon's 2021 ROE was 6.87% and for 2022 is 4.86%[51], both below its deemed ROE of 9.43%.[52] As noted in its Argument in Chief (AiC) Section 73, Elexicon's forecasted ROE for 2023-2025 is not expected to exceed 300 basis points over the 2023 deemed ROE.

4.5.2 SEC accepts that Elexicon meets the Means Test.

4.5.3 SEC also accepts that the WSG could be considered a discrete project and outside current rate base funding.

4.6 *ICM Criteria – Prudence and Rate Impacts*

4.6.1 For the OEB to approve an ICM, the amounts to be incurred must be prudent, meaning that the distributor's decision to incur the amounts must represent the most cost-effective option (not necessarily least initial cost) for ratepayers.[53]

4.6.2 ***Options Analysis.*** Elexicon did look at two other options: Option B and C as described in the AiC[54];

- ***(a)*** pursue, develop and deploy the WSG project by 2028 using the existing capital envelope or

- ***(b)*** do not do the project at all.

4.6.3 However, SEC believes that Elexicon's analysis of Option B was flawed in at least the following ways:

[51] Updated Undertaking JT2.5(a), May 3, 2023
[52] Appendix B, p. 37
[53] Filing Requirements for Electricity Distribution Rate Applications - 2022 Edition for 2023 Rate Applications - Chapter 3 Incentive Rate-Setting Applications, May 24, 2022, p. 26
[54] AiC, Section 82

(a) It assumed that NRCan funding would be forfeited. As SEC has pointed out in Section 4.8.2 below, it does not appear that NRCan funding would be at risk if Elexicon were to proceed initially with the ADMS, and then deploy the field units over time.

(b) Elexicon has assumed that it is critical that the whole of the WRZ be equipped with VVO and FLISR in the quickest time possible, so that all customers will start to see the benefits. This is inconsistent with standard capital planning by distributors. When Elexicon makes any other investment in its system to improve its reliability, e.g., replaces aging equipment or installs a second line, the benefits do not accrue to all of the customers in the service area. No, these improvements are targeted at areas which need improvement, but all customers bear the cost. The theory is that, over time, every customer will benefit from the improvements that are best suited to their part of the system.

(c) Elexicon has made the assumption that it needs to begin integrating, accommodating and managing high-levels of DER penetration in 2026-2030.[55] However, Elexicon has provided no evidence to support the notion that there will be high levels of DER penetration by 2026. In fact, its DER enabling program is in the early planning stages[56] and it has not done any studies on DER penetration in any part of its franchise area.[57]

4.6.4 ***Rate Impacts.*** Another consideration as to whether a project is prudent for a distributor's customers is to examine the rate impacts. In presenting the rate impacts for the WSG project, Elexicon has always been careful to include the off-setting theoretical value of the benefits to its customers, as if the hard cost of the investment and the hoped-for benefits it will provide are somehow equivalent. However, what the customer will actually see in terms of monthly bill impacts is significantly different.

4.6.5 As SEC pointed out in the oral hearing, the distribution portion of a residential customer's bill will increase by 31.63%, in addition to other increases such as IRM inflation adjustments and the DER enabling program.[58] For the schools in Whitby, which SEC represents, the increase for both ICMs is 26% in 2025.[59]

4.6.6 As SEC indicated in section 2.3 on Customer Engagement, at no time were customers asked their opinion of such large increases, and what information is there in the surveys suggests that they are very resistant to large rate hikes.

[55] AiC, Section 69
[56] Oral Hearing Transcripts Vol.1, p. 180, line 11
[57] Oral Hearing Transcripts Vol. 1, p. 153, lines 6-9
[58] Oral Hearing Transcripts Vol. 1, p. 179, line 4 to p. 180, line 22
[59] *ibid*, p. 183

4.6.7 SEC accepts that there will most likely be off-setting benefits as a result of the WSG, but they may not be sufficient to make this level of rate impacts bearable, particularly where the rate impact is being loaded on the customers in one big dump.

4.6.8 Elexicon has failed to investigate this aspect of prudence.

4.7 ***Cost Allocation***

4.7.1 Elexicon has stated that it has allocated the cost of the WSG using the OEB's cost allocation methodology.[60] SEC notes that Elexicon is unable to provide an allocation of the benefits of the WSG.[61] In producing the WSG Project NPV benefit summary[62], benefits are assumed to flow equally to all customers and customer classes. This is unlikely to be the case in fact.

4.7.2 Should the OEB approve the WSG project as proposed and require Elexicon to report on the actual benefits by class, then there would be sufficient data to determine whether the cost allocation methodology is correct. Until that information is available, SEC believes that it is premature to finalize the cost allocation for this project. The allocation for ICM rate rider purposes should be expressly determined to be subject to correction.

4.8 ***Alternative Proposal***

4.8.1 Elexicon has stated that it is not possible to bifurcate the ADMS portion of the WSG from the installation of the related field devices (VVO and FLISR) for various reasons: doing so would put NRCan funding at risk[63] and it would not address the issues Elexicon has with respect to the long lead time required for material orders and the need for certainty.[64]

4.8.2 However, in its response to Staff-9, when asked 'Please explain if the NRCan funding would be withdrawn if Elexicon Energy only completes the ADMS portion ($8.08 million) of the Whitby Smart Grid project', Elexicon replied 'No, the funding will not be removed as long as the items in 'Schedule A' of the abovementioned document are met.' There is no reference to VVO nor FLISR in Schedule A.

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[60] AiC, Section 94
[61] Oral Hearing Transcripts Vol. 2, p. 33, line 15
[62] AiC, Section 6, Figure 1
[63] Oral Hearing Transcripts Vol. 2, p. 128, line 4
[64] Appendix B, Section 6.1

4.8.3 The components which in Elexicon's proposal make up the WSG, namely the ADMS, VVO and FLISR, are not new technology, nor are they unique to Elexicon.[65] In fact, numerous distributors have installed these components with the goal of improving management of their distribution grid, as part of their regular capital spending.[66] Although Elexicon did briefly explore this option as Option 2[67] (or B in the AiC), they did so under the arbitrary constraint that the work had to be complete by the end of 2028.

4.8.4 Instead, Elexicon could integrate the installation of VVO and FLISR into its regular capital spending by reallocating funds from programs that have some duplication, e.g., pole replacement, and by addressing more problematic areas first. It could also integrate this substantial spending into a DSP at the time of its next rebasing, or even earlier, as its next DSP is due in 2026.

4.8.5 Elexicon states that there is a need to have the WSG fully in-service by the end of 2025 in order to be ready to begin integrating, accommodating and managing high - levels of DER. However, there is no evidence that there is going to be high penetration of DER throughout the whole Whitby service territory. SEC proposes that Elexicon could start with the Sustainable Brooklin area for installation of the field devices, since it is all new build anyway, and for existing system put FLISRs on the feeders that have the poorest reliability.

4.8.6 ***SEC Recommendation.*** SEC therefore proposes that the OEB should approve Elexicon's plan to install the WSG under the following parameters:

- Elexicon would continue the work that has already been started on the ADMS[68], with a target completion of June 30th, 2024 for both the WRZ and the VRZ. It would be treated as a separate project.

- This stand alone ADMS project would be eligible for a 2024 ICM in the VRZ, but would not meet the materiality threshold for the WRZ.

- Elexicon is already required to file its next DSP in 2026, and would in that DSP incorporate the phasing in of the remaining components of the WSG, including adjusting spending in other areas, and integrating the field devices into other projects where feasible. If possible, this should be done without requiring any incremental capital funding, but if Elexicon determines that further funding is needed at that time, an ICM application for that purpose would be decided by the OEB on its own merits.

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[65] Oral Hearing Transcripts Vol. 1, p. 142
[66] Undertaking JT2.3
[67] Appendix B, p. 39
[68] Oral Hearing Transcripts, Vol. 1, p. 134, line 14

4.9 *Conditions of Approval*

4.9.1 Should the OEB approve the WSG ICM project as proposed, or with variations, SEC recommends that the following conditions of approval be imposed by the OEB, in order to ensure that customers actually see the benefits promised by Elexicon in this Application, and are not unduly harmed by the large increases in rates.

4.9.2 Elexicon has stated that it has not updated its DSP as a result of the significant spending proposed for the WSG.[69] Elexicon is due to prepare and submit to the OEB a DSP for the period 2027-2031.[70] SEC believes that the OEB should require Elexicon to demonstrate how the WSG project is being accommodated through the re-prioritization of other capital expenditures when it files is next DSP in 2026.

4.9.3 In the event that the OEB accepts the SEC approach outlined above, Elexicon should be required to update the 2024 ICM rate riders in their 2025 rate application to reflect the actual cost of the ADMS project.

4.10 *Future Reporting and Metrics*

4.10.1 When asked whether it could provide a detailed report on whether the forecasted benefits have materialized, Elexicon stated that 'you can come up with an estimated improvement in reliability… [but] on the VVO side there's also no way to measure the energy savings.'[71] SEC believes this is unacceptable. Elexicon is asking for the Commissioners to approve significant capital expenditure and rate increases without any promise of attempting, or even being able, to report on the results.

4.10.2 The OEB should require Elexicon to, within one year of the OEB's Decision, file the proposed WSG project performance metrics it intends to track. Then Elexicon should provide a detailed report which compares the WSG project costs and benefits, broken down by customer, as implemented compared to what was forecast in this Application. This report should be filed on an annual basis starting for the year 2026.

4.10.3 The OEB ordered a similar requirement when it approved PUC's Smart Grid ICM.[72] SEC notes that in PUC's approved settlement proposal for its 2023 rates, PUC agreed to engage an independent third-party to undertake a review of the

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[69] Oral Hearing Transcripts, Vol. 1,, p, 141, line 23
[70] *ibid*, p. 152, line 24
[71] *ibid*, p. 198, line 27 – p. 199, line 3
[72] EB-2020-0249/EB-2018-0219, Decision and Order, April 29, 2021, p. 24

VVO savings.[73] SEC proposes that the OEB should order a similar requirement for Elexicon.

4.11 ***Conclusion***

4.11.1 SEC submits that, while it supports Elexicon's commitment to developing a smart grid in the Whitby service area, it does not agree with the proposed pace of this ICM project.

4.11.2 SEC recommends that the OEB approve an ICM for the VRZ for the ADMS only, with an in-service date in 2024. The remainder of the project should be implemented more gradually, and integrated into the next Elexicon DSP, due in 2026.

[73] EB-2022-0059, Decision and Rate Order, April 6, 2023, Schedule A, p. 59

5 OTHER MATTERS

5.1 *Costs*

5.1.1 The School Energy Coalition hereby requests that the Board order payment of our reasonably incurred costs in connection with our participation in this proceeding. It is submitted that the School Energy Coalition has participated responsibly in all aspects of the process, in a manner designed to assist the Board as efficiently as possible.

All of which is respectfully submitted.

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