



September 29, 2022

Nancy Marconi  
Registrar  
Ontario Energy Board  
P.O. Box 2319  
2300 Yonge Street  
Toronto ON  
M4P 1E4

Dear Ms. Marconi,

**RE: EB-2022-0024 Elexicon Energy Inc. 2023 Distribution Rate Application  
CCMBC Interrogatories to the Applicant**

Attached are the interrogatories of the Coalition of Concerned Manufacturers and Business of Canada (CCMBC) to the applicant in the EB-2022-0024 proceeding, the application by Elexicon Energy Inc. for 2023 Rates and Charges.

Respectfully submitted on behalf of CCMBC,

Tom Ladanyi  
Consultant representing CCMBC

cc. Bridgit Armstrong (OEB Staff)  
Jocelyn Bamford (CCMBC)  
Cynthia Chan (Elexicon Energy)

**EB-2022-0024**

**Elexicon Energy Inc. 2023 Distribution Rate Application**

**Coalition of Concerned Manufacturers and Businesses of Canada**

**Interrogatories**

**September 29, 2022**

**CCMBC-1**

**Reference:** Page 44

**Preamble:** *“The WSG Project involves the deployment of a combination of well understood and proven smart grid technologies across Elexicon’s distribution system in the WRZ and VRZ.”*

- a) What is a “*smart grid*” as used in the quoted sentence?
- b) Please file a list of the “*well understood and proven smart grid technologies*” that the referenced statement is referring to. Please explain the function of each technology and indicate if Elexicon has any experience with its use.

**CCMBC-2**

**Reference:** Page 44

**Preamble:** *“The Sustainable Brooklin Project involves Elexicon providing capacity to a group of residential developers represented by the Brooklin Landowners Group Inc. (the “Developers”), who will in turn construct new homes in Brooklin, ON with DER enabling features such as rough-ins for solar panels, battery storage and EVs.”*

- a) What is the meaning of “*capacity*” as used in the quoted sentence.
- b) Are the members of the Brooklin Landowners Group Inc. (the Developers) the same entities that are listed Attachment 1 of the letter of intervention dated September 2 filed by their counsel? If the answer is yes, please file Attachment 1 of that letter. If the answer is no, please file the list of members of the Brooklin Landowners Group Inc. (the Developers) who will be receiving “*capacity*” from Elexicon.
- c) What is the number of “*new homes*” that the quoted sentence refers to?

- d) What is the cost of “*capacity*” per “*new home*”?
- e) Is there a signed agreement or contract regarding the provision of “*capacity*” between Elexicon Energy Inc. and the Brooklin Landowners Group Inc. If the answer is yes, please file a copy of the agreement. If the answer is no, please explain why not.

### **CCMBC-3**

**Reference:** Appendix B, Page 6 and Appendix B-2, page 13

**Preamble:** “*ICM funding of \$26.657MM for the Sustainable Brooklin Project in the WRZ and an exemption for the Brooklin Line (as more fully described in Appendix B-2) from Section 3.2 of the Distribution System Code (“DSC”) (the “DSC Exemption”), which would otherwise require Elexicon to collect a capital contribution from the local developers towards the cost of constructing and operating the Brooklin Line.*”

- a) Please file a copy of Section 3.2 of the Distribution System Code as a document and not a link.
- b) What is the amount of the capital contribution that “*would otherwise require Elexicon to collect*”?
- c) Is \$26.657 million the total cost of constructing the Brooklin Line? If the answer is no, what is the cost of constructing the Brooklin Line? If the answer is yes, does the calculation of the contribution consider incremental revenues of the Brooklin Line?
- d) The quoted text suggests that “*the local developers*” would otherwise pay an operating cost. What is the amount of this operating cost and how and when would the local developers pay it?
- e) Are “*the local developers*” the same entities previously referred to as the Brooklyn Landowners Group? If not, please explain why not and file the list of “*local developers*” who will not be required to pay a contribution.
- f) Does Elexicon have a contribution policy that it applies to new development? If the answer is yes, please file a copy of the policy. If the answer is no, please explain how Elexicon informs developers about the requirement for contributions.
- g) Are there developers in other parts of the Elexicon service area who are currently paying or have paid contributions to Elexicon? If the answer is yes, what is the annual amount of contributions received by Elexicon? If the answer is no, please explain why not.

#### **CCMBC-4**

**Reference:** Appendix B, page 8

**Preamble:** *“Elexicon 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.”*

- a) Considering that developers are not regulated by the OEB, please explain why Elexicon believes that the OEB could set such a condition.
- b) Would the OEB have to inspect each new home that is built by *“the developers that may stand to benefit”* over the years to ensure that the condition is met?
- c) For how many years would the OEB need to inspect the construction of new homes and who would pay for such inspections?

#### **CCMBC-5**

**Reference:** Appendix B, page 8

**Preamble:** *“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. The amount of the capital contribution would be approximately \$2,260 per home or building before Elexicon supplies power (Source Brooklin Landowners Group Inc). With respect to non-residential customers, Elexicon would apply the standard requirements of the DSC to calculate a capital contribution commensurate with the capacity required for the customer in question.”*

- a) The quoted text indicates that the \$2,260 capital contribution per home or building was calculated by the Brooklin Landowners Group. Does Elexicon agree with that estimate and adopt it as its own? If the answer is yes, is that amount the approximate estimate of making a home DER-and-EV ready? If the answer is no, please explain why not and provide the correct estimate per home.
- b) Please file a numerical example of how Elexicon would apply the standard requirements of the DSC to calculate a capital contribution commensurate with the capacity required for a non-residential customer.
- c) When and how would Elexicon collect the \$2,260 contributions per home?

- d) Would such contributions be credited against the Whitby Rate Zone plant in service to reduce rate base?

#### **CCMBC-6**

**Reference:** Appendix B, page 9

**Preamble:** *“Finally, the ICM Projects respond to the desire of local communities to have a say in the kinds of investments in electricity infrastructure that are made in their service area, to serve their needs. In this regard it is noteworthy that on July 11, 2022, the Whitby Town Council unanimously endorsed the WSG and Sustainable Brooklin Projects.”*

- a) Did Elexicon make a presentation to the Whitby Town Council? If the answer is yes, please file copies of all presentation materials. If the answer is no, please explain why not.
- b) Was the Whitby Town Council informed that electricity customers in Whitby would have to pay \$43.171 million for the Whitby Smart Grid Project and \$26.657 million for the Sustainable Brooklin Project? If the answer is yes, please file the minutes of the Council Meeting proving that they were informed. If the answer is no, please explain why not.
- c) Please file a copy of the resolution of the Whitby Town Council endorsing the WSG and the Sustainable Brooklin Project.

#### **CCMBC-7**

**Reference:** Appendix B, page 10

**Preamble:** *“As set out in Appendix B-4, to defer upstream capital investments needed for distribution system capacity, approximately 12% of all new customers in the North Brooklin area need to install rooftop solar with battery storage to defer a material capital investment by one year, 39% for a three-year deferral and 53% for a five-year deferral.”*

- a) How would Elexicon know which customers installed rooftop solar with battery storage?
- b) Would any size of rooftop solar and battery storage meet this condition? If the answer is no, what is the minimum size per new customer of rooftop solar in square metres and the minimum capacity of storage battery in kWh. If the answer is no, please explain why not.
- c) Does Elexicon expect to have a contract with each home purchaser that would require the purchaser to install rooftop solar with battery storage? If the answer is yes, please file a draft contract. If the answer is no, please explain why not.

**CCMBC-8**

**Reference:** Appendix B, page 36, Tables 5, 6 and 7

- a) Please file a table showing forecast and actual capital expenditures by category for WRZ and VRZ for 2018, 2019, 2020, and 2021.
- b) Please file a table of the forecasts of capital expenditures by category for WRZ and VRZ for 2022, 2023, 2024 and 2025.

**CCMBC-9**

**Reference:** Appendix B, Page 38

**Preamble:** *“In order to satisfy the prudence test, a distributor must demonstrate that its decision to incur the incremental capital represents the most cost-effective option for its customers (though, not necessarily the least initial cost option).”*

- a) Please confirm that WSG consists of numerous electrical components that will be installed at various locations.
- b) Please confirm that installation of electrical components at various locations is a typical annual program of an electricity distributor.
- c) Is the option selected for WSG the least cost option from the perspective of Elexicon ratepayers? Please explain your answer.
- d) Please confirm that Sustainable Brooklin Project is a feeder extension project.
- e) Please confirm that feeder extension project is a typical annual program of an electricity distributor.
- f) Is the Sustainable Brooklin Project the least cost option from the perspective of Elexicon ratepayers? Please explain your answer.

**CCMBC-10**

**Reference:** Appendix B, page 44

**Preamble:** *“Absent the DSC Exemption, the Developers are concerned that construction of both the Brooklin Line and new homes in North Brooklin area will be delayed by several years while the Developers raise financing for the capital contribution. In order to address these concerns, Elexicon and the Developers created the innovative Sustainable Brooklin Project to meet the needs, preferences, and goals of customers, the OEB, the Ministry of Energy, Developers and Elexicon. In exchange,*

*the Developers are willing to construct DER-and-EV-Ready homes in the North Brooklin community (as set out in section 2.3.2). The estimated incremental cost per home for the Sustainable Brooklin Project is \$2,260; resulting in an expected investment from the Developers of \$20 to \$30.4MM over the course of 20 years.”*

- a) Did Elexicon or the Developers initiate the creation of the Sustainable Brooklin Project?
- b) Please file copies of all correspondence including e-mails between Elexicon and the Developers that resulted in the creation of the Sustainable Brooklin Project.
- c) Please file copies of all correspondence including e-mails between Elexicon and the Ministry of Energy regarding the Sustainable Brooklin Project.
- d) Did Elexicon discuss the Sustainable Brooklin Project with any employee of the OEB prior to filing? If the answer is yes, please identify the OEB employee(s), the dates of the discussions, and file copies of any correspondence including e-mails.
- e) Considering that the incremental cost to make a home “*DER-and-EV-Ready*” is only \$2,260 why does Elexicon believe that the Developers would not be able to recover the cost from Sustainable Brooklin home buyers and should instead recover it from current Elexicon ratepayers using ICM funding?

#### **CCMBC-11**

**Reference:** Appendix B, Page 49

**Preamble:** *“The Developers have raised a concern of inconsistency between the DSC and the TSC. In assessing available alternatives to meet growth needs in the North Brooklin area. Elexicon assessed the construction of a potential (hypothetical) new TS (“Brooklin TS”). Construction of a Brooklin TS was dismissed on evaluation as an imprudent investment.”*

- a) Did the Developers express their concern about *inconsistency between the DSC and the TSC* in writing? If the answer is yes, please file copies of all correspondence including e-mails between the Developers and Elexicon about the inconsistency? If the answer is no, when, and how was Elexicon made aware of the inconsistency?
- b) Does Elexicon agree that there is inconsistency between the DSC and TSC? If the answer is yes, please file a copy of the section(s) of the TSC that are inconsistent with the DSC and explain the inconsistency. If the answer is no, did Elexicon explain to the Developers that their concern is unfounded?

- c) Please file copies of all correspondence including e-mails between the Developers and Elexicon regarding alternatives to growth needs in the North Brooklin Area.
- d) When was the construction of a Brooklin TS dismissed and who made the decision to dismiss it?
- e) Is the decision not to construct a Brooklin TS permanent, meaning that Elexicon has made a commitment to not build it at any time in the future, or does the decision just delay its construction?

### **CCMBC-12**

**Reference:** Appendix B-1, page 12, Table 2, Forecast Capital Expenditures

- a) What is the capital expenditure on each component of ADMS: Software, Communications Infrastructure, Active Demand Management Program Design, by year?
- b) What is the capital expenditure on VVO and FLISR Field Hardware by year? Please show VVO and FLISR separately.
- c) What are the in-service dates and amounts for each year?
- d) Why is NRCan funding only \$4.041 million and how was that amount determined?
- e) Has Elexicon received the \$4.041 million from NRCan? If the answer is yes, will the interest on the \$4.041 million be used to reduce rate base? If the answer is no, when does Elexicon expect to receive it?

### **CCMBC-13**

**Reference:** Appendix B-1, Whitby Smart Grid Business Case, page 30

- a) How will Elexicon measure the achievement of the “*Expected Benefits*”?
- b) What should the OEB do if Elexicon does not achieve the “*Expected Benefits*”?
- c) What will be the impact on Elexicon ratepayers if the “*Expected Benefits*” are not achieved?



### **CCMBC-14**

**Reference:** Appendix B-1, Whitby Smart Grid Business Case, page 26, Table 13

- a) Please explain why “*Major Equip Field Commissioning*” and “*Minor Equip Field Commissioning*” which appear to be activities and not assets are listed under “*Asset Type.*”
- b) Please confirm that items listed in Table 13 under “*Asset Type*” are similar to asset types that Elexicon or its predecessors have installed in the past without the need for ICM funding from ratepayers.

### **CCMBC-15**

**Reference:** Appendix B-1, Whitby Smart Grid Business Case, page 38

**Preamble:** “*High penetrations of DERs, increases the needs for distribution system reliability. Thus, to quickly locate faults, maintain system reliability, and minimize outages, CFCIs will be added to the DA system. DERs increase distribution system complexity and traditional methods of fault locating may be too cumbersome, resulting in extended outages in a high-DER future. Incorporating FLISR systems will help improve system reliability.*”

Please confirm that Elexicon is requesting OEB approval for ICM funding from ratepayers of \$26.7 million to increase DER penetration, and ICM funding from ratepayers of \$43.2 million to deal with the reliability problems due to high penetration of DERs. Please discuss your answer.

### **CCMBC-16**

**Reference:** Appendix B-1, Whitby Smart Grid Business Case, pages 43 and 44

**Preamble:** “*As stated earlier it is expected that with the implementation of smart grid technology there will be reliability improvements. The following provides a summary of an example of system reliability improvements through FLISR systems implementation based on historical period of April 2020 to January 2022:*

- *SAIFI improving from 0.87 to 0.28*
- *SAIDI improving from 1.03 to 0.45*
- *CAIDI ~ 40 minutes improvement per complex outage.*
- *MAIFI going from 0 to 0.59”*

- a) Does the quoted text refer to an area served by Elexicon? If the answer is yes, please identify the area, the number of customers served and the cost of FLISR systems implementation. If the answer is no, please provide the source of the quoted numbers.

- b) Is Elexicon claiming that it will achieve the same results with WSG implementation? Please explain your answer.
- c) How should the OEB ensure that Elexicon is held accountable for the success of WSG?

### **CCMBC-17**

**Reference:** Appendix B-1, Whitby Smart Grid Business Case, page 54

- a) What is the NPV of Option 1 from the perspective of Elexicon ratepayers?
- b) What is the NPV of Option 2 from the perspective of Elexicon ratepayers?

### **CCMBC-18**

**Reference:** Appendix B-2, Page 13

**Preamble:** *“As stated earlier, Elexicon is proposing to fund the new feeders and associated smart grid technologies through the ICM.”*

- a) Has Elexicon or its predecessor distributors ever built new feeders in the past without ICM funding? If the answer is no, please explain why not? If the answer is yes, what is the cost of new feeders built by Elexicon or its predecessor distributors net of contributions from developers over the past five years?
- b) What are “associated smart grid technologies”?
- c) Do “associated smart grid technologies” make construction of feeders more expensive? If the answer is yes, what is the per cent increase in costs of feeders due to smart grid technologies? If the answer is no, please explain why not.

### **CCMBC-19**

**Reference:** Appendix B-2, Sustainable Brooklin Business Case, page 14

**Preamble:** *“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. Based on initial quotes the Brooklin Developers has received, it is estimating a cost of around \$23M install the standard rough-in.”*

- a) What is included in the “standard rough-in” of \$23 million?

- b) Please confirm that the Developers are avoiding payment of a contribution of \$26.657 million while incurring an incremental cost of \$23 million. Please explain your answer.

### **CCMBC-20**

**Reference:** Appendix B-2, Sustainable Brooklin Business Case, page 15

**Preamble:** *“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 inclusion of these technologies at 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) Does Elexicon believe that DER and EV ready homes would not be more attractive to home buyers and that they would be unwilling pay \$2,260 more for such homes? Please discuss.
- b) Why does Elexicon believe that Brooklin Developers would be unlikely to assume the business risk of constructing DER and EV ready homes at the additional cost of only \$2,260 per home?
- c) Have the Developers discussed the market risk of constructing DER and EV ready homes with Elexicon? If the answer is yes, please file copies of all correspondence including e-mails between the Developers and Elexicon regarding such market risk. If the answer is no, please confirm that Elexicon has no experience in the assessment of real estate market risk.
- d) Is it fair for Elexicon customers in other service areas to be forced to subsidize the construction of DER and EV ready homes in Brooklin while they must pay higher costs to have their own homes made DER and EV ready? Please explain your answer.

### **CCMBC-21**

**Reference:** Appendix B-4, METSCO Report, page 24

**Preamble:**

*“Assumptions:*

- 1. Nameplate rating of rooftop solar panel: 10 kW.*
- 2. Nameplate rating of battery storage: 10 kWh.*

3. Firm capacity of rooftop solar without BESS in summer: 33%.
4. Firm capacity of rooftop solar without BESS in winter: 0%.
5. Firm capacity of rooftop solar with BESS (summer and winter): 100%.”

- a) Is the nameplate rating of rooftop solar based on perfect conditions such as daytime on a sunny day with no snow cover on the roof?
- b) Does “Firm capacity of rooftop solar with BESS (summer and winter): 100%” mean 24 hours a day, 365 days per year?
- c) What assumptions did METSCO make for the following:
  - i) hours of darkness during different seasons of the year,
  - ii) number of days per year when solar panels will be covered with snow,
  - iii) number of overcast days per year,
  - iv) type of space heating and cooling in the home,
  - v) type of water heating in the home,
  - vi) number of hours per day of EV charging and the Level of charger,
  - vii) number of hours per day that a 10-kWh battery supplies all electricity needs of a home.

## **CCMBC-22**

**Reference:** Appendix B-4, METSCO Report, page 28

**Preamble:** “While DER can be used to offset peak demand and defer investments into new stations and feeders, high DER penetration creates numerous challenges for operating the distribution system. Methods such as VVM, DA, AMI must be used to facilitate the DER.”

- a) Is it possible that the costs of addressing numerous challenges of high DER penetration could be greater than the benefits? Please discuss.
- b) Do electricity distributors with high DER penetration need specialized technical staff to deal with the challenges?