

ONTARIO ENERGY BOARD

ELEXICON ENERGY INC.

EB-2022-0024

APPLICATION FOR CHANGES TO ELECTRICITY DISTRIBUTION RATES IN THE VERIDIAN RATE ZONE AND THE WHITBY RATE ZONE, EFFECTIVE JANUARY 1, 2023

OEB PANEL QUESTIONS

OEB Panel-1

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

Ref 2: Interrogatory Staff-12 d), Attachment 1

Question:

Please provide a map clearly illustrating options 1, 3 and 4 in Appendix B-2 commencing at the Whitby TS that includes major roads in the area, existing and proposed feeders and voltages, the step-down equipment location, and the location of the Sustainable Brooklin project (Phase 2) as illustrated in reference 2. Please clearly illustrate the existing distribution circuits by kV size and options 1, 3 and 4 in separate colours.

OEB Panel-2

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

Ref 2: Technical Conference 1 - Transcript page 159

Ref 2: Interrogatory Staff-12 d), Attachment 1

Ref 3: Interrogatory Staff-13

Preamble:

Appendix B-2 commencing at page 18 provides 4 options of which options 1, 3 and 4 consist of different facility configurations.

Appendix B-2, Figure 1, page 6 illustrates the location of each of the proposed two new 27.6 kV circuits in option 1. Notes 1, 2, 3, and 4 indicate that the 27.6 kV feeder denoted in green will replace existing poles. Note 6 indicates that a portion of the 27.6 kV circuit denoted in blue will replace existing poles.

Questions:

- a) Who developed the cost estimate for the ICM funding request for Phase 1 of the Sustainable Brooklin project? If Elexicon Energy did not develop the cost estimate, please confirm that the cost estimate was performed in accordance with safety, accounting, and engineering specifications provided by Elexicon Energy. Please reference the answer provided at transcript page 159.
- b) When was the Class 4 cost estimate for option 1 (two 27.6 kV feeders) developed? Given the proposed construction timeline and Q3 2023 energization date, please confirm that Elexicon Energy's position is that the Class 4 cost estimate is the best

cost estimate for approving ICM funding and assessing prudence of actual costs at the time of rebasing.

- c) Please provide the cost and distances of both the overhead and underground portions of option 1 shown in Table 1 response to Staff-13 were Elexicon Energy to construct only a <u>single</u> pole with two 27.6 kV feeders shown in <u>blue</u> in Appendix B-2, Figure 1. Also, as part of the cost and distance estimates for the overhead portion of the feeder please indicate the cost and distance for replacement of poles and existing kV circuit proposed to be attached to the replacement pole. For example, will the section of replacement poles in note 5 have a new 27.6 kV and 13.8 kV circuit be attached to the same section of replacement poles or is the existing 13.8 kV circuit being transferred to the new 27.6 kV pole?
- d) Please provide the cost and distances of both the overhead and underground portions of option 1 shown in the Table 1 response to Staff-13 if Elexicon Energy to initially construct only a <u>single</u> pole <u>with two</u> 27.6 kV feeders shown in <u>green</u> in Appendix B-2, Figure 1. Also, please indicate the comparable cost and distances for replacement of poles and existing kV circuit proposed to be attached to the replacement pole. For example, will the section of replacement poles in notes 1, 2, 3 and 4 have a new 27.6 kV and 13.8 kV circuit attached to the same section of replacement poles or is the existing 13.8kV circuit being transferred to the new 27.6 kV pole?
- e) If Elexicon Energy were to initially build only a single 27.6 kV pole line, which would be preferable to build, the portion denoted in blue or green in Appendix B-2, Figure 1? Please explain.
- f) Has Elexicon Energy considered a single 27.6 kV pole line design initially with the second 27.6 kV pole line subsequently added once a certain demand/number of houses have been built?
- g) Elexicon Energy indicated that it rejected option 3, utilizing an existing 44 kV line reserved for commercial and industrial growth, to serve the Sustainable Brooklin project. Please provide a list of all contracted demand or forecast demand in 2023 and 2024 to be served by this 44 kV line and provide the remaining capacity to serve the Brooklin Landowners. Is Elexicon Energy indicating that it is uneconomic to step down the 44 kV line to 27.6 kV, to match the voltage of the proposed option 1?

OEB Panel-3

Ref 1: Technical Conference 1 – Transcript pages 161-162

Ref 2: Application – Appendix B-2, Figure 1

Ref 3: Interrogatory Responses – Staff-12 Attachment 1

Preamble:

On pages 161-162 of the technical conference transcript day 1, Elexicon Energy indicated that its planning standards and engineering standards require a loop feed design because the size of the load.

Questions:

- a) Please provide the Elexicon Energy planning/engineering standard that requires a loop feed in feeder design and the size threshold of the load that requires such design.
- b) Please provide the number of outages caused by fallen poles on Lakeridge Road in the past 5-years. What was the range and average outage time for these outages?
- c) Figure 1 of Appendix B-2 shows that there is a loop design for the Northeast quadrant of Ashburn and Columbus. However, there is no loop design in the North/Southwest quadrant of Ashburn and Columbus. Please explain how this design adheres to Elexicon Energy's loop feed standards?

OEB Panel-4

Ref 1: Technical Conference 1 – Transcript pages 54-55, 134

Ref 2: Reminder of Distributor Discretion to Extend Customer Connection Horizon for System Expansions, December 22, 2022 (<u>https://www.oeb.ca/sites/default/files/OEB-staff-Letter-Customer-Connection-Horizon-20221222.pdf</u>)

Ref 3: Appendix B-2, pages 5, 6 and 10.

Preamble:

Reference 1, pages 54-55 of the technical conference transcript day 1, Elexicon Energy stated that for the purpose of the DCF Elexicon Energy considered the Brooklin Development Group as one customer for Phase 1 and for Phase 2 it would treat different customers connecting to the feeders at different times. For Phase 1, Elexicon Energy also stated that because of the way Phase 1 is defined, it does not expect any revenue from the Brooklin Development Group.

Reference 1, page 134, Elexicon Energy implies the developers, its customer, staged the project and the phasing of this application.

Reference 2 is a letter issued by OEB staff reminding electricity distributors of OEB staff's view that under the Distribution System Code electricity distributors have the discretion to extend the customer connection horizon that is used in distribution system expansions. Appendix B of the Distribution System Code includes a statement that for customer connection periods of greater than 5-years, an explanation of the extension of the period must be provided to the OEB.

Reference 3 indicates that the Brooklin Development Group, which account for 60% of the landowners in the area and 87% of the housing, are planning on building between 10,081 to 11,217 new homes by 2041 at a pace of 700 DER/EV-ready homes a year for the next 20-years.

Questions:

- a) Why is Phase 1 a discrete project as required by the OEB's ICM funding criteria? Please explain.
- b) Has Elexicon Energy or the Brooklin Landowners developed an estimate of the residential level distribution build out for (Phase 2) over 20-years. If yes, please provide the annual estimated cost.
- c) Please provide a DCF calculation in accordance with Appendix B of the Distribution System Code together with the live excel model considering Phase 1 (option 1) and Phase 2 on a combined basis. Please include the Brooklin Landowner's minimum and maximum annual customer connections and the associated annual Phase 2 cost from the projected date of energization over a 5-year, 10-year, 15-year, and 20year time horizon. Please include all assumptions.
- d) Please provide a DCF calculation in accordance with Appendix B of the Distribution System Code in a live excel model considering both Phase 1 and Phase 2 on a combined basis assuming the cost for a <u>single</u> 27.6 kV pole line design. Please include the Brooklin Landowners minimum and maximum annual customer connections and the associated annual Phase 2 costs from the projected date of energization over a 5-year, 10-year, 15-year, and 20-year time horizon. Please include all assumptions.