

July 11, 2022

VIA RESS

Ontario Energy Board P.O. Box 2319, 2300 Yonge Street, 27th Floor Toronto, ON M4P 1E4 Attention: Registrar

Dear Ms. Marconi,

Re: Alectra Utilities Corporation ("Alectra") Incremental Capital Module Application for 2023 Electricity Distribution Rate Charges Board File No.: EB-2022-0013

We are counsel to the Distributed Resource Coalition ("DRC") in the above-noted proceeding. Please find enclosed the interrogatories of DRC to Alectra, filed pursuant to Procedure Order No. 1.

Sincerely,

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DT Vollmer

c. Natalie Yeates, Alectra Charles Keizer, Torys LLP Wilf Steimle, Electric Vehicle Society Cara Clairman, Plug'n Drive

Encl.

ONTARIO ENERGY BOARD

IN THE MATTER OF the *Ontario Energy Board Act, 1998*, S.O. 1998, c. 15, Sched. B, as amended;

AND IN THE MATTER OF an Application by Alectra Utilities Corporation (**Alectra**) to the Ontario Energy Board 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 (the **Application**).

EB-2022-0013

INTERROGATORIES

OF

DISTRIBUTED RESOURCE COALITION

(DRC)

July 11, 2022

Reference: • Exhibit 1, Tab 1, Schedule 4, pp. 4-5.

Preamble: Alectra notes that the current level of underground cable renewable investment is insufficient to maintain the reliability of its distribution system. Further, Alectra notes the increasing pace at which cable failures have intensified in existing or new emerging neighbourhoods and in so-called localized "hotspots".

Alectra indicates that system reliability has worsened as a result of several factors, including deteriorated distribution equipment and the increased impact of adverse weather events and storms. In addition, Alectra indicates that delaying investments may "result in greater risk of extended outages for affected customers, alongside increasingly reactive, significantly less cost-effective capital expenditures."

- a) With respect to the "several factors" that have contributed to the deterioration in system reliability referenced in the Application, please provide details as to whether any factors, other than adverse weather events and storms, have contributed in a significant way to the deterioration in system reliability.
- b) Please provide further details as to the frequency and severity of the adverse weather events and storms referenced in the Application, as well as any analysis Alectra has performed or commissioned concerning future climate trends as relevant to the viability or cost advantages to the investments contemplated in the Incremental Capital Module (ICM), to alternative options that Alectra considered, or to options including distributed energy resources (DERs).
- c) Please discuss how changing and anticipated demands in terms of the new forms of distribution and DERs across the grid from the anticipated increases in electrification will affect the necessity and reliability of the investments in underground cables contemplated in the ICM.
- d) Please indicate and discuss how the Application's proposed investments will address expected increased demand arising from increased electrification, including as a result of increasing adoption of DERs and electric vehicles (EVs) in Alectra's service territory.

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- e) With respect to the "significantly less cost-effective capital expenditures" noted in the Application, please clarify whether Alectra quantified cost estimates for capital expenditures other than cable rehabilitation or replacement. If so, please provide details and cost estimates. If not, please explain why not.
- f) Please confirm whether Alectra considered how the availability of EVs as storage centres may influence the need or lack thereof for existing distribution approaches and future impacts on system reliability, including the need for the proposed investments as part of the Application. If yes, please provide details and discuss. If not, please explain why not.

Reference: • Exhibit 2, Tab 1, Schedule 1, p.10

- Preamble: Alectra notes that it considered various options to address the growing reliability issues due to underground cable failures resulting from ground moisture and corrosion.
- a) Please provide details as to any other options that Alectra considered and why Alectra ultimately concluded they should not be pursued.
- b) Please describe any assumptions concerning a changing climate or increases in adverse weather events that were discussed in the development of Alectra's conclusions to not pursue other options and please describe how these various options would have a negative or positive effect on the transition to EVs and DERs, as well as anticipated demands on the grid arising from increased electrification.
- c) Please describe any options that were available that would have been advantageous from the perspective of supporting the transition to EVs and DERs, as well as anticipated demands on the grid arising from increased electrification. If any such options existed, please provide details as to why Alectra ultimately concluded they should not be pursued.

Reference: • Exhibit 3, Tab 1, Schedule 1

- EB-2019-0018, Interrogatory responses to DRC,¹ DRC-2
- EB-2019-0018, 2020 EDR Application, Exhibit 4, Tab 1, Schedule 1, pp. 327-328
- EB-2019-0018, 2020 EDR Application, Exhibit 4, Tab 1, Schedule 1, Appendix 13, p. 13
- Preamble: Alectra notes that investments in Lines Capacity minimize the impact of additional load growth on service levels for existing customers. However, current investments in Lines Capacity are "paced at a bare minimum level to only match the timing of known and committed development, considering available capacity, and expected load growth, net of conservation and demand side management persistence."

In an interrogatory response to DRC in EB-2019-0018 (Exhibit 4, Tab 1, Schedule 1 (DSP), Section 5.3.1, p. 328), Alectra provided EV adoption and load forecasts in its service territory that informed Alectra's load forecast as part of the 2020 DSP.

- a) Please indicate whether Alectra's expected load growth considers the impact and integration of DERs, EVs, and EV charging infrastructure and the future transition to increased electrification. If it does, please discuss the expected impacts and how the proposed investments address these impacts. If not, please explain why not.
- b) Please indicate whether Alectra's EV adoption and actual and forecasted load demand for the period 2020-2024 has changed since the 2019 distribution rates application (EB-2019-0018). If it has, please provide, in the chart format below, Alectra's updated assessment of the impacts on loads and demands of Alectra's estimate of EVs in each year:

	2020	2021	2022	2023	2024
EVs (#)					
EV (kW – on peak)					

¹ EB-2019-0018, Alectra_IRR_DRC_MFactor_Part 1_20190913, available online: <<u>https://www.rds.oeb.ca/CMWebDrawer/Record/652493/File/document</u>>.

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- c) Please describe how Alectra's current forecasts of trends in EV use aligns with the current and future necessity of the investments contemplated in the ICM.
- d) Please describe to what extent DERs as non-wires alternatives were considered as a potential means to defer or avoid costs associated with the traditional infrastructure investments contemplated in the ICM.

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Question: DRC-4

Reference: • Exhibit 3, Tab 1, Schedule 2

- Alectra 2021 Sustainability Report, p. 30
- Preamble Alectra suggests that cable injection is "environmentally friendly" as a result of the avoided greenhouse gas (**GHG**) emissions compared to the manufacture, transport and installation of new cable. Alectra indicates that is has avoided 5,012 tCO₂ by renewing underground cables using cable injection instead of replacing cables.
- a) Please place Alectra's 2021 Sustainability Report on the record in this proceeding.
- b) Has Alectra quantified the expected avoided GHG emissions from prioritizing cable injection as part of the Application? If yes, please provide any and all working papers, reports, and analysis conducted to support Alectra's estimated avoided GHG emissions. If no, please provide an estimate of avoided GHG emissions as a result of the proposed cable injection.
- c) Please provide any details as to how the proposed measures relating to the underground cable network align with either or both of the priorities of astute grid modernization or system hardening, which are set out in Alectra's 2021 Sustainability Report.

Reference: • Exhibit 3, Tab 1, Schedule 3

- Exhibit 4, Tab 1, Schedule 1, Attachment 11
- Preamble: Alectra engaged Innovative Research Group (**Innovative**) to undertake a customer engagement process seeking customer input on: (i) customer needs and outcome priorities for future system investments, and (ii) potential near-term investments to renew underground cable in the PowerStream and Enersource rate zones.
- a) Please indicate whether Alectra and Innovative invited and/or included the participation of EV stakeholders and other DER customers (including EV drivers, owners of DERs, EV associations, and DER industry associations) in customer engagement activities. If yes, please provide any and all customer engagement questions and responses pertaining to: EVs, batteries, EV charging, energy storage, and DERs generally. If no, why not?

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Question: DRC-6

- Reference: Exhibit 3, Tab 1, Schedule 2, pp. 1-18
 - Exhibit 3, Tab 1, Schedule 4, p. 7
 - Exhibit 4, Tab 1, Schedule 1, Attachment 12, p. 11
- Preamble: Alectra provides an update of the most recent reliability trends emerging from the growing backlog of direct-buried XLPE cable and a detailed breakdown of the most pressing areas of the system where underground cable health has deteriorated, started failing, and is no longer reliable. Further, Alectra anticipates that its replacement of the existing deteriorated and failing cable in 15 neighbourhoods with new cable installed in protective conduit will provide reliable service for the next 55 years.

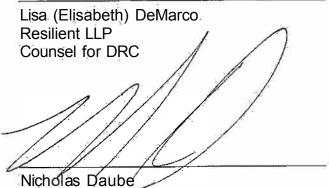
Guidehouse Canada Ltd. (**Guidehouse**) concludes that Alectra recognizes the potential for renewable energy generation to defer capacity investments and has proposed pilot projects to determine the conditions under which renewable energy generation may be a cost-effective alternative.

- a) Does the Asset Analytics Platform include an assessment of trends in adverse weather events or other climate considerations as they might relate to the cost or viability of the underground cable network or alternatives to it? If yes, please provide details. If no, please explain why not.
- b) Please describe any assumptions concerning a changing climate or increases in adverse weather events that were considered in the development of Guidehouse's conclusions.
- c) Please discuss any Guidehouse assumptions relevant to the conclusions it presents in its report as to how the trends in adverse weather events described in the Application affect the viability of DERs, including EVs, as an alternative or complementary measure to the approach to underground cables contemplated in the ICM.

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ALL OF WHICH IS RESPECTFULLY SUBMITTED THIS

11 $^{\mathrm{th}}$ day of July, 2022.



Nicholas Daube Resilient LLP Counsel for DRC