RESPONSES TO ENERGY PROBE RESEARCH FOUNDATION INTERROGATORIES

INTERROGATORY 1-EP-1

Reference: Exhibit 1, Tab 11, Schedule 2, Page 4

Preamble: Alectra Utilities is proposing a Custom IR framework to meet funding needs arising from evolving cost pressures and investments required; needs that cannot be accommodated within the parameters of the OEB's Price Cap Incentive Rate-setting (Price Cap IR) model.

Question: Considering that most of the 57 Ontario electricity distributors can accommodate their funding needs within the OEB's Price Cap Incentive Rate-setting model, and that Alectra has successfully used that model in the past, why does Alectra now believe that it can no longer use that model.

RESPONSE:

Alectra Utilities provided its proposal and need for a Custom IR framework in Exhibit 1, Tab 11, Schedule 2, pp.4-5. The Price Cap IR framework does not provide Alectra adequate funding and regulatory stability to invest in the renewal of its aging and deteriorating infrastructure in order to keep the system in a state of good repair, while meeting growing electricity demand, building a more resilient grid for the future, and ensuring appropriate staffing levels to operate a large and complex utility. The *Handbook for Utility Rate Applications* outlines the OEB's three incentive rate-setting methods: Price Cap IR, Custom IR and Annual IR Index. As stated on p.23 of the Handbook, the OEB developed these rate-setting options to ensure utilities have sufficient flexibility to adopt a method that best meets their needs. In accordance with this guidance, Alectra has selected the framework that meets the needs of its 2027-2031 Investment Plan so that Alectra Utilities can provide the outcomes that customers and policy stakeholders want and expect.

RESPONSES TO ENERGY PROBE RESEARCH FOUNDATION INTERROGATORIES

INTERROGATORY 1-EP-2

Reference: Exhibit 1, Tab 11, Schedule 2, Page 4, Chart 1-11-1: Custom Price Cap Revenue vs. Price Cap (IRM) Revenue

Questions:

a) Please file a table showing all calculations used in preparing this chart.

b) Please list all assumptions used in preparing this chart.

c) Did Alectra take into consideration that it would be eligible for ACM/ICM under Price Cap but not under Custom Price Cap.

RESPONSE:

a) Please see response to 1-CCC-9.

b) Please see response to 1-CCC-9.

c) ACM/ICM is not designed to address Alectra Utilities' capital investment needs that cannot be funded under IRM. As provided in Exhibit 2A, Tab 1, Schedule 1, Section 5.4.2 p. 373, Alectra Utilities' total planned capital expenditures are expected to increase from $454.8MM in 2027 to $757.3MM in 2031, reflecting the need to address the substantial inventory of deteriorated assets, while ensuring the system has sufficient capacity to meet the growth in electricity demand through a resilient and modern system.

RESPONSES TO ENERGY PROBE RESEARCH FOUNDATION INTERROGATORIES

INTERROGATORY 1-EP-3

Reference: Exhibit 1, Tab 7, Schedule 1, page 1

Preamble: Through its Green Energy & Technology (GRE&T) Centre, Alectra Utilities partners closely with government agencies, industry partners, and other utilities to explore and implement new ideas and emerging technologies that can enhance how Alectra Utilities serves its customers.

Questions:

a) Please file the 2026 Test Year itemized budget for the GRE&T Centre, including both capital and OM&A.

b) What is the number of Test Year FTEs in the GRE&T Centre?

c) What green energies are within the scope of the GRE&T Centre?

RESPONSE:

a) Alectra Utilities notes that the Test Year for this application is 2027. Accordingly, the GRE&T Centre itemized budget is provided for the 2027 Test Year.

Table 1 – 2027 Capital Budget

Description ($MM)	2027 Capital Budget
Consulting	0.06
Labour	0.19
Material	0.21
Reimbursement	(0.04)
Total	**0.43**

Table 2 – 2027 OM&A Budget

Description ($MM)	2027 Budget
Consulting	0.18
Direct Labour Costs	3.12
IST Licenses and Maintenance	0.00
Legal Fees	0.05
Miscellaneous	0.04
Mileage and Parking	0.03
Reimbursement (Funding Recovery)	(0.44)
Software as a Service	0.08
Subscriptions and memberships	0.03
Training & Development	0.03
Conferences, Workshops & Accommodation	0.04
Total	**3.16**

b) For the 2027 Test Year, the GRE&T Centre has a total of 22 FTEs.

c) The GRE&T Centre focuses on emerging clean and low-carbon technologies that support electrification, improve grid flexibility and resilience, and enable the integration of distributed energy resources within Alectra Utilities' distribution system. Green energies within scope include electrification and e-mobility, demand-side load flexibility, distributed energy resource orchestration, and advanced analytics and AI-enabled grid-edge capabilities.

RESPONSES TO ENERGY PROBE RESEARCH FOUNDATION INTERROGATORIES

INTERROGATORY 1-EP-4

Reference: Exhibit 1, Tab 7, Schedule 1, page 3

Preamble: "By conducting pilot projects, technology demonstrations, and field assessments, the Centre gathers practical insights that support informed investment decisions."

Questions:

a) Please list the pilot projects, their costs and achieved results that GRE&T Centre was involved in during the Bridge Year.

b) Please list the pilot projects, their costs and expected results that GRE&T Centre will be involved in during the Test Year.

RESPONSE:

a) Please see the table below, which summarizes the pilot projects undertaken by the GRE&T Centre and the associated costs for the Bridge Years (2025–2026) and the Test Year (2027).

Table 1 - Pilot Projects Undertaken by the GRE&T Centre

Initatives ($MM)	2025			2026			2027		
	Capital	OMA	Total	Capital	OMA	Total	Capital	OMA	Total
V2X (AKA Grid Enablement School BUS)	0.49	0.37	0.86	0.13	0.23	0.36	0	0.02	0.02
Computer Vision for Utility Operations	0.26	-	0.26	-	-	-	-	-	-
Outage Restoration: Enhancing Predictions & Customer Experiences	0.57	-	0.57	-	-	-	-	-	-
Enhancing C&I Meter Change Verification	0.13	-	0.13	-	-	-	0.21	0.02	0.23
Enhanced Material Forecasting	0.35	-	0.35	-	-	-	-	-	-
AlectraDrive for Fleets	0.24	0.16	0.4	1.08	0.03	1.1	-0.04	0.18	0.15
SEW Customer Engagement eMobility	0.83	0.13	0.96	0.42	0.22	0.64	0	0.05	0.05

b) For a discussion of the benefits of these activities, please see 1-SEC-14, part b.

RESPONSES TO ENERGY PROBE RESEARCH FOUNDATION INTERROGATORIES

INTERROGATORY 2-EP-5

Reference: Exhibit 2B, Tab 1, Schedule 2, Page 3, Table 2-1-7: Comparing capital expenditures to in-service additions (2025-2031) ($MM)

Question: Please explain the reason for the increase in System Service capital expenditures from $79.6 million in 2028 to $150.0 million in 2029.

RESPONSE:

The increase in System Service spending from 2028 to 2029 is largely due to increased required investments in Capacity Lines and Capacity Stations. Increased load requirements, intensification and electrification growth are the key drivers for the required increase in investments. Additionally, Alectra Utilities continues to invest in Distribution Automation initiatives to support outage restoration times and grid modernization.

RESPONSES TO ENERGY PROBE RESEARCH FOUNDATION INTERROGATORIES

INTERROGATORY 2A-EP-6

Reference: Exhibit 2A, Tab 1, Schedule 1, 5.3.2 Overview of Assets Managed, Page 142

Preamble: "One contributor to growth is the projected increased load pertaining to data centres in the Alectra Utilities service area. Load from data centres is approximately 115MW and Alectra Utilities has received applications and customer commitments to connect an additional 425MW of data centre load over the 2025-2031 period."

Questions:

a) Does Alectra have sufficient available capacity on its distribution system to connect and serve these data centres? If the answer is no, will Alectra need to expand its system to serve them, and will the data centres be required to pay a contribution if the revenues from them are inadequate?

b) Please provide a link to the OEB's Capacity Information Map for Alectra.

RESPONSE:

a) Alectra Utilities does not have sufficient available capacity on its distribution system to connect these data centers. Alectra Utilities will need to expand the distribution system to serve them.

For each expansion, Alectra Utilities conducts an economic evaluation as per Appendix B of Distribution System Code in order to determine if the future revenue from the customer will pay for the capital cost and on-going maintenance costs of the expansion. If future revenue will not be sufficient, Alectra Utilities determines the initial capital contribution and expansion deposit. Upon energization of the project, Alectra Utilities,

over the connection horizon period, reviews the demand that has materialized and returns the percentage of the expansion deposit in proportion to the actual demand that materialized in that year. If at the end of the customer connection horizon the forecasted demand has not materialized, Alectra Utilities retains the remaining portion of the expansion deposit.

b) Please use the following link to the OEB's Capacity Information Map for Alectra: https://oeb.planview.ca/Ontario-capacity-map/

RESPONSES TO ENERGY PROBE RESEARCH FOUNDATION INTERROGATORIES

INTERROGATORY 2A-EP-7

Reference: Exhibit 2A, Tab 1, Schedule 1, 5.3.5 Non-Wires Solutions to Address System Needs, Page 338

Preamble: "Alectra Utilities plans to implement an NWS Program during the 2027-2031 period to procure, third-party DER capacity and energy in the five affected pockets: Nebo TS, Newton TS, Melbourne MS, Alliston MS, and Barrie MS. This NWS Program will provide locational capacity, relief and thereby defer or right-size otherwise necessary station investments."

Questions:

a) Please list the types of third-party DERs that Alectra is referring to and their expected annual load factors.

b) What is Alectra's plan if there is inadequate third-party DER capacity available?

c) What is Alectra's plan if there is adequate third-party DER capacity, but its cost is much higher than expected.

RESPONSE:

a) Alectra Utilities' proposed NWS Program is intended to be technology-neutral and competitively sourced. Accordingly, the specific types of third-party DERs to be procured will be determined through market engagement and competitive procurement (please refer to *Exhibit 2A, Tab 1, Schedule 1, Section 5.3.5.5.C NWS Program*).

The DSP identifies the following illustrative categories of DERs that may be deployed individually or as bundled portfolios (please refer to *Exhibit 2A, Tab 1, Schedule 1, Section 5.3.5.4.C NWS Options*).

With respect to "expected annual load factors," Alectra Utilities notes that NWS resources are expected to be called primarily during peak system conditions to reduce loading at constrained stations, rather than to operate as continuously-dispatched resources. For planning purposes, Alectra Utilities has assumed dispatch on the order of up to approximately six events per year, with an average duration of approximately four hours per event, recognizing that actual dispatch frequency and duration will be driven by real-time system conditions and contractual terms (please refer to *Interrogatory Response 2-Staff-47, Attachment 2-Staff-47_Attach1_NWS BCA Template*)

b) Please refer to *Interrogatory Response 2-Staff-48*.

c) Alectra Utilities notes that the NWS framework includes a gate-based screening process (please refer to *Exhibit 2A, Tab 1, Schedule 1, Section 5.3.5.4.D Gate-Based Screening Process*). Gate 3 (BCA & Engineering) requires that the proposed NWS portfolio demonstrates an equal or greater net present value to ratepayers relative to the traditional wires alternative (or is sufficiently close, with justified qualitative benefits).

If market engagement and procurement indicate that adequate third-party DER capacity is available but at a materially higher cost than the assumed price (refer to *Interrogatory Response 2-Staff-47, Attachment 2-Staff-47_Attach1_NWS BCA Template*), the NWS portfolio may not pass the Gate 3 benefit-cost assessment and would therefore not be advanced as the preferred solution. In such circumstances, Alectra Utilities would apply the contingency approach described in *Interrogatory Response 2-Staff-48*, including re-assessing and, where feasible, advancing the conventional alternative and/or other prudent mitigation measures to maintain service and reliability.

Alectra Utilities has also proposed a Non-Wires Solutions Deferral Account to record actual NWS-related costs and address forecast variability in market pricing, subject to a prudency review (please refer to *Exhibit 9, Tab 8, Schedule 3 Non-Wires Solutions Deferral Account (NWSDA)*). Notwithstanding the use of the deferral account, the decision to proceed with NWS remains contingent on the NWS portfolio meeting the screening and economic feasibility requirements established in the NWS framework.

RESPONSES TO ENERGY PROBE RESEARCH FOUNDATION INTERROGATORIES

INTERROGATORY 2A-EP-8

Reference: Exhibit 2A Tab 1 Schedule 1 Appendix B09 - Information Technology Systems Page 351

Preamble: Alectra Utilities expects work volumes to rise as it reinforces, expands, and modernizes its grid to address customer growth, increasing extreme weather challenges, increased DER access, and electrification growth within its service territories.

Questions:

a) Please explain the reasons for the increase in work volumes caused by increased DER access.

b) Is the increase in work volumes different for exporting and non-exporting DERs?

c) How many customers currently own DERs in the territory served by Alectra and how many are expected to own DERs by the end of 2031?

d) Are customers that own DERs charged for the increased work volumes caused by them?

RESPONSE:

a) DER connections contribute to work volumes, as each connection must be planned, reviewed, engineered, approved, and executed in the field in accordance with applicable technical and safety requirements. This includes system impact assessments, reviewing customer plans to ensure that their equipment meets applicable standards, technical and commercial interactions with HONI, metering and telecommunication installations, physical connection work, and co-ordination with customer contractors or consultants.

b) No. The increase in work volumes is not different for exporting versus non-exporting DERs.

c) As of the end of December 2025, Alectra Utilities had 6,894 DERs connected across its service territory. By the end of 2031, Alectra Utilities forecasts that there will be 9,569 connected DERs across its service territory.

d) Customers that own DERs are charged for their connection-related costs in accordance with Alectra Utilities' approved connection policies and applicable regulatory requirements.

RESPONSES TO ENERGY PROBE RESEARCH FOUNDATION INTERROGATORIES

INTERROGATORY 2A-EP-9

Reference: Exhibit 2A Tab 1 Schedule 1 Appendix B09 - Information Technology Systems Page 364

Questions:

a) Please explain how school bus fleets use DERs

b) Are school bus fleet owners charged for the incremental cost of DERs serving them?

RESPONSE:

a) Grid Enablement: School Bus Fleets is also referred to as V2X Pilot. Electric school buses connected by a bi-directional charger to the grid function as the distributed energy resource (DER) itself. The buses are equipped with battery systems and power electronics that enable bidirectional power flow, allowing stored energy to be discharged from the vehicle back to the electricity system when required. In this configuration, the electric school bus itself serves as the DER, and no other DERs are required for its operation.

b) No. Under the V2X pilot, school bus fleet owners will be utilizing the bus itself as the DER. There will no incremental costs associated with other DERs serving them.

RESPONSES TO ENERGY PROBE RESEARCH FOUNDATION INTERROGATORIES

INTERROGATORY 2A-EP-10

Reference: Exhibit 2A Tab 1 Schedule 1 Appendix B09 - Information Technology Systems Page 365

Preamble: "Customer-sited DERs offer valuable flexibility and capacity for the distribution system. Efficient use of DERs enables load curtailment and shifting to off-peak periods, helping manage and defer 4 load growth within current limits until upgrades are made."

Questions:

a) What types of DERs are described in the quoted sentences?

b) Do all types of DERs offer the same amount of valuable flexibility and capacity? Please explain your answer.

RESPONSE:

a) The quoted sentences refer to customer-sited Distributed Energy Resources that can provide operational flexibility to the distribution system through load curtailment or load shifting. Consistent with Alectra Utilities' services-first, technology-neutral approach to Non-Wires Solutions, the DER types contemplated include any customer-sited resource capable of delivering the required service, including generation, energy storage, flexible or controllable load, and aggregated portfolios of such resources.

b) No. The flexibility and capacity of a DER depends on its specific performance characteristics, which vary by resource type, such as generation, energy storage, or load curtailment. These characteristics are influenced by factors such as availability and intermittency, the duration for which the resource can provide service, and the

mechanisms through which the resource can be dispatched or controlled. As a result, the value of a given DER for providing flexibility or capacity is context-specific and depends on the system need being addressed.

RESPONSES TO ENERGY PROBE RESEARCH FOUNDATION INTERROGATORIES

INTERROGATORY 3-EP-11

Reference: Exhibit 3, Tab 1, Schedule 1, Page 3 and Exhibit 2A, Tab 1, Schedule 1, 5.3.2 Overview of Assets Managed, Page 142

Preamble: "The second layer of Alectra Utilities' customer and load forecast accounts for anticipated impacts from EV adoption and building electrification. This component of the forecast reflects expected changes in electricity demand arising from the transition of buildings to electric end-uses and the increasing penetration of EVs. …. Additionally, building electrification is projected to be another contributing driver of load growth. To capture the associated impact, Alectra Utilities' System Planning Team developed Low, Medium, and High electrification uptake scenarios while Itron's forecast incorporates the Medium uptake scenario."

Questions:

a) Please list the assumptions regarding electrification, separating the impact of EVs from building electrification.

b) What forecast period assumptions did Alectra make regarding the increases in the total cost of heating with natural gas and the increases in the total cost of heating with electricity assuming the same level of building insulation.

c) There is no mention of loads from data centres. Are loads from any data centers included in the forecast?

RESPONSE:

a) Please refer to 3-EP-11_Attach 1_Electrification Assumptions, as prepared by Itron.

b) Alectra did not consider the pricing impact of heating with natural gas vs heating. Alectra Utilities' building electrification assumption was based on Municipal Energy plans. This developed scenario reflects the municipalities' vision to achieve net zero.

c) Please see 3-SEC-75.

3-EP-11

Attachment 1
Electrification Assumptions

Please see live Excel