

## **Ontario Energy Board**

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

**AND IN THE MATTER OF** the Application by Alectra  
Utilities for 2020 Electricity Distribution Rates.

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**Energy Probe Research Foundation**

**Interrogatories to Alectra Utilities**

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**July 29, 2019**

## EP-1

**References.:** Exhibit 1, Tab 3, Schedule 1, Page 5, Figure 2: Long-Term System Renewal Trends; Exhibit 2, Tab 1, Schedule 2, Page 1

**Preamble:** “While the predecessor capital plans were appropriate for those utilities, the DSP is based on the needs of the entire Alectra Utilities distribution system, and its operation as a single utility. The DSP supports the effective and efficient planning of capital expenditures across Alectra Utilities’ entire service area. *As such, the DSP is not based on historical capital budgets of the predecessor utilities*, rather it was developed from identified investment needs using a common and uniform Asset Management Framework.”

### Question:

- a) Clarify if the approvals sought are for the DSP (green line) or Partial Funding (purple line).
- b) Indicate the annual and total differences in capital for DSP and PF scenarios for the period 2019-2024.
- c) Please provide a version of Figure 2 showing in bar chart form, the ACA- based capital requirement by former utility and post-merger rate zone from 2019-2024 (as applicable). Please add percentages.
- d) Please also provide a Table that shows the ACA capital breakdowns corresponding to the chart.
- e) Please insert a table row showing the approved annual and total Capital Plan from each of the approved DSPs prior to merger, add a row that shows actual capital spend in each of the years and provide explanatory notes and references.
- f) Please explain in detail the basis of the “surge” in Alectra Capital starting in 2027/28.

## EP-2

**Reference:** Exhibit 1, Tab 3, Schedule 1, Page 5

**Preamble:** The Alectra RZs will continue on their current rate plan terms until such terms expire. Under those plans, Alectra Utilities is permitted to apply for: a) inflationary increases to rates, adjusted for an efficiency factor; and b) funding of incremental discrete capital projects through the Incremental Capital Module (“ICM”) mechanism.

### Question:

- a) Please provide a forecast of the capital that would have been available under the current Rate Plans 2020-2024
- b) Please provide a table that compares the Status Quo (capital under an ICM) to the current request for each sub-utility/RZ and for Alectra over the period 2020-2024

### EP-3

**References:** Exhibit 2, Tab 1, Schedule 1, Page 4; Exhibit 2, Tab 1, Schedule 3, Page 5

**Preamble:** (1) “The OEB determined that the ICM is unable to accommodate many of the investments needed to maintain Alectra Utilities’ distribution system. *In particular, ICM funding is not available for “typical annual capital programs” or smaller projects that do not on their own meet an undefined, secondary materiality threshold. The cumulative cost for these types of necessary investments is significant,* and the lack of funding for such work through rates. is having a material impact on Alectra Utilities’ distribution system.” (EB-2017-0024, Decision and Order, April 6, 2018, p. 30.)

(2) “Custom IR is not a rate setting option available to Alectra Utilities during the rebasing deferral period. Further, the RRF framework was set several years prior to the update to the MAADs framework and related rate making in that context. However, the company’s evolving capital needs are analogous to those distributors whose capital programs have been funded through Custom IR frameworks, accepted by the OEB.”

#### **Question:**

- a) Does Alectra agree, or not, that the current application seeks approval of a Custom IRM Plan? Please Discuss.
- b) Please explain why Alectra is filing a CIR Plan without rebasing, include the precedential aspects of this request.
- c) In support of Alectra’s position set out at Exhibit 2 Tab 1 Schedule 3 Page 6, please provide the relevant extracts of the Board’s guidelines and filing requirements and precedent decisions.
- d) Did Alectra petition the Board following the MAADs decisions to request that it be allowed to file a CIR Plan without rebasing? Please provide copies of the relevant documents, including the Board response/direction.

### EP-4

**References.:** Exhibit 2, Tab 1, Schedule 2, Page 3, Consolidated DSP; Exhibit 04, Tab 01, Schedule 01, 5.2.3 Performance Measurement for Continuous Improvement, pages 108 and 110

**Preamble:** “Alectra Utilities has experienced declining levels of reliability, both in terms of frequency and duration of outages, which are unacceptable to the company and its customers. The leading cause of this trend is defective equipment; specifically, failures of underground direct-buried cable and cable accessories. Mitigating such reliability and customer impacts through the renewal of deteriorated underground systems is a key focus for this DSP and represents approximately 25% of the capital expenditure plan.”

#### **Question:**

- a) Please provide in chart and table form, the Historic System Reliability Indices for each Sub- Utility/RZ and the Alectra aggregate for 2018.
- b) For each utility/RZ please provide the historic (including 2018) Cause Codes for SAIFI and SAIDI.
- c) Please position both the former utilities/RZs and Alectra in the Ontario SAIDI and SAIFI cohorts indicating positioning by quartile for each. Attached are Charts with 2017 data from EB-2018-0165 Toronto Hydro evidence, to assist with the response.
- d) Please provide the historic and 2018 data for Momentary Interruptions. (MAIFI).
- e) Please provide the MAIFI Cause Codes for 2018.
- f) Please confirm the targets related to improved SR (SAIFI, SAIDI, MAIFI) during the term of the DSP, assuming funding is available under the requested M factor.
- g) Why is Alectra indicating “Maintain” given the worsening reliability Trends? Discuss how this relates to Customer Preferences identified in the customer surveys. (“Innovative Research's overall finding was that, despite price concerns, customers are generally willing to consider paying more to maintain a reliable system.” Page 142)

***Attachment to EP-4 System Reliability Extract from IRR Toronto Hydro***

*Toronto Hydro-Electric System Limited  
EB-2018-0165  
Interrogatory Responses  
U-EP-64  
FILED: June 11, 2019*

***RESPONSES TO ENERGY 1 PROBE RESEARCH FOUNDATION***

***INTERROGATORIES***

***INTERROGATORY 64:***

***Reference(s): Exhibit U, Tab 1B, Schedule 1, p. 4, 2.10 System Reliability:***

***SAIDI/SAIFI***

***Preamble:***

*“Toronto Hydro achieved improvements in both SAIDI and SAIFI in 2018. SAIDI was measured at 0.81, which is a reduction from the 0.91 in 2017 and 2016. SAIFI in 2018 reduced to 1.14 versus the 1.18 in 2017 and 1.28 in 2016.”*

- a) At a high level please provide a short narrative with the reasons that SAIDI and SAIFI (CAIDI) have improved over 2015-2018 period, including system renewal investment.*
- b) Please comment if TH is an average performer relative to its Ontario peer group, and if system reliability will continue to improve, given continuing investment over the 2020-2024 CIR Plan Period?*
- c) Please confirm that TH provided 2020-2024 reliability projections/outlook to PSE and PEG for their Econometric models.*
- d) Please provide a copy of this projection/outlook.*
- e) Please comment if the reliability improvement in 2018 is material relative to the projection/outlook provided to PSE and PEG.*

**RESPONSE:**

*a) As illustrated in Exhibit U, Tab 1B, Schedule 1, pages 23 and 24 (in Figures 16 and 17), reliability performance has improved over the 2015-2018 period. For example, after excluding major event days (i.e. MEDs) and loss of supply (i.e. LOS), SAIFI and SAIDI have improved by an average of approximately 4 percent and 6 percent respectively each year. Although some of the improvement can be attributed to reductions in contributions from cause codes such as Adverse Environment, Human Element, and Scheduled Outages, the majority of the improvement is attributed to reductions in interruptions caused by Defective Equipment.*

*The reductions in Defective Equipment interruptions have been achieved predominantly through investment in System Renewal. Between 2015 and 2018, Toronto Hydro invested \$1,066 million in this category of capital expenditures. Although \$204 million of this was for Reactive Capital, the remainder was directed to planned investments that addressed aging, deteriorated, and obsolete assets that posed elevated reliability (and other) risks. (Please see Exhibit U, Tab 2, Schedule 2, at pages 9 and 16 for Tables 9 and 15 for expenditure details between 2015 and 2018.)*

*With respect to 2018, please note that although SAIFI and SAIDI results bettered 2015-2017 results, they benefited from performances in some areas that are considered to be anomalies. For example, SAIFI benefited from its best performance in the past 15 years for the cause codes of Lightning and Scheduled Outages. Within the Defective Equipment cause code, contributions from assets such as non-direct buried cables, overhead insulators, and poles were lower than expected and are also considered to be anomalies.*

*b) The following two graphs compare the SAIFI and SAIDI performance <sup>1</sup> (excluding Loss of Supply and Major Event Days) of Toronto Hydro to the other Ontario utilities using OEB RRR data for the most recently available year, 2017. The charts highlight Toronto Hydro's performance in orange, other utilities that serve the Greater Toronto Area (GTA) in green, and the remaining utilities in grey. Toronto Hydro's reliability performance is worse than average for SAIFI (i.e. third quartile) and better than average for SAIDI (i.e. second quartile) when compared to all other Ontario utilities.*

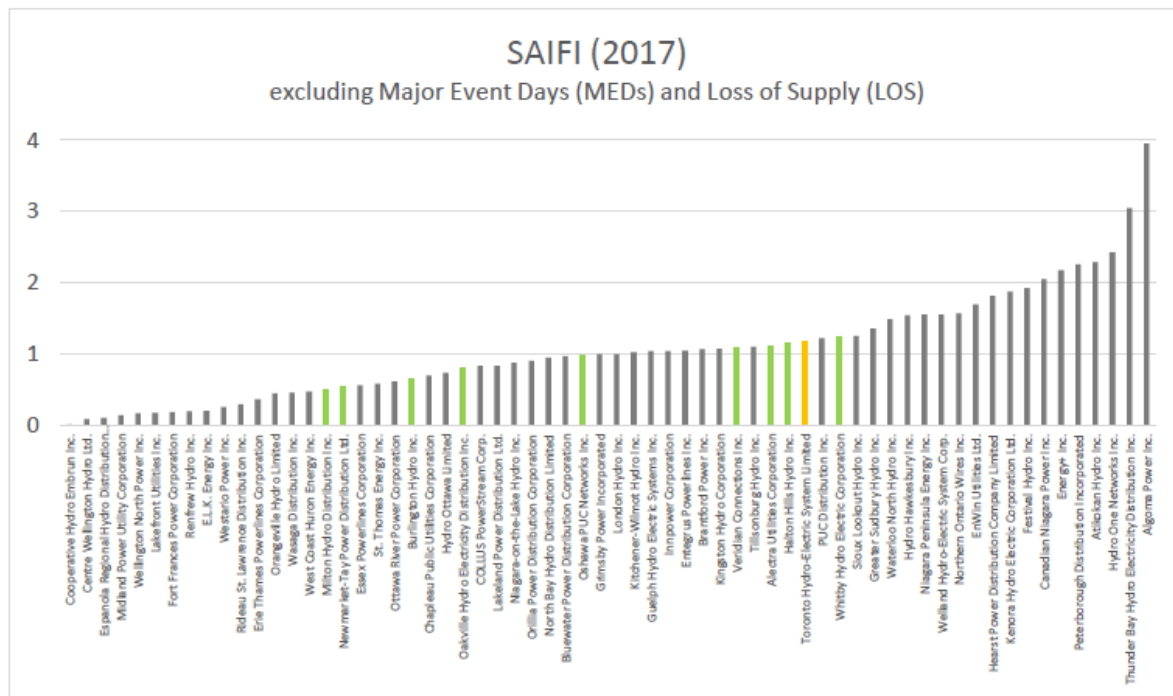


Figure 1: 2017 SAIFI (excluding MEDs and LoS)

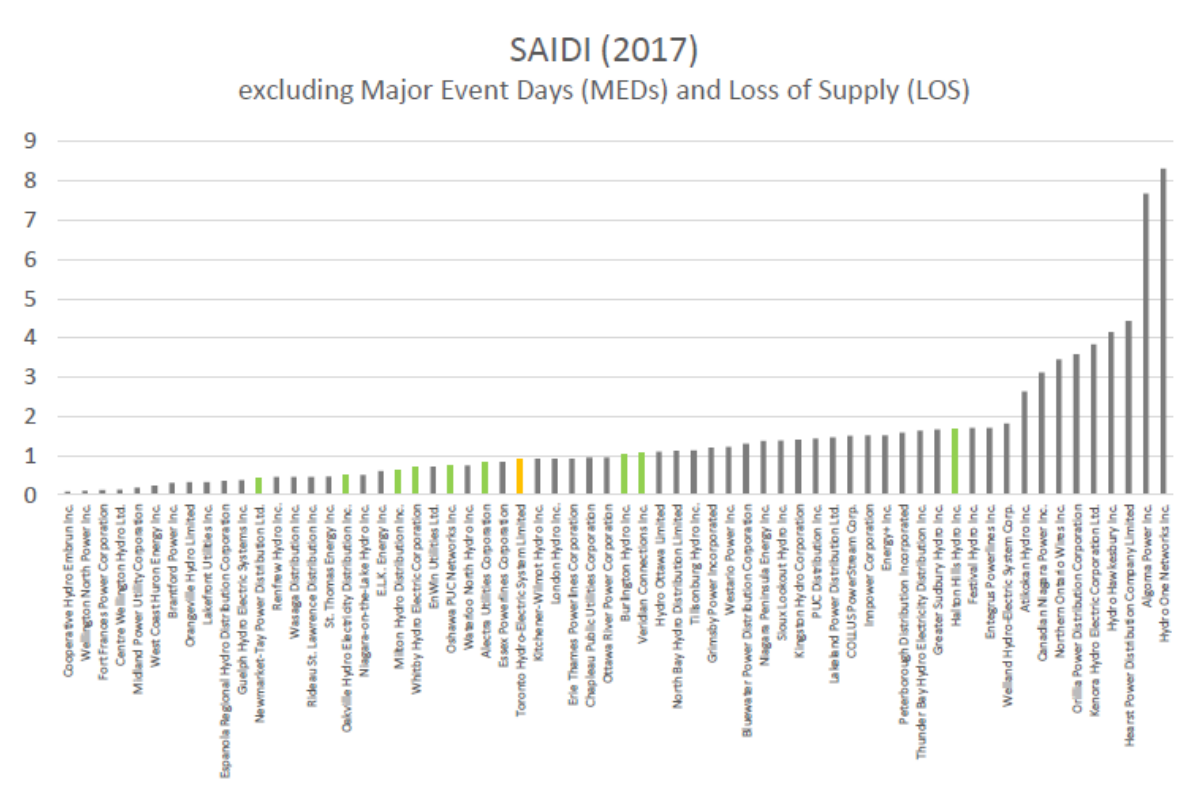


Figure 2: 2017 SAIDI (excluding MEDs and LoS)

*These findings are directionally similar to the findings in PSE's reliability benchmarking study, which used an econometric approach to compare Toronto Hydro to a broader set of U.S. utilities. That study found that Toronto Hydro is worse than its predicted benchmark on SAIFI performance and better than its benchmark on SAIDI performance.*

*The results above do not speak to the customer's perspective on Toronto Hydro's reliability performance and whether that performance aligns with customer priorities. As explained in Exhibit 2B, Section E2.3.1, feedback received during the first phase of customer engagement indicated that the average customer was satisfied with current reliability performance. Customer priorities were to keep distribution price increases to what is necessary to maintain long-term performance for customers experiencing average or better reliability service, and improve service levels for customers experiencing below average service. In response to this feedback, Toronto Hydro designed a plan that would achieve these objectives.*

*As illustrated in Toronto Hydro's response to U-SEC-105, Toronto Hydro does not expect continued improvement in SAIDI and SAIFI results through the 2020-2024 period. As detailed throughout the DSP, the utility has relied on various indicators of future asset performance (e.g. asset health) and other indicators of system need (e.g. weather and climate analyses) to develop an expenditure plan that is paced to prevent asset failure risk from increasing over the period (e.g. by seeking to maintain the number of assets in HI4 and HI5 condition). Toronto Hydro is generally not planning to invest at a pace that will reduce asset failure risk from current levels, with a few exceptions for areas where risk accumulation has reached unacceptably high levels (e.g. Stations Renewal). In addition, the utility used its Reliability Projection methodology – which compiles asset demographics data, historical reliability performance, and planned program investments – to guide the development of the proposed plan and ultimately ensure that the proposed investment program would be of the right pace and mix to sustain system reliability. The results of this analysis are shown at Exhibit 2B, Section E2, Figures 8 and 9.*

*Toronto Hydro's proposed increase in total capital expenditures relative to the 2015-2019 period is necessary to deliver not only on its proposed reliability outcomes, but also to manage a number of other critical needs and objectives that drive material investment requirements. Some examples are provided below...*

## **EP-5**

**Reference.:** Exhibit 2, Tab 1, Schedule 2, Page 11

**Preamble:** "Details on the customer engagement process are set out in Sections 5.2.1, 5.3.1 and 5.4.1 of the DSP, and the impact that customer input had on specific investment categories is described in the respective capital narratives provided as appendices to Section 5.4.3 of the DSP."

**Question:**



What information was provided in the customer survey regarding system reliability relative to the other Ontario utilities? Please provide a copy of the specific data/information for each class surveyed.

#### **EP-6**

**Reference.:** Exhibit 2, Tab 1, Schedule 6, Page 1

**Preamble:** "...for the purposes of the ESM calculation, the representative approved OEB ROE for Alectra Utilities would be calculated using the weighted average, weighted by the OEB-approved rate base amounts for each RZ (from the most recent OEB-approved rebasing application for each predecessor company) as at the time of Alectra Utilities' formation in 2017."

#### **Question:**

- a) Since the ESM proposal is based on a weighted average, what happens if one RZ exceeds 300 BP ROE and the others do not? Does Alectra agree, or not, that sharing among Rate Zones would result in cross subsidies. Please discuss from a fairness/ratemaking perspective.
- b) Confirm that 300 BP is the normal off-ramp trigger under IRM. How does this work with the ESM?

#### **EP-7**

**Reference:** EB-2014-0219 Decision, Page 13, Section 4.1.1, The Adoption of the "Discrete" Project Criterion

**Preamble:** "The Board is of the view that projects proposed for incremental capital funding during the IR term must be discrete projects, and not part of typical annual capital programs. This would apply to both ACMs and ICMs going forward."

#### **Question:**

- a) Assuming that Alectra could implement the DSP under the ACM policy, please discuss which elements of the 2020-2024 DSP meet the noted criterion from the ACM/ICM Report as opposed to "not part of typical annual programs."
- b) Please list the specific projects that qualify under the "discrete projects" criterion.

#### **EP-8**

**Reference:** Exhibit 2, Tab 1, Schedule 3, Page 4, and Exhibit 4, Tab 1, Schedule 1, page 6

#### **Question:**

- a) Please confirm that XLPE cable is not unique to Alectra and that a number of other utilities also have it.



- b) Please file a repair vs replace discounted cash flow analysis of XLPE cable, listing all assumptions. If such an analysis does not exist, please explain why not.
- c) Why is there a large reduction in “good condition” cable length in year 25?
- d) Why does the cable suddenly become “poor” in year 32 and “very poor” in year 36?
- e) How many kilometers of XLPE cable has Alectra and each of its predecessor utilities replaced each year for the past 5 years? Please provide the length for each utility, the cost per year and the cost per kilometer.
- f) Please provide the cost for each of the next 5 years that Alectra proposes to spend on XLPE cable replacement and the length in km per year that Alectra proposes to replace.

#### **EP-9**

**References:** EB-2014-0219 Decision, Page 18, Section 4.2; Exhibit 2, Tab 1, Schedule 4, Page 4, Table 17; Exhibit 04, Tab 01, Schedule 01, Appendix A03 - Road Authority and Transit Projects; Exhibit 4, Appendix B, Material Investment Business Cases, page 10, Road Authority Projects

**Preamble:** “Distributors must also include a discussion on any offsets associated with each incremental project for which ACM or ICM treatment is proposed due to revenue to be generated through other means (e.g. customer contributions in aid of construction), at the time of the cost of service application, along with an estimate of the revenue requirement impact associated with those offsets.”

#### **Question:**

- a) Please provide a list of qualified projects from the DSP and show for each rate zone, date in service, gross capital and net capital with estimated offset contributions, such as CIAC.
- b) List by rate zone, the Transit Projects and other Municipal Projects that require deferral or changes to the DSP. Please discuss management of the impacts of these projects.
- c) Please explain in detail how the revenue requirement impacts associated with the externally driven projects flow through the “EDCVA” to the rate riders?
- d) Please list each YRRT relocation project with the amount spent to date and the forecast amount.
- e) In the EB-2018-0016 proceeding Alectra stated that it considers York Region Rapid Transit a Road Authority under the Public Service Works in Highways act and that as a result YRRT is only paying approximately 50% of Alectra’s relocation costs for YRRT projects. During the EB-2018-0165 Proceeding Toronto Hydro stated that Toronto Hydro does not consider Metrolinx to be a Road Authority under the act and that as a result,

Metrolinx is paying 100% of Toronto Hydro's relocation costs for the Eglinton Crosstown project. Has Alectra requested YRRT to pay 100% of relocation costs? If not, why not?

**EP-10**

**Reference:** Exhibit 2, Tab 1, Schedule 4, Page 12

**Question:**

- a) Please file the CDM Wind Down Resource Plan.
- b) Please provide a table of total CDM FTEs and total CDM headcount, listing permanent, part time and contract employees, and average compensation per employee, and severance per employee.

**EP-11**

**Reference:** Exhibit 04, Tab 01, Schedule 01, Page 3

**Question:**

- a) Please provide numerical evidence to support the claim that Alectra has experienced declining levels of reliability.
- b) Please provide a table of causes of reliability decline with numerical impact of each cause.

**EP-12**

**References:** EB-2014-0219 Decision, Page 24, Section 7.1.5 Rate Riders; Exhibit 2, Tab 1, Schedule 3, Page 17; Exhibit 5, Attachment 3

**Preamble:**

"Distributors must file the calculation supporting the proposed rate riders to recover the incremental revenue from each applicable customer class, and the rationale for the proposed approach."

**Question:**

- a) Please provide expanded explanations for the Rate Zone Allocation Methodology.
- b) Please confirm that for each Rate Zone, the Capex under the Tab "Summary by RZ" is based on the DSP.
- c) Based on the Tab showing the RZ Capex please provide the ISAs for each rate zone.

- d) Please explain in detail what assets are included in “Multiple” e.g. Is this Back Office Capital, IT etc.?
- e) What is the basis of the allocation factors for “Multiple” to each Rate Zone? List the allocation factors such as revenue, rate base etc. and the weightings for each.
- f) Please show how “Multiple” is allocated to the rate classes in each RZ.

### **EP-13**

**References:** Exhibit 2, Tab 1, Schedule 4, Page 7; EB-2014-0219 Decision, Page 25, Section 7.3

**Preamble:** “The EDCVA would operate symmetrically, such that the revenue requirement associated with any prudent expenditures in excess of the level reflected in rates would be recoverable by the Applicant, and any excess funding in rates would be refundable to customers in a future proceeding. Carrying charges would apply to the opening balances in the account at the OEB-approved rate.”

#### **Question:**

- a) Does Alectra expect to add/delete projects or change project timing/pacing from the approved DSP during the Rebasing Period? If so what mechanism is there to review such changes?
- b) How frequently will the EDCVA balances be reviewed and disposed of?

### **EP-14**

**References:** Exhibit 2, Tab 1, Schedule 4, Page 7; EB-2014-0219 Decision, Page 25, Section 7.3

**Preamble:** The EDCVA would operate symmetrically, such that the revenue requirement associated with any prudent expenditures in excess of the level reflected in rates would be recoverable by the Applicant, and any excess funding in rates would be refundable to customers in a future proceeding. Carrying charges would apply to the opening balances in the account at the OEB-approved rate.

#### **Question:**

- a) Does Alectra expect to add/delete projects or change project timing/pacing from the approved DSP during the Rebasing Period? If so what mechanism is there to review such changes?
- b) How frequently will the EDCVA balances be reviewed and disposed of?

### **EP-15**

**Reference:** Exhibit 3, Tab 1, Schedule 2, Page 2, Table 24

**Preamble:** “Alectra Utilities and the Parties reached a Settlement Agreement on the ESM for the Horizon Utilities RZ. The Parties agreed that the allocation of costs between Alectra Utilities’ rate zones to determine the Horizon Utilities RZ ESM for 2017; and the interaction between the calculation and the change in capitalization policy, should be deferred to the 2020 EDR Application proceeding.”

**Question:**

Alectra’s ESM proposal assumes the proposed change in capitalization policy is approved by the Board. Please show the earnings sharing if the change in capitalization policy is not approved.

**EP-16**

**Reference:** Exhibit 3, Tab 1, Schedule 4, Page 1

**Preamble:** “The Stretch Factor assignments for 2020 IRM filers have not yet been updated by the Board. Alectra Utilities has used a Stretch Factor of 0.3% in this Application, in accordance with the most recent PEG Report, issued on August 23, 2018. The August 2018 Report placed Alectra Utilities in Group III for the purpose of calculating stretch factors for 2019.”

**Question:**

- a) Please provide a highlighted extract from the 2018 PEG report that provides the rankings for the former utilities/RZs, including Guelph Hydro and for Alectra plus the cohorts for each.
- b) Please provide a Table that shows the Total Cost Benchmark as determined by PEG for each Utility/RZ and for Alectra.

**EP-17**

**Reference:** Exhibit 3, Tab 1, Schedule 10, Page 3

**Preamble:** Alectra Utilities has relied on the most recent and appropriate final CDM evaluation report from the IESO in support of the lost revenue calculation. The IESO’s Final Annual Verified Results for 2017 is filed as Attachment 34.

**Question:**

- a) With regard to the RZ Load Forecasts, please discuss how Alectra addresses 2020 with no further reporting by the IESO and CDM Programs being eliminated or uploaded 2018/2019.
- b) Please file the current approved Rate Zone and class Load forecasts underlying 2020 rates, including the CDM forecast for 2020.
- c) Discuss the basis of the 2020 CDM forecasts including Persistence from prior years.

**EP-18**

**Reference:** Exhibit 3, Tab 1, Schedule 12, Page 1

**Question:**

- a) Please provide for 2020 a table and/or spreadsheet showing the costs allocated to each rate class in each RZ, the forecast revenue and a calculation of the class revenue to cost ratios.
- b) Please confirm that Street Lighting lies outside the Board's R/C ratio guidelines in the Horizon RZ. How is Alectra proposing to remedy this?
- c) Who are the street lighting service providers in each Rate Zone? Please provide a list and indicate if they are an affiliate or not.

**EP-19**

**Reference:** Exhibit 04, Tab 01, Schedule 01, 5.2.3 Performance Measurement for Continuous Improvement, page 100

**Preamble:** Table 5.2.3 - 2(A): Finance: Cost Control Custom Performance Measure indicates that Historical (2018) performance was 84% and the 2020 – 2024 Target is 100%.

**Question:**

- a) Please provide the calculation that supports the 84% performance measure.
- b) Please explain the 100% target. Would a target be achieved if 100% of the budget was spent for a particular project but the project did not deliver the expected benefits in reliability improvement?

**EP-20**

**Reference:** Exhibit 04, Tab 01, Schedule 01, 5.2.3 Performance Measurement for Continuous Improvement, page 101

**Preamble:** "Since Alectra Utilities' Planned Capital Project Completed measure was developed in 2019, there are no historical measures available. Alectra Utilities will measure and track its Planned Capital Projects Completed levels using the performance measure over the duration of the DSP implementation period to establish a baseline from which it may in future propose a target." The quoted statement seems to indicate that Alectra expects that it will not complete many capital projects.

**Question:**

Why should the OEB be satisfied with poor project completion performance by Alectra?

**EP-21**

**Reference:** Exhibit 04, Tab 01, Schedule 01, 5.2.3 Performance Measurement for Continuous Improvement, pages 122 and 123

**Preamble:** “The CPI and SPI are new measures introduced after the formation of Alectra Utilities. Therefore, the requisite five years of historical data are not available. Alectra Utilities will measure and track its work execution DSP-specific performance measure over the duration of the DSP implementation period to establish a baseline from which it may in future propose a target.”

**Question:**

- a) Please provide numerical examples of how the Cost Performance Index (CPI) and the Schedule Performance Index (SPI) are calculated.
- b) Did Alectra or its legacy distributors track cost and schedule performance of its capital projects? If the answer is yes, for each legacy distributor please provide data on cost and schedule performance of capital projects. If the answer is no, please explain why.
- c) Should the OEB impose a target for Alectra that all projects be completed on budget and on schedule? Please explain your answer.

**EP-22**

**Reference:** Exhibit 04, Tab 01, Schedule 01, Page 3, York Hill/ Hilda cable replacement project

**Question:**

- a) What is the budget of the York Hill/ Hilda cable replacement project and how much has been spent to date?
- b) When did the project start?
- c) What is the cost per metre of the replacement project?
- d) Please provide discounted cash flow repair vs replace analysis of the York Hill/ Hilda cable replacement project.

**EP-23**

**Reference:** Exhibit 04, Tab 01, Schedule 01, Page 5

**Question:**

- a) Please explain what Alectra means when it refers to “secure funding” and how it differs from a series of blank cheques.
- b) Is Alectra claiming that the OEB’s 4GIRM does not allow for “secure funding” of capital projects.

**EP-24**

**Reference:** Exhibit 04, Tab 01, Schedule 01, Page 8

**Question:**

- a) When did Downtown Mississauga start intensifying?
- b) Is Alectra claiming that it needs “secure funding” to connect 6 buildings?
- c) If the answer to (b) is yes, please provide a numerical analysis to support the claim that demonstrates that rates paid by the owners or occupants of the 6 buildings are inadequate to fund the connection.

**EP-25**

**References:** Exhibit 04, Tab 01, Schedule 01, Pages 11 and 12

**Question:**

- a) Are Alectra’s annual capital needs far greater than the combined capital needs of the legacy utilities prior to the 2017 amalgamation? If the answer is yes, please
- b) Please provide a numerical analysis that demonstrates that Alectra’s revenues together with productivity savings from amalgamation are insufficient to fund capital needs.
- c) Considering that amalgamation was approved less than two years ago, why has Alectra given up so soon on finding productivity and efficiency savings that could be used as a source of funds for capital projects?

**EP-26**

**Reference:** Exhibit 04, Tab 01, Schedule 01, Page 13

**Preamble:** “Should Alectra Utilities not receive sufficient funds to implement the renewal as proposed in this DSP, Alectra Utilities will have to defer essential system renewal investments which are projected to have a significant negative impact on reliability.” Alectra’s message to the OEB appears to be a classic shakedown threat: give us the money or reliability gets it.

**Question:**

- a) Why does Alectra believe that the OEB would respond favourably to a shakedown threat?
- b) Please provide a numerical analysis that supports the claim that reliability would decrease by 50% over the next 5 years and by a further 112% over the next 10 years.



- c) Please provide a 10 year projection of SAIDI, SAIFI and MAIFI under each scenario.

**EP-27**

**Reference:** Exhibit 04, Tab 01, Schedule 01, Page 67, Figure 5.2.2-6

**Question:**

Please explain the reason for the sharp reduction in 2019 summer peak demand and the sharp increase in 2020 summer peak demand.

**EP-28**

**Reference:** Exhibit 04, Tab 01, Schedule 01, Appendix A07, Rear Lot Conversion, Page 15

**Preamble:** “Historical expenditures between 2015 and 2019 total \$17.1 MM. There were no expenditures in 2018 as rear lot projects were dropped to due to mandatory work related to requests from road authorities. There are four projects which will be completed in 2019 at a cost of \$5.1 MM.”

**Question:**

- a) Are rear lot conversion projects considered low priority projects that can be deferred due to lack of resources?
- b) Please explain the reasons for the sharp reduction in planned capital expenditures on rear lot conversion in 2021 and 2022 and the large increase in 2024.
- c) Please file a discounted cash flow repair vs replace analysis of the \$19.9 million 2020-2024 capital expenditure on rear lot conversion projects.

**EP-29**

**Reference:** Exhibit 4, Tab 1, Schedule 1, Appendix B, pages 26 to 28

**Question:**

- a) Which legacy utility authored a Distribution Automation report?
- b) Please file a copy of the referenced Distribution Automation report.
- c) Why is there a sharp drop in spending on distribution automation in 2019?

**EP-30**

**Reference:** Exhibit 04, Tab 01, Schedule 01, Appendix A16, Distributed Energy Resources (“DER”) Integration, Page 2

**Preamble:** “Alectra Utilities may be able to lower the energy costs for the entire customer base by proactively managing DER in such a way that incremental infrastructure cost upgrades to safeguard the grid from DER adoption or power quality issues are mitigated.”

Considering that this is new technology there is a significant possibility that Alectra may not be able to lower energy costs for its entire customer base.

**Question:**

- a) When should the OEB conduct a review of actual costs and actual benefits to evaluate the success of Alectra’s costs of integrating DERs?
- b) If such a review finds that costs are greater than benefits should the OEB hold Alectra accountable and disallow all or a portion of the costs?

**EP-31**

**Reference:** Exhibit 04, Tab 01, Schedule 01, Appendix A16, Distributed Energy Resources (“DER) Integration, Page 9

**Preamble:** “Potential Risks to Reliability: With increased DER adoption, the effect of these resources presents certain reliability challenges that require careful understanding and measured actions. This leads to a need for further study to better understand the impacts, and how those effects can be included in planning and operation of the distribution system.”

**Question:**

- a) When should the OEB review the impact of Alectra’s integration of DERs on Alectra’s reliability performance?
- b) If the OEB finds that reliability has been adversely affected by DER integration, what should the OEB do?

**EP-32**

**Reference:** Exhibit 04, Tab 01, Schedule 01, Appendix A16, Distributed Energy Resources (“DER) Integration, Page 23

**Preamble:** “Option 2 maximizes the number of DERs connected to the network before power quality and capacity limitations constrain the connection of new DERs - provides greater energy choices for our customers who wish to consume and generate their own electricity while remaining connected to the network.

**Question:**

- a) Please explain when and how would Alectra assess the “power quality and capacity limitations”?
- b) What reliability metrics capacity metrics would Alectra use in its assessment?

- c) How low would Alectra allow reliability to drop before it constrains DERs?

**EP-33**

**Reference:** Exhibit 04, Tab 01, Schedule 01, Appendix A16, Distributed Energy Resources (“DER”) Integration, Page 23

**Question:**

a) What is a “DER Control Platform”? Please provide a detailed breakdown of its \$1.6 million cost estimate.

b) What is a “Smart DER Platform”? How is it different from other DER platforms that are not smart? Please provide a breakdown of the \$2.4 million cost estimate.

**EP-34**

**References:** Exhibit 4, Appendix B, Business Cases

**Question:**

- a) Please file a table listing all business cases filed in Appendix B with the cost of each project indicating which projects are mandatory such that cost is no object and which projects are discretionary and can be deferred if Alectra is short of funds.

Respectfully submitted,

Roger Higgin and Tom Ladanyi  
Consultants to Energy Probe