

## **Ontario Energy Board**

**IN THE MATTER OF** the *Ontario Energy Board Act, 1998*, Schedule B to the *Energy Competition Act, 1998*, S.O. 1998, c.15;

**AND IN THE MATTER OF** an Application by Toronto Hydro-Electric System Limited for an Order or Orders approving or fixing just and reasonable distribution rates and other charges, effective May 1, 2020 to December 31, 2024.

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**Energy Probe Research Foundation**

**Interrogatories to Pacific Economics Group**

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**March 29, 2019**

**M1-EP-1**

**Reference:** Exhibit M1 Page 38 Table 5

- a) Please clarify which Canadian/Ontario utilities were included in the sample of 83 utilities.
- b) How does the current Ontario data set differ from the prior PEG study presented in Toronto Hydro evidence at Exhibit 1B Tab 4 Schedule 3 (PEG Benchmarking Data).

**M1-EP-2**

**References:** Exhibit M1 Page 7 and Figure 2 and Page 43; Exhibit 1B Tab 4 Schedule 2 PSE Report Pages 4 and 15/16; Exhibit 1B Tab 4 Schedule 3 PEG Benchmarking Data

- a) Please confirm that PSE's results show Toronto Hydro Total Costs are 18.7% below the Peer Group Benchmark moving to 6% below in 2024 compared to the PEG Benchmark showing Toronto Hydro Cost Performance is 54% of above peer group.
- b) PEG concludes that during the term of the proposed plan, the Company's projected/proposed OM&A expenses would be about 12.1% *below* the model's predictions whereas the Company's capital cost would be about 43.0% *above* the predictions and capex would be about 21.7% above predictions. The results of these studies are summarized in Figures 1 and 2. Why is the result materially different from that presented in Exhibit 1B, Tab 4, Schedule 3 and from PSE? Please list and discuss the key points similar those on Page 43.
- c) Discuss which result (PEG or PSE) should ratepayers and the OEB use in setting the CIR rate plan and the X/stretch factor and list all of the reasons why the Board should adopt the PEG recommendation rather than PSE.

**Stretch Factor**

**M1-EP-3**

**Reference:** Exhibit M1 Page 9

**Preamble:** *"On the basis of our research, we believe that a 0.45% stretch factor is indicated for Toronto Hydro provided that the Board is comfortable fixing the stretch factor for the full plan term. Combined with a 0% base productivity factor, this would yield an X factor of 0.45%. The PCI formula would then be Inflation - 0.45% exclusive of Z or growth factors".*

- a) In the context of the RRFE, please provide more detail, why the results of PEG's analysis suggest the Toronto Hydro 2020-2024 CIR Plan should have a 0.45 stretch factor and an X factor of -0.45.

- b) Discuss the main reasons this differs from the PSE recommendation.
- c) If the actual revenue requirement and ROE during the term is lower or higher than allowed should there be an interim adjustment to the formula?

## **Reliability Benchmarking Econometric Models**

### **M1-EP-4**

**Reference:** Exhibit 1B Tab 4 Schedule 2 Page 44, Tables 2 & 3, Figures 2 & 3; EB-2014-0116 Exhibit B, Tab 2, Schedule 5, Table 15 and, Figures 4&5

**Preamble:** PSE States: *“We find that Toronto Hydro’s 2015-2017 average SAIFI is 47.2% above the benchmark value. Our research on Toronto Hydro’s 2015-2017 average CAIDI indicates that the reliability level is 63.4% below the benchmark value”.*

- a) Please provide a comparison summary table and bar chart with PEG and PSE results.
- b) Please comment on the accuracy of the two econometric reliability models.
- c) Does PEG believe econometric reliability models should be used in custom IR Plans or in all applications (transmission and distribution)?

## **DEFERRAL & VARIANCE ACCOUNTS**

### **M1-EP-5**

**Reference:** Exhibit M1, Page 13

**Preamble:** A Lost Revenue Adjustment would compensate the Company for load losses due to conservation and demand management (“CDM”) programs. Costs of CDM programs would continue to be funded by Ontario’s Independent Electricity System Operator rather than through rates.

The Government has announced plans to upload conservation programs to the Independent Electricity System Operator. What directional changes/adjustments would that require to the Toronto Hydro CIR Plan, including the LRAM and Load Forecast?

### **M1-EP-6**

**Reference:** Exhibit M1, Page 10

**Preamble:** *“The proposed ratemaking treatment of capital cost is problematic. Incentives to contain capex would be weakened by the CRRVA and the Externally-Driven Capital Variance Account. The Company is perversely incented to spend excessive amounts on capital that slows growth of OM&A expenses. Notwithstanding the CRRVA, the Company is still incentivized to exaggerate its need for supplemental revenue. The regulatory cost for the OEB and stakeholders is substantially raised and, ultimately, it is ratepayers who bear the burden of the capital cost increases.”*

As noted above, TH has proposed a CRRRVA account. PEG suggests, inter alia, this reduces the incentive to control Capital Expenditures. Does PEG agree/disagree that another approach could be an Account to adjust for timing of assets in service (ISAs)? Please comment on the merits of such an in-service assets deferral/variance account vs the proposed CRRRVA account, from a regulatory incentive perspective

## **Performance Targets 2020-2024F**

### **M1-EP-7**

**Reference:** Exhibit M1, Pages 14 and 16

**Preamble:** The Company has proposed to add 15 metrics to its existing performance scorecard and service quality reporting requirements. Each of these metrics would be associated with a goal, which may be to monitor, improve, or maintain performance. For each metric associated with the goal of maintaining or improving performance, Toronto Hydro's recent historical average performance was provided. The Company states that these targets are calibrated based on its proposed capital spending and that any change to this spending may affect the proposed targets.

Given the comments of the Board (OEB, Decision and Order EB-2014-0116, *op. cit.*, p. 6-7) Cited on Page 16 of the Evidence, does PEG have an opinion and/or comments on the TH Performance Targets, given its experience with other IRM CIR plans, including recently, Hydro Quebec Distribution and Hydro One Distribution? Specifically Energy Probe is interested in the appropriate baseline, qualitative targets vs quantitative, equal vs specific weighting and any other comments such as links to allowed return and ESM.

### **M1-EP-8**

**Reference:** Exhibit M1, Page 20

**Preamble:** *"PSE also benchmarked the Company's reliability. Econometric models were developed for the System Average Interruption Frequency Index ("SAIFI") and Customer Average Interruption Duration Index ("CAIDI") using U.S. data. These models control for various business conditions, such as forestation and undergrounding, which can affect reliability. The models were developed using data from utility reports to state regulators as well as form EIA 861 data.*

**Benchmarking work using these models suggests that the Company has long been an inferior SAIFI performer but a superior CAIDI performer and that these performances will not change much during the new plan."**

- a) Does PEG agree/disagree with this statement. Please Discuss.
- b) Please provide an opinion if ratepayers/customers should accept that reliability will not improve under the CIR plan and if improved reliability a desirable outcome of the Capital Plan

## **Alternative Cost Models**

### **M1-EP-9**

**Reference:** Exhibit M1, Page 26

- a) Please provide a multi-year projection of the Toronto Hydro revenue requirement in Excel Format using PEG's recommended econometric model, parameters and assumptions. Please provide explanatory notes.
- b) Please compare the results to those provided in PSE's evidence and comment on the main material drivers/differences (Inputs, Stretch Factor, Capital Factor etc.)

## **Alternative Reliability Models**

### **M1-EP-10**

**Reference:** Exhibit M1, Page 31/32, Tables 3 and 4

**Preamble:** *"PEG developed alternative econometric reliability models using the data provided by PSE in its working papers. We modelled CAIDI and SAIFI using business condition variables obtained from PSE and an additional weather variable that are pertinent to power distributor reliability performance. The sampled companies were the same. We extended the sample period to include 2017."*

- a) Please Confirm that Toronto Hydro has prepared a forecast of SAIFI and CAIDI for the CIR Plan period and provided this to PSE and PEG.
- b) Please compare the PEG and PSE econometric model results to the Toronto Hydro forecasts for 2018-2024 in tabular and graphic formats.