

## **ENERGY PROBE RESEARCH FOUNDATION INTERROGATORIES**

### **M1-EP-3**

**Reference:** Exhibit M1, page 16

**Preamble:** “Custom IR is not a multi-year cost of service; explicit financial incentives for continuous improvement and cost control targets must be included in the application.”

### **Interrogatory:**

- a) In PEG’s opinion, has Hydro One Transmission included in its application “*explicit financial incentives for continuous improvement and cost control targets*” for capital projects? Please explain your answer.
- b) Does the Custom IR proposed by Hydro One Transmission have the required incentives that would result in improved productivity in the execution of capital projects?

**Response to EP-3:** The following response was provided by PEG.

- a) PEG believes that the financial incentives for continuous improvement in capital cost management would be unusually weak under its proposed plan. A hybrid regulatory system is proposed that effectively combines a revenue cap index for OM&A with cost of service regulation for capital revenue. As is common under cost of service regulation, the capital revenue requirement would reflect Hydro One’s proposal, adjusted for any disallowances. Since an X factor of zero is proposed, there would be no mechanistic markdown of the growth of capital revenue. The Company would recover 98% of its approved capex cost should it elect to spend these sums. Supplemental revenue for capex could be obtained via Y factors and Z factors, and these would not have materiality threshold dead bands. Revenue requirement growth not eligible for Y or Z factor treatment which exceeds that approved would not be funded. However, this is also a challenge with cost of service regulation. There would be a perverse incentive to substitute capex for operation and maintenance expenses. The proposed system violates the spirit of the Board’s Custom IR guidelines if not their letter.
- b) Please see the response to part a).

**M1-EP-6**

**Reference:** Exhibit M1, Page 39

**Preamble:** “We believe that the **-0.25%** trend in the MFP of the U.S. power transmission industry which we calculated for our full 1996-2016 sample period is a reasonable base productivity trend for Hydro One.”

**Interrogatory:**

- a) Is this the first time that PEG has recommended a negative base productivity in Ontario? Please discuss, including regulatory considerations.
- b) What are the implications for 4GIRM? Is it time to update the base analysis?

**Response to EP-6:** The following response was provided by PEG.

- a) No. PEG recommended a negative base transmission industry productivity trend in the Hydro One Sault Ste. Marie proceeding (EB-2018-0218). We also found a negative Ontario distribution industry productivity trend in our work on 4GIRM, but recommended a base productivity trend of zero.
- b) A negative base productivity trend could, in PEG’s view, also make sense for power distributors if it was strongly supported by statistical research. This would reduce the need for supplemental capital revenue. However, there is no consensus presently that the industry productivity trend has recently been negative. Recent research by PEG for the Attorney General of Massachusetts has found the MFP trend of U.S. power distributors to be positive.

We believe that there is some merit to new research on the appropriate X factors for Ontario power distributors. The most recent research on the productivity trends of most Ontario distributors was done in conjunction with the Hydro One distribution Custom IR proceeding (EB-2017-0049). PSE and PEG both provided evidence of MFP trends ending in 2015. Our work in that proceeding, which was of preliminary character, suggested that the MFP trend of Ontario distributors was approximately zero or slightly positive. The uncertainty of this conclusion was due in part to issues which were not resolved in that proceeding.

The transition to IFRS accounting was the most prominent of these issues. The change in the accounting policy for capitalized overheads could not be quantified for all companies. This IFRS accounting change caused many distributors to expense costs that were previously capitalized. This had the effect of raising OM&A cost without a full contemporaneous offset to capital cost, as the majority of capital cost accounting savings will be realized in the future. This had a negative impact on TFP growth. We believe that the best way to address these issues would be in the context of an OEB-sponsored study in which the distributors could be required to provide the data necessary to analyze this and other issues in a standardized manner.

Renewed attention to U.S. power distributor productivity trends (last considered by the OEB for 3GIRM) may also be warranted since U.S. experience is pertinent and there may be fewer data problems.

**M1-EP-7**

**Reference:** Exhibit M1, Page 39

**Preamble:** “We disagree with PSE’s 0.0% stretch factor recommendation, which is based on the contentions that an explicit stretch factor is not warranted given Hydro One’s superior cost performance and that there is a large implicit stretch factor in the 0.0% base productivity trend.”

**Interrogatory:**

- a) Why is the 4GIRM an appropriate stretch factor reference for Transmission?
- b) Please show the sensitivity of the stretch factor to the cost benchmark. i.e. if the Hydro One Total Cost is at or below the benchmark by – 0.0, 2.5, 5, 7.5 and 10%.

**Response to EP-7:** The following response was provided by PEG.

- a) We believe that there is an inadequate record in this proceeding to support a relationship between benchmarking results and stretch factors that differs from that approved by the Board for 4GIRM. However, a new relationship merits consideration in future proceedings as we discuss further in our response to SEC-2 (Exhibit L1/Tab 4/Schedule 2).
- b) We propose that Hydro One’s stretch factor bear the same relationship to the total cost benchmarking score as in 4GIRM.

<b>Score (%)</b>	<b>Stretch (%)</b>
-10.0	0.15
-7.5	0.30
-5.0	0.30
-2.5	0.30
0.0	0.30
2.5	0.30
5.0	0.30
7.5	0.30
10.0	0.45