

## 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 an Application by Hydro One  
Sault Ste. Marie Inc. on behalf of Hydro One Sault Ste.  
Marie Limited Partnership for an Order or Orders pursuant  
to section 78 of the Ontario Energy Board Act, 1998 for 2019  
transmission rates and related matters.**

### **Additional Interrogatory of Energy Probe**

**November 22, 2018**

Energy Probe has reconsidered its approach to confidential interrogatories and has decided to follow the approach followed by OEB Staff. The additional interrogatory is written so that it does not disclose confidential information. Like OEB Staff, Energy Probe understands that it may be necessary for the Applicant to request confidential treatment for all or part of its responses to the questions in this interrogatory.

#### **D1-EP-29**

**Reference:** Exhibit D, Tab 1, Schedule 1, Attachment 1 (the “PSE Report”), pages 45 and 46

**Preamble:** The PSE Report states that the average annual rate of Industry TFP growth was - 1.71% for the study period 2004-2016 and -2.40% for the period 2010-2016 (Table 12, p.46).

**Question:**

- a. Please explain how the Industry TFP Index was calculated. For example, is it an average of the utility-specific indexes or has it been calculated from aggregated output and input quantity data calculated from the data on the firms in its sample?
- b. Please indicate which of the working papers that PSE has provided on a confidential basis contains the names of the variables shown in the SST spreadsheet that is part of the Excel workbook named “Final Dataset and Tables Used”.
- c. Please provide the Excel formulas that PSE has used to calculate numerical values in the cells of the SST spreadsheet that is part of the Excel workbook named “Final Dataset and Tables Used”. If these Excel formulae have already been provided on a confidential basis, please indicate what working paper(s) they are located in.
- d. Please confirm/disconfirm that the annual TFP index values for Hydro One and the 48 utilities in the sample is the variable “tpfi” in column AJ of the SST spreadsheet that is part of the Excel workbook named “Final Dataset and Tables Used”.
- e. Please confirm/disconfirm that the TFP growth rates by utility and by year in the industry sample can be calculated based on the data for “tpfi” in Column AJ of the SST spreadsheet that is part of the Excel workbook named “Final Dataset and Tables Used”.
- f. Please confirm/disconfirm that (i) the arithmetic average of the 552 observations of annual TFP growth in the sample is -1.775%, (ii) the median is -1.596%, (iii) the standard deviation is 7.9407 percentage points and (iv) a conventional one-sample t-test (2-tailed, 5% significance) shows that the sample average is statistically significant