EB-2016-0160

**ONTARIO ENERGY BOARD**

**IN THE MATTER OF *the Ontario Energy Board Act, 1998* (“Act”);**

**AND IN THE MATTER OF an Application by Hydro One Networks Inc. for an order or orders made pursuant to section 78 of the Act approving rates for the transmission of electricity.**

# Written Questions from Technical Conference

# UNDERTAKING NO. TCJ2.20

# Energy Probe Research Foundation

September 24, 2016

**EB-2016-0160 Hydro One Transmission Rates 2017-2018**

Written TC Questions Energy Probe Research Foundation

UNDERTAKING NO. TCJ2.20

**References**

**Exhibit I Tab 11 Schedule 2 IRR Parts a) and d)**

**Exhibit I, Tab 1, Schedule 15**

**Exhibit B1, Tab 2, Schedule 2, Attachment 2,**

**Exhibit A Tab 3 Schedule 1 Table 2 page 7**

**Exhibit B1 Tab2 Schedule 7 Table 6 Page 15.**

**Exhibit B1 Tab3 Schedule 1 Page 1 Table 1**

**Exhibit I Tab 11 Schedule 2 IRR Parts a) and d)**

**Response:**

Part a) The Reliability Risk Model provides an outcome measure to gauge the impact of investments on future transmission system reliability. It assesses the replacement impact of 3 asset types (i.e., lines, breakers and transformers) that are the most influential to reliability. In order to9 answer this interrogatory, numerous revisions to Hydro One’s investment plan would be required to determine the mixture of asset replacements required to reach the decrease in

reliability risk over the various time periods requested. The request would require

unreasonable effort to address in the timeframe available.

However, evidence regarding scenario comparison has been provided with this application.

Please refer to **Exhibit I, Tab 1, Schedule 15** for additional information.

d) Yes, Hydro One evaluated alternative investment scenarios, which were discussed as part of

 the customer engagement included in **Exhibit B1, Tab 2, Schedule 2, Attachment 2,**

 Transmission Customer Engagement: Investing for The Future, Page 23. Three indicative

 investment scenarios over a 5 year planning period were discussed.

**Respective reliability risk associated with Scenario 1, 2 and 3 are increased by 9%, increased by 2% and reduced by 10%.**

1. **What does the Risk Reliability Model -cover just Sustainment Capital as indicated in response to part a) or any other classes of Capital Investment as well e.g. Control Centre?**

**Of the 3 Investment Scenarios Attachment 2, Ipsos Report page 24 presented to the Consultation Exhibit B1, Tab 2, Schedule 2, it says on Page 14**

**“**the majority of participants would be willing to support the investment required to at least maintain the current level of reliability risk. The general sentiment, overall, was that the right balance between reliability risk and rates is somewhere between Illustrative Scenario 2 (6.3% rate increase for an essentially unchanged reliability risk) and Scenario 3 (6.8%rate increase for approximately 10% improvement in reliability risk).”

**2. Which (Sustaining?) Investment Scenario and Rate Increase presented in the Consultation is closest to**

 **a) the participant’s expressed preference and**

 **b) Hydro One proposal Preferred Scenario as shown Table 2**

**Include Investment amount 2016-2020 and associated average “Rate Increase”.**

**3. The Process for Optimization of the Capital Plan and Investment Portfolio (B1Tab 3 Schedule 1Page 1) using the Risk Reliability Model is shown at Exhibit B1 Tab2 Schedule 7 Table 6 Page 15.**

**How are the “asks” for each of the 5 major Capital Investment categories balanced particularly with the pressure for Sustaining reliability-related investments**

**Specifically we would like to understand where and approximately how the trade-offs were made in the other 4 areas of Capital Investment to accommodate the $400-500 million increased investments for Reliability.**

**Please provide illustrative high level Budgets for each step of the optimization process Exhibit B1 Tab2 Schedule 7 Table 6 Page 15.**