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BY EMAIL

May 8, 2018

Kirsten Walli **Board Secretary** Ontario Energy Board 2300 Yonge Street, 27th Floor Toronto, ON M4P 1E4

Dear Ms. Walli:

Ontario Energy Board (OEB) Staff Interrogatories Application for leave to construct Transmission Facilities by Hydro One Networks Inc. **OEB File Number - EB-2018-0098**

In accordance with Procedural Order No. 1, please find attached OEB staff's interrogatories in the above noted proceeding. Hydro One Networks Inc. (Hydro One) has been copied on this filing. Hydro One's responses to interrogatories are due by May 23, 2018.

All of which is respectfully submitted.

Original signed by

Michael Lesychyn Case Manager

Encl.

Ontario Energy Board (OEB) Staff Interrogatories

APPLICATION FOR LEAVE TO CONSTRUCT A TRANSMISSION LINE AND RELATED FACILITIES BY HYDRO ONE NETWORKS INC. (APPLICANT OR HYDRO ONE)

EB-2018-0098

May 8, 2018

Interrogatory No. 1: Description of Need

References: Ex. B/Tab. 3/Schedule 1, pg. 4

Preamble:

Hydro One's evidence states:

This project is required to address capacity and voltage performance needs that emerge due to the expiry of local generation facilities' contracts. Once the contracts expire, these generation facilities can no longer be relied on to meet local needs. The project need date is June 2020.

- a) Please confirm the contracts expiry date is June 2020. Is there a provision within the agreement for emergency service past the contract expiry date?
- b) Did the IESO considered negotiating a new long term supply contract with the generator at the existing supply level? If not why not? If this alternative was considered, please explain why it was rejected.

Interrogatory No. 2: The Recommended Project

References: Ex. B/Tab. 3/Schedule 1, pg. 6, Ex. B/Tab 6/Schedule 1, pg. 1

Preamble:

On page 6 of Exhibit B, Tab 3, Schedule 1, Attachment 1, Section 4, the IESO recommends that circuit H9K between Carmichael Falls JCT and Spruce Falls JCT be upgraded to a minimum of 310 A, whereas on page 1 of Exhibit Tab 6, Schedule 1, Hydro One indicates the thermal limits on the circuit will be increased to a minimum summer continuous rating of 370 A.

Questions:

- a) Please explain the apparent discrepancy between the two ratings. Please confirm Hydro One is proposing to upgrade the circuit beyond the IESO's recommended rating.
- b) If Hydro One is proposing to upgrade the circuit to 370 A, what is the cost impact over the IESO recommended upgrade rating of 310 A?

Interrogatory No. 3: Alternatives

References: Ex. B/Tab. 3/Schedule 1, Attachment 1, section 5, pg. 8

Preamble:

The IESO's evidence states:

Based on the above, Option 1 was determined to be the least-cost option for meeting the capacity and voltage performance needs in the Area.

Additionally, Option 1 is preferable to a new generation facility because any new generation facility would only be required to meet the need for the 10 to 15-year interim period between contract expiry of local generation facilities and the end-of-life replacement of the 32 km section of circuit H9K. This period is shorter than a typical contract period for a similar new facility.

Question:

a) How would the cost of signing a short term supply agreement (e.g. 5 years with the existing generator), thus reducing the advancement cost, compare to Option 1? Please provide a cost estimate for this type of solution.

Interrogatory No. 4: Project Classification and Categorization

References: Exhibit B/Tab. 4/Schedule 1, pg 1, line 23; pg. 2, line 14

Preamble:

Hydro One's evidence states:

The Board's filing guidelines require that projects be categorized to distinguish between a project that is a "must-do", which is beyond the control of the applicant ("non-discretionary"), from a project that is at the discretion of the applicant ("discretionary")...Based upon the above criteria, the Project is considered non-discretionary.

Question:

a) If the IESO manages to sign a new short term agreement with the existing generator, would the project shift to being "discretionary" during the length of the new short term agreement?

Interrogatory No. 5: Apportioning Project Cost & Risks

References: Exhibit B/Tab. 7/Schedule 1, Table 1

- a) Hydro One has estimated the contingency cost to be \$700,000, which is 4.6% of the total cost for the line work of \$15,065,000. How did Hydro One establish that \$700,000 is an appropriate contingency amount? What is the contingency amount for station work?
- b) Why did Hydro One not break down the station work into cost components similar to how the line work is presented? E.g. Materials, Labour, Overheads, etc. Please provide the cost breakdown similar to how the line work is presented in Table 1.

Interrogatory No. 6: Risks and Contingencies

References: Exhibit B/Tab. 7/Schedule 1, pg. 2

Preamble:

Hydro One has identified the top three project risks as: Resource shortage, Outage constraints, and Aggressive timelines.

Questions:

- a) Why does Hydro One not consider weather as a potential risk factor, considering the geographical location of the proposed work?
- b) Is there a risk that the IESO could pursue a supply option after the project has been initiated, therefore making this project unnecessary? Please elaborate.

Interrogatory No. 7: Costs of Comparable Projects

References: Exhibit B/Tab. 7/Schedule 1, page 3, line 9

Preamble:

Hydro One's evidence states:

The comparable lines project, D2L Dymond x Upper Notch Junction was a line refurbishment project from Dymond TS to Upper Notch JCT Structure 261.

- a) Is the D2L Dymond X Upper Notch Junction the only comparable recent line project that Hydro One has completed within the last 10 years? Please provide the data for two other line project comparables, if available.
- b) What other station projects, similar to the 10 MVAR reactive and 10 MVAR capacitive projects have been completed recently by Hydro One? Please provide a comparative cost breakdown for these projects.

Interrogatory No. 8: Line Physical Design

References: Exhibit C/Tab. 1/Schedule 1, pg. 3

Preamble:

Hydro One's evidence states:

As documented, the 115kV H9K in the above sections is strung on wood poles. The existing conductor is 4/0 ACSR. The proposed 411.4kcmil ACSR/TW conductor is heavier and larger in diameter than 4/0 ACSR therefore some structures will need to be replaced to maintain adequate clearance. Additionally, some of the existing pole structures are in bad condition and need to be replaced.

- a) What is the number of total poles in the 32 km of circuit H9K that Hydro One is proposing to replace? Is Hydro One proposing to replace all poles in the circuit? If not what percentage of poles will be replaced?
- b) Has Hydro One completed engineering calculations to ensure that any remaining poles that are marginally fit poles have sufficient strength to hold up under heavy ice and snow loading?

Interrogatory No. 9: Land Matters

References: Exhibit E, /Tab 1/Schedule 1, pg.1

Preamble:

Hydro One's evidence states:

The existing transmission corridor crosses an estimated 104 parcels of land, which consists of:

- Hydro One fee simple ownership;
- Easement corridor over privately-owned and municipally-owned properties;
- Lands under the jurisdiction of the Ministry of Natural Resources and Forestry, which Hydro One holds a Master Land Use Permit for its transmission and distribution facilities;
- Crossings over highways under the jurisdiction of the Ministry of Transportation; and,
- Crossings over railways.

The proposed transmission facility work is not expected to have any impact on the rights of any adjacent properties.

- a) Has Hydro One approached any landowners to date? Have any landowners expressed any concerns with the proposed project and routing and, if so, please explain?
- b) Has Hydro One approached any landowners that will be impacted by temporary access rights to be used for construction staging, access, flagging and permitting? Have any of these landowners expressed any concerns with the temporary access rights? Will the temporary access rights require any environmental approvals? If so, please explain.
- c) Will temporary access rights for construction staging involve any First Nations' lands?
- d) Please confirm whether or not Hydro One intends to commence any construction work on the project prior to the completion of all land-related negotiations?

Interrogatory No. 10: Land Matters

References: Exhibit E, Tab 1, Schedule 1, Attachments 1 & 2, Forms Of Land Agreements

Preamble:

Hydro One's evidence states:

Copies of Off-Corridor Temporary Access and Temporary Access Road, Construction License Agreement for construction staging, and a Damage Claim Agreement and Release Form (which will be used as the basis for compensation related to construction impacts, such as crop or property damage) are included at the end of this schedule as **Attachments 1 through 3**.

Questions:

- a) Please confirm that all of the affected property owners had the option to receive, or will receive the option of, independent legal advice regarding executing the Land Agreements in Attachments 1 through 3 of Exhibit E. What is the current status of these agreements?
- Please describe the status of any permits that need to be updated with government ministries and railways for the proposed construction and stringing activities.

Interrogatory No. 11: Project Schedule

References: Exhibit. B/Tab. 11/Schedule 1, Construction and In-Service Schedule

Question:

 a) Please update the Project Schedule at the above reference if the schedule has changed.

Interrogatory No. 12: System Impact Assessment

References: Exhibit. F/Tab. 1/Schedule 1, System Impact Assessment (SIA)

Preamble:

Hydro One's evidence states:

Hydro One confirms that it will implement the requirements noted by the IESO in the SIA regarding the 32km line stretch from Spruce Falls to Carmichael Falls. Consistent with the IESO Evidence in Support of Need (provided in **Exhibit B, Tab 3, Schedule 1, Attachment 1**), there is no longer an identifiable need to complete the 0.3km stretch of line from Gemini Falls to H9K Structure and Hydro One will not be carrying out this work. There is no anticipated system impact.

Question:

a) Did the IESO issue an addendum to the SIA to indicate that the 0.3 km stretch of line from Gemini Falls to H9K Structure is no longer needed?

Interrogatory No. 13: Cost Responsibility

References: Exhibit. B/Tab. 9/Schedule 1, Rate Impact Assessment, Network Pool

Preamble:

Hydro One's evidence states:

Over a 25-year time horizon, this slight change in the network pool revenue requirement is not material enough to incrementally impact the Provincial Network rate, which was assessed at the approved \$3.59/kW/month. The maximum revenue shortfall related to the proposed network facilities will be \$1.53 million in the year 2026. The detailed analysis illustrating the calculation of the incremental network revenue shortfall and rate impact is provided in Table 1 below.

Question:

a) Table 1 indicates a shortfall for the entire 25 year time horizon ranging from \$1,043 M in year 2020 to a maximum in 2026 of \$1,529 M, to \$1,273 M in 2044. This represents a negative balance over the entire 25 year time horizon. How does Hydro One plan to recover this shortfall in 2020 and beyond?