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BY E-MAIL

December 17, 2018

Kirsten Walli
Board Secretary
Ontario Energy Board
2300 Yonge Street, 27th Floor
Toronto, ON M4P 1E4
BoardSec@oeb.ca

Dear Ms. Walli:

**Re: OEB Staff Interrogatories
Hydro One Networks Inc.
Côté Lake Mine Connection Project
OEB File No. EB-2018-0257**

In accordance with Procedural Order No. 1, please find attached OEB staff's interrogatories in the above proceeding.

Yours truly,

Original signed by

Ritchie Murray
Project Advisor

Cc (by email):

Linda Gibbons, regulatory@HydroOne.com
Michael Engelberg, mengelberg@HydroOne.com
Maia Chase, RegulatoryAffairs@ieso.ca

**HYDRO ONE NETWORKS INC.
CÔTÈ LAKE MINE CONNECTION PROJECT
EB-2018-0257**

OEB STAFF INTERROGATORIES

Interrogatory # 1

Ref: Exhibit B, Tab 1, Schedule 1, Attachment 1, p. 1-2
EB-2018-0191, Exhibit B, Tab 1, Schedule 1, Attachment 1

Preamble:

In the current application, Hydro One Networks Inc. (HONI) has applied to the Ontario Energy Board (OEB) for leave to construct the upgrade (in this case, the re-conductoring) of approximately 115 km of an idle 115 kV circuit, called T2R, as part of providing service to an open pit gold mine (Mine) approximately 200 km northwest of Sudbury (Project). The Mine is being developed by IAMGOLD Corporation (IAMGOLD). On December 6, 2018, the OEB granted IAMGOLD leave to construct approximately 44 km of 115 kV transmission line and associated facilities to serve the Mine. The IAMGOLD transmission line will be fed by the Project.

In its application, IAMGOLD provided a map that shows a 230 kV transmission line between the City of Timmins and the vicinity of the Mine.

Question:

Did Hydro One consider using the 230 kV transmission line as part of providing service to the Mine? If not, why not? If so, please explain why this alternative was ruled out.

Interrogatory # 2

Ref: Exhibit B, Tab 1, Schedule 1, pp. 2-3
Exhibit B, Tab 11, Schedule 1

Preamble:

In concert with the T2R upgrade, for efficiency, Hydro One will also refurbish circuit T61S – a 115 km 115 kV circuit that shares the same towers as T2R and currently serves HONI distribution and industrial / mining customers. Through laboratory testing, T61S has been confirmed to be at end of service life and at increased risk of failure.

The proposed in-service date for the Project (i.e., T2R upgrade) is August 2020, assuming the initiation of procurement activities in March 2019 and construction commencement in September 2019. The refurbished T61S circuit is planned to be in service in June 2021.

Question:

What are the risks associated with this interdependent project timeline, and what are the potential financial impacts on the overall T2R project budget?

Interrogatory # 3

Ref: Exhibit B, Tab 1, Schedule 1, p. 1
Exhibit E, Tab 1, Schedule 1, p. 1

Preamble:

Pursuant to the *Ontario Energy Board Act, 1998*, (OEB Act) HONI has applied under section 92 for leave to construct the Project and section 97 approval of the forms of land use agreement offered or to be offered to affected landowners.

The existing transmission corridor crosses an estimated 35 patented parcels of land, which consist of:

- Hydro One fee simple ownership
- Easement corridor over privately-owned and municipally-owned properties
- Lands under the jurisdiction of the MNRF
- Crossings over Municipal roads and highways [emphasis added]

Questions:

- a) Please explain why Hydro One is not also seeking approval under section 101 (1) of the OEB Act for the proposed upgrade of T2R and refurbishment of T61S that will involve crossing roads and highways?

- b) Please provide an update on negotiations for road crossing permits.

Interrogatory # 4

Ref: Exhibit B, Tab 3, Schedule 1, p. 1

Preamble:

To upgrade T2R, Hydro One will use the smallest standard size of conductor suitable for this range of application: 411 kcmil Aluminum Conductor Steel Reinforced (ACSR). This will provide supply capacity and will minimize the scope of any tower modifications required to accommodate the new conductor.

Questions:

- a) What is the difference in capacity between the existing and proposed conductor?
- b) Does the proposed conductor provide sufficient capacity for any future increases in load that maybe required to meet the supply needs of the Mine or new customer connections along the 115 Km of the T2R circuit?
- c) Is Hydro One aware of any proposed customer connections along the 115 km of the T2R circuit?

Interrogatory # 5

Ref: Exhibit B, Tab 6, Schedule 1, p. 2

Preamble:

By energizing T2R first, the subsequent T61S refurbishment work will have an alternate conductor to transfer load to, thereby minimizing the number and length of necessary outages to customers while re-conductoring work is completed. Additionally, other potential costs that would otherwise need to be incurred during construction will be avoided, such as the construction of a bypass line or installing diesel generation to maintain customer load requirements, had the T2R line not been energized beforehand.

Questions:

- a) The preamble above suggests that T2R will be in-service and supplying load

while the refurbishment work on T61S is underway. Is this correct? Please explain. Will outages of T2R be required to do work on T61S?

- b) What has been Hydro One's experience with scheduled outages during construction of similar projects in this area of the province? If there have been delays or cancellations of scheduled outages, what were the repercussions on both schedule and final costs?
- c) After the upgrade of T2R and the refurbishment of T61S, does Hydro One expect to use T61S as an alternative supply during planned or unplanned outages of T2R? If not, please explain Hydro One's outage management plan when T2R must be removed for service for planned or unplanned outages.
- d) Similarly, does Hydro One expect demand supplied by T61S to be able to use T2R as an alternative supply path during planned or unplanned outages of T61S?

Interrogatory # 6

Ref: Exhibit B, Tab 7, Schedule 1, pp. 2-3

Preamble:

The cost estimate and schedule assumes a Class EA Screening process of approximately eight months; however, there is a risk of the screening process to exceed that duration and the Project may be subject to a full Class EA.

Questions:

- a) What factors would result in the Class EA Screening process being bumped up to a full Class EA?
- b) If the Class EA Screening process were bumped up to a full Class EA, what would be the impact be on the project schedule, costs and in-service date for T2R? Could a bump up result in a delay in getting power to the Mine?

Interrogatory # 7

Ref: Exhibit B, Tab 7, Schedule 1, p. 3

Preamble:

A budgetary estimate with AACE Class 4 (-30% / +50%) level of accuracy was completed at the time the leave to construct application was filed. Until a detailed line inspection and a number of studies and surveys are completed, there is a risk of scope changes, including structural and foundation refurbishment, resulting in increased cost and a delayed in-service date.

Questions:

- a) When does Hydro One anticipate the line inspections, studies and surveys to be completed? If some or all have been completed, please summarize the findings to date.
- b) Has Hydro One encountered these types of scope changes for projects in this or other areas of the province? Please explain.
- c) Given the vintage of the circuits and towers, what is the probability of such an occurrence?
- d) If these types of scopes changes have been encountered before, what were the impacts on project schedules and costs?
- e) Please explain how IAMGOLD's contribution could change if actual costs are materially different than the current estimate.

Interrogatory # 8

Ref: Exhibit B, Tab 9, Schedule 1, pp. 1-2

Preamble:

The Mine was determined to meet the risk classification of a medium-high connection. Therefore, a 10-year discounted cash flow (DCF) analysis of both the line connection pool and network pool work was conducted consistent with the economic evaluation requirements of the Transmission System Code (TSC) to determine whether a capital contribution is required. The risk classification was determined in accordance with the methodology and requirements set out in Appendix 4 of the TSC and the Customer Risk Classification section of Section 2.5 Economic Evaluation Procedures of Hydro One's Transmission Connection Procedures.

For the Line pool, the DCF results show that this capacity enhancement project will have a negative net present value of \$23.4 million and will require a capital contribution of \$27.7 million from IAMGOLD. This DCF analysis is based on the

incremental estimated initial cost of \$31.7 million, plus the assumed impact on the future capital cost allowance and Hydro One corporate income tax.

Questions:

- a) Please explain why the Mine was determined to meet the risk classification of a medium-high connection.
- b) If the Mine was instead determined to be high risk and subject to a 5-year discounted cash flow analysis, what would the increase in capital contributions be for the line connections? Would there still be no need for a network connection capital contribution?
- c) In the event the Mine's risk level changed from medium-high to high risk during the 10 year economic evaluation period, does Hydro One have any measures in place to mitigate the economic or financial impact on the connection and network pools?
- d) In the event the mine should become insolvent during the 10-year economic evaluation period, how would Hydro One seek to recover the balance of the Mine's required capital contribution?

Interrogatory # 9

Ref: Exhibit C, Tab 2, Schedule 1, Attachments 1-3

Preamble:

Hydro One provided a map indicating the geographic location of the T2R and T61S circuits. The Mattagami First Nation (Mattagami Indian Reserve No. 71) is located adjacent to a portion of the circuits.

Question:

Is Hydro One required to conduct any indigenous consultations regarding the Project and, if so, what is the status of the consultations?

Interrogatory # 10

Ref: Exhibit E, Tab 1, Schedule 1, pp. 1-3

Preamble:

The Project will require additional right-of-way width for tapping structures. The connection will be on Ministry of Natural Resources and Forestry (MNRF) Crown land, and the additional width will be added to Hydro One's master Land Use Permit for Transmission.

Temporary construction needs, such as temporary work headquarters, off corridor access, material staging and laydown areas, will be licensed from landowners as needed to facilitate the refurbishment of the transmission line and connection to the Mine. Temporary rights will be acquired by Hydro One at mutually agreeable terms with the impacted property owners.

Questions:

- a) Please provide an update on the status of land use permits from MNRF.
- b) Please provide an update on negotiations with private land owners or claim holders impacted by the Project.
- c) Please identify and explain any land use requirements for the T61S refurbishment work that are not also required for the T2S upgrade work.

Interrogatory # 11

Ref: EB-2018-0191, Exhibit F, Tab 1, Schedule 1, Attachments 1

Preamble:

Several requirements in the Final System Impact Assessment (SIA) for IAMGOLD's transmission line are applicable to Hydro One rather than IAMGOLD.

Question:

Please confirm that Hydro One is aware of the SIA's requirements and is taking actions to address them.