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**BY EMAIL AND RESS**

April 21, 2022

Ms. Nancy Marconi  
Registrar  
Ontario Energy Board  
Suite 2700, 2300 Yonge Street  
P.O. Box 2319  
Toronto, ON M4P 1E4

Dear Ms. Marconi,

**EB-2020-0188 - Hydro One Networks Inc. Leave to Construct Application - Power Downtown Toronto  
LTC – Response to OEB letter**

This letter is in response to the letter and corresponding questions received by Hydro One on April 4, 2022 regarding the material changes to the Power Downtown Toronto Project (“the Project” or “the PDT Project”). This correspondence provides a response to each question posed and has been filed under the leave to construct docket for the PDT Project (EB-2020-0188) as well as the docket for Hydro One’s Joint Rate Application (EB-2021-0110) as requested by OEB Staff.

Sincerely,



Joanne Richardson

**1. What is the cause of the in-service delay?**

The delay to the in-service date is driven by the Request for Proposal process. Securing turnkey contractors for the project and aligning project activities based on contractors resourcing availability and internal resources took longer than anticipated. This resulted in modifications needed to the original proposed schedule provided in the leave to construction application (“LTC”). Hydro One has discussed the new schedule with the City of Toronto (“the City”) to confirm that the City can accommodate the use of 75 Elizabeth Street. The City is on-board with the project plan, contractors have been secured, and the sustainment project estimate and schedule are now considered an AACE Class 2 level given these developments.

**2. What is the cause of the cost increase?**

Relative to the AACE Class 3 estimate approved in the LTC, the approximately \$9.5M increase in cost forecast for project execution is predominantly driven by an increase to the license fee on land use predicated by a market increase in land value provided by Create TOs appraisal (an increase of more than \$4M). Other variables contributing to the cost forecast increase include \$3.5M of additional interest and overhead driven by the delay, and \$2.0M in minor estimate revisions driven by an increase in maturity of the design and workplan.

Overall, Hydro One highlights that the forecast cost to execute the Project remains within the acceptable AACE Class 3 range of the approved LTC estimate (+30%/-20%), and the forecast cost is now considered an AACE Class 2 estimate.

**3. In Hydro One and the IESO’s assessment, are changes required to the IESO SIA and Hydro One CIA because of the in-service delay?**

As there are no changes to the connection points or electrical/technical characteristics of the cables no additional updates are required to the Expedited SIA.

In accordance with the Market Rules, Hydro One received an Expedited System Impact Assessment (“SIA”) from the IESO for the PDT Project. The SIA was conducted by the IESO to determine the impact of the Project on the reliability of the integrated power system and to identify enhancements to the transmission system that would be required to mitigate any adverse reliability impacts caused by the Project. The IESO issued an Expedited SIA for the Project on the basis that the Project did not represent significant system changes and was not expected to have a major impact on the reliability of the integrated power system.

Additionally, prior to informing the OEB, Hydro One did notify the IESO of the new in-service date through a Project Status Report in late November of 2021 and no concerns have been expressed by the system operator. Similarly, Hydro One does not believe an update to the Customer Impact Assessment (“CIA”) is required. As documented in the Final CIA provided in evidence, the new cables will be routed in a different path than that of the existing cables. Therefore, no major outages are expected to impact the supply of customer’s load. The exact outage schedule will be made available during the execution phase of the project and will be established in consultation with load customers in the area. The outage

duration, if any, will be minimized and risk managed with proper outage planning and co-ordination. There is an insignificant increase in the fault level primarily at the Esplanade TS 115kV buses as a result of the cable replacement. The cable replacement work, once completed, will increase supply reliability for customers connected to these circuits as it reduces the chance of cable failure.

**4. In Hydro One and the IESO’s assessment, will the in-service delay impact supply reliability to Toronto given the advanced age of the existing cables?**

As provided at Exhibit B, Tab 4, Schedule 1 of EB-2020-0188, the PDT Project is a sustainment project to address end-of-life assets. While the new cables will be operated at 115 kV, they will be rated for 230 kV and will be able to accommodate high temporary overvoltages during fault conditions, reducing the likelihood of damage requiring repair and therefore improving long-term reliability. As indicated above, Hydro One has notified the IESO of the delay in the project’s in-service date and no concerns have been expressed by the system operator.

Hydro One does not expect a significant reliability impact due to the in-service delay since both Esplanade and Terauley TS are supplied by other circuits. Furthermore, it is rare that both circuits (i.e., C5E and C7E) would fail simultaneously. Typically, failures of joints, terminations and cables are limited to a single phase and do not affect adjacent phases or circuits. Hydro One will continue to monitor these cables for decline in condition and reliability.

**5. Does the estimated cost increase change the transmission alternative that Hydro One would have proposed?**

No, the PDT Project as filed is still the preferred transmission alternative. It is expected that the delay and cost increase that the PDT Project is incurring would also impact any feasible alternative in a similar fashion. In addition, the Project went through considerable public consultation prior to receiving Environmental Assessment (EA) acceptance and was selected as the preferred alternative based on various evaluation criteria. The PDT Project, as filed, remains the most cost-effective solution to address the need articulated in the leave to construct application.

**6. Has construction started?**

Yes, construction has started. Hydro One has completed:

1. Vacuum truck investigations of the in-ground constraints at Esplanade TS and Terauley TS
2. Environmental test wells for the Project
3. Geotechnical investigations of the tunnel route which includes drilling and taking core samples of the rock under the City streets
4. Issuing purchase orders for the tunnel construction and cable installation
5. Ordering cable raw materials through the cable installation contractor

In addition to the above, the Tunnel Contractor is progressing well with the re-build and modifications to the Tunnel Boring Machine. These modifications are required due to the project’s tunnel turning radius requirements. Photos of that work are provided as Attachment 1 for reference purposes.

**7. Is the update to the Power Downtown Project reflected in the update to Hydro One's Joint Rate Application?**

The JRAP application update reflected the impact of updated inflation assumptions on the as-filed investment plan's capital and OM&A for the JRAP period, and evidence updates for 2021 actual expenditures. PDT Project expenditures related to these updates were reflected in those totals (see EB-2021-0110 Exhibit O-01-02-02-01 for updated inflation assumptions to T-SR-18, and Exhibit O-02-1 for 2021 actual expenditures at the envelope and category level). The update did not include updated project-specific information.

The PDT Project is being impacted by a variety of external factors. Hydro One will leverage its redirection and reprioritization processes to manage its capital expenditures portfolio to respond to project specific needs as they arise.

## ATTACHMENT 1

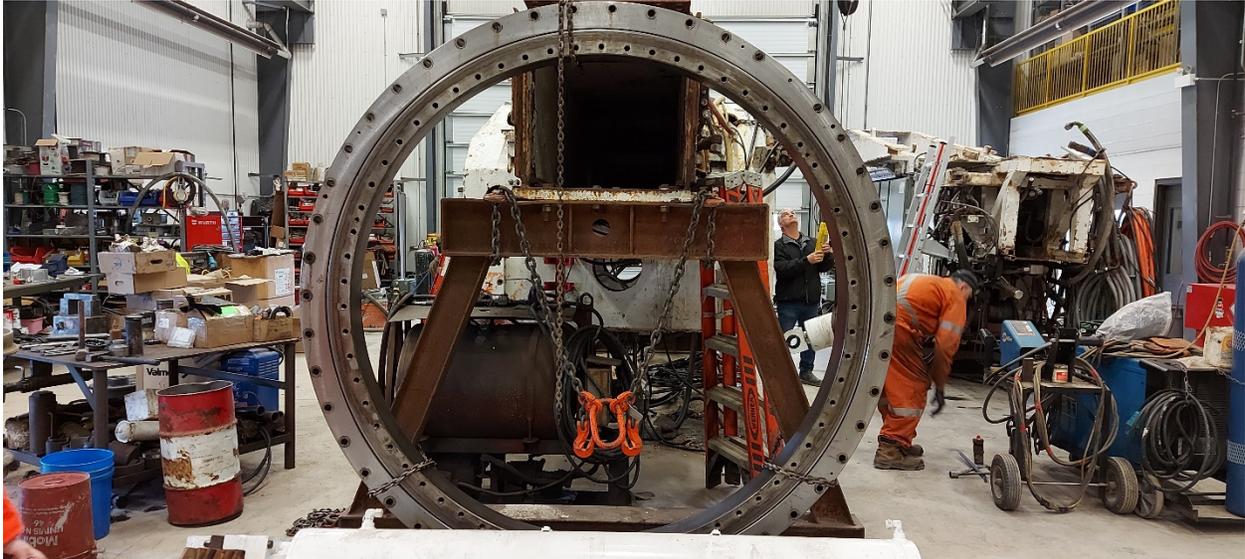
Boring Machine Head Rebuild:



Boring Head Drive Rebuild:



Boring Machine Main Bearing has been re-built:



Main Beam for the Tunnel Boring being re-built:

