May 3, 2022



Independent Electricity System Operator 1600-120 Adelaide Street West Toronto, ON M5H 1T1 t 416.967.7474

www.ieso.ca

Mr. Robert Reinmuller Director, Transmission Planning Hydro One Inc. 483 Bay Street, 13th Floor, North Tower Toronto, Ontario M5G 2P5

Dear Robert:

As per the Ontario Government's December 2013 Order in Council ("OIC") requiring Hydro One to develop and seek approvals for the Northwest Bulk Transmission Line (the "NWBL") according to the scope and timing recommended by the Independent Electricity System Operator ("IESO"), the IESO has updated its electrical demand forecast and the resulting needs for additional supply capacity in the area west of Thunder Bay (the "Region"). The purpose of this letter is to describe the updated supply capacity needs and the IESO's recommended highlevel scope and timing for the construction of the line.

Background

The NWBL was identified in the Government's 2013 and 2017 Long Term Energy Plans (the "LTEPs") as a priority project in order to:

- increase electricity supply to the region west of Thunder Bay;
- provide a means for new customers and growing loads to be served with clean and renewable sources that comprise Ontario's supply mix; and,
- enhance the potential for development and connection of renewable energy facilities.

The LTEPs divided the NWBL into three phases as shown in Figure 1:

- Phase 1 a line from Thunder Bay to Atikokan;
- Phase 2 a line from Atikokan to Dryden; and,
- Phase 3 a line from Dryden to the Manitoba border through Kenora.



Figure 1 – West of Thunder Bay Area and NWBL Phases

Following the 2013 LTEP, the Ontario Government issued an OIC, also in 2013, that amended Hydro One's license to develop and seek approval for the NWBL according to the scope and timing specified by the IESO.

In 2018, the IESO recommended that Hydro One commence development work (i.e., complete the Environmental Assessment) for Phase 1 and Phase 2 of the NWBL, between Thunder Bay and Atikokan, and Atikokan and Dryden, based on the timing of projected supply capacity needs and the risk of them materializing earlier. The IESO committed to ongoing monitoring to determine when construction of both Phase 1 and Phase 2 should begin and to confirm that they are the best course of action to meet the needs. Hydro One subsequently named Phase 1 and Phase 2 of the NWBL the Waasigan Transmission Line, hereafter called the "Project".

Scope and Timing for Construction

Since 2018, the IESO has updated the forecast in the Region and subsequently refreshed the supply capacity need dates. Figure 2 below shows the updated electrical demand forecast for the Region. Mining developments continue to be the main driver for growth. The demand forecast underpinning the latest update on the need for the Project includes mining growth assumptions informed by outreach and engagement with Indigenous and municipal communities and sector stakeholders as part of the ongoing Northwest Integrated Regional Resource Plan (IRRP). The update shows that under the reference demand forecast, Phase 1 is needed from 2025 onwards and Phase 2 is needed from 2026 to 2027 and uncertain thereafter. Although the need for Phase 2 is intermittent, the IESO recognizes the risks associated with demand forecast uncertainty and the potential for large industrial projects to add significant load to the Region utilizing the remaining capacity margin sooner than anticipated.



Figure 2 – West of Thunder Bay Electrical Demand Forecast

Given the timing of the needs, the range of possible growth scenarios, and the lead time for implementing solutions, the IESO recommends a staged approach for construction of the Project. Hydro One should construct the Project to meet near-term system capacity needs with Phase 1 being placed in-service as close to the end of 2025 as possible. Phase 1 continues to be the most cost effective option to meet the Region's supply capacity needs. The IESO will continue to monitor developments in the Region and provide the targeted in-service date for Phase 2; the IESO will provided an update on the timing of the need for Phase 2 at the beginning of Q2 2023, recognizing the Project lead-time. Hydro One will be required to manage the reasonable execution timing and staging of the Project for alignment with the in-service dates indicated by the IESO.

The IESO will provide support to Hydro One in obtaining Environmental Assessment and Ontario Energy Board approvals for the Project, as required.

Sincerely,

Ahmed Maria Director, Transmission Planning Independent Electricity System Operator

cc: Mr. Chuck Farmer, IESO Mr. Devon Huber, IESO