APPrO
ASSOCIATION OF POWER PRODUCERS OF ONTARIO

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Association of Power Producers of Ontario (APPrO) Submission: *Proposal to Support Critical Transmission Infrastructure in Northeast and Eastern Ontario*

Environmental Registry of Ontario, #019-7337
https://ero.ontario.ca/notice/019-7336

Introduction

The Association of Power Producers of Ontario ("APPrO") is pleased to offer its comments regarding *Supporting Critical Transmission Infrastructure in Northeast and Eastern Ontario* (ERO #019-7336).

APPrO is proud to have established itself as a leader in the industry, representing various power producers across Ontario. Founded in 1986, our member companies build, own, and operate power projects in Ontario, and produce most of Ontario's electricity from clean and renewable resources, including nuclear, hydroelectric, natural gas, biomass, wind, and solar energy.

APPrO's goal is the achievement of an economically and environmentally sustainable electricity sector in Ontario that supports the business interests of electricity suppliers, ratepayers, and the provincial economy. APPrO plays a leadership role in the formation of energy policy and rules to facilitate investment in sustainable supply and efficient pricing of electricity in Ontario.

APPrO Comments of the Ministry Proposal

The Ministry of Energy ("Ministry") is proposing to take certain actions to facilitate the timely development of three transmission projects across Northeast and Eastern Ontario. The proposed actions include:

1. Prioritizing Three Transmission Projects
2. Designating Hydro One as the Transmitter to Develop the Three Priority Projects

Electricity demand from the industrial sector in the Northeast and Eastern Ontario is forecast to grow at a rapid pace over the next 10 years, primarily driven by electrification initiatives and anticipated policies to reduce carbon emissions. In addition significant potential for new made-in-Ontario clean hydroelectric developments in the north has been identified. New additions to the transmission network will required to ensure that growing demand and new capacity can be accommodated.

On the other hand, the transmission development lifecycle identified by the IESO is between 4 to 10 years. This imposes significant risks to ensure the timely supply of required reliable, low-carbon electricity for these regions. Transmission improvements will also alleviate the challenges faced by outage planning and other availability impacts.

Further, the electric vehicle industry is expected to grow rapidly in Ontario, as witnessed recently by the announcement of the Stellantis and VW EV battery plants in Windsor and St. Thomas. This is the driving force in growing demand for critical minerals such as nickel and lithium. It is estimated that auto makers in Ontario could be building 400,000 electric and hybrid vehicles annually by 2030. Vehicles will be powered by batteries made in Ontario using minerals that have been extracted and processed in Northern Ontario.

These and other proposed developments can create jobs and growth throughout Ontario and especially in the North, and would bring about socioeconomic benefits to Indigenous communities along with significant regional economic growth.

Shortening the development timelines for large, long-lead time infrastructure projects has been identified as a significant energy transition development challenge. A flexible approach is advisable in order to have a transmission plan in place that can change with the demand forecast. There is an opportunity to identify and advance some transmission needs such that preliminary environmental assessments, design and stakeholder conversations can begin. This will ensure the process is fluid and preserves timelines required for a reliable system. Additionally, the development of an *Integrated Ontario Transmission Plan* that collects and links the various regional planning studies currently being done by the IESO into a focused and actionable plan should be undertaken by the IESO as part of its Annual Planning Outlook (APO), in concert with electricity stakeholders, including Ontario's Indigenous communities.

1. Prioritization of Three Transmission Projects

1. **The Mississagi to Third Line** – a 230-kilovolt transmission line that will run approximately 75 kilometers from Mississagi Transformer Station (west of Sudbury) to Third Line Transformer Station (Sault Ste. Marie); and

2. **The Hanmer to Mississagi** – a 500-kilovolt transmission line that will run approximately 205 kilometers from Hanmer Transformer Station (Greater Sudbury) to Mississagi Transformer Station (west of Sudbury);

3. **The Greater Toronto Area East** – a 230-kilovolt transmission line that will run approximately 50 kilometers from either Cherrywood Transformer Station (Pickering) or Clarington Transformer Station (Oshawa) into Dobbin Transformer Station (Peterborough)

APPrO supports the importance of accelerating all three projects.

The three enhancements/reinforcements proposed will also allow for reliably incorporating additional generation in the north and west of Sudbury regions.

The ERO Proposal Summary notes that the IESO has recommended that another transmission line be developed in northeastern Ontario: the **Wawa to Porcupine Line**. This project would entail a 230-kilovolt transmission line running 260 kilometers from Wawa Transformer Station (south of Wawa) to Porcupine Transformer Station (Timmins area).

APPrO supports the IESO recommendation that the Wawa to Porcupine Line should also be developed. In our view, these reinforcements would be a **minimum** in order to build the planned generation in the North and Northeast to meet future load requirements. Reinforcement of the existing Timmins X Sudbury 500KV corridor should also proceed.

Many of the needed investments above will be challenging to implement given their location within major load centres and populations. Appropriate environmental assessments will need to be undertaken as well as coordination of buildouts to ensure overloading of a line on one side of the GTA does not take place. Load supply issues will need to be taken into account. The upgrades being considered in this ERO should be flexible to accommodate any future buildouts.

A robust transmission grid is crucial, and this opportunity should also consider including the transmission requirements for multiple generation site buildouts to support electricity demand increases due to further economy-wide decarbonization efforts over the coming decades.

2. <u>Designating Hydro One as Transmitter to Develop the Three Priority Projects</u>

APPrO concurs with the Ministry that Hydro One, for a number of reasons, not least of which is its 50/50 Indigenous equity opportunity policy, would be the best transmitter to develop the three priority projects.

3. <u>Selecting transmitters in the future</u>

With respect to the Ministry engaging other interested transmitters and developing a formal transmitter selection framework in the future, APPrO recommends that, given the amount of future transmission work that will be needed, more than one transmitter must be considered. One alone will not be able to meet all of the work required to build a robust transmission grid, quite apart from the potential for best cost solutions for ratepayers arising from competitive processes.

As noted earlier, an *Integrated Ontario Transmission Plan* developed by the IESO should also be undertaken to provide clarity and line of sight on future needs.