Northwest Regional Electricity Planning Public webinar – December 8, 2020

Response to Feedback

The IESO hosted a public webinar on December 8, 2020 to provide an overview of Northwest regional electricity planning currently underway and to seek input to inform the Scoping Assessment Outcome Report which will define the scope, characteristics and timing to develop a long-term electricity plan. The meeting materials and recorded webinar are available on the engagement webpage along with the feedback received.

Feedback was received from the following parties and posted on the engagement webpage:

- Common Voice Northwest Energy Task Force
- Earthcare Thunder Bay
- Evolution Mining
- Impala Canada Ltd. – Lac des Iles Mine
- Municipality of Sioux Lookout
- Sioux Lookout Hydro
- Township of Ear Falls

The section below summarizes the themes that emerged from the feedback along with the IESO's response and how it was considered in this phase of regional planning.

Municipal Energy Planning and Economic Development

1. Feedback provider: Earthcare Thunder Bay

   Feedback: The City of Thunder Bay is currently developing a municipal energy plan (Community Energy and Emissions Plan; CEEP) with a community-wide target of net-zero greenhouse gas (GHG) emissions by 2050. The draft CEEP is scheduled to be completed January 2021. The CEEP will include 32 actions to reduce energy use and GHG emissions across community sectors. The actions include targets for the electrification of personal vehicles, public transit, and residential space heating, as well as local renewable energy generation. A five-year implementation cycle is proposed for the CEEP and may impact the electricity forecast for the Thunder Bay sub-region.

IESO response: Thank you for bringing this to the IESO's attention. The data gathering phase in the development of a long-term electricity plan - the Integrated Regional Resource Plan (IRRP) - will include a review of all available CEPs/CEEPs and, in particular, the initiatives contemplated that will have an impact on future electricity needs. Note that the IRRP also relies on local distribution companies (LDCs) to provide load forecasts for their service territories as part of their role in the Technical Working Group1. The IESO looks forward to working with the City of Thunder Bay and Synergy North in the IRRP phase.

2. Feedback provider: Earthcare Thunder Bay

   Feedback: To support local and provincial climate commitments the study should consider opportunities for low-carbon solutions and non-wires options to address any system needs. A climate lens should be applied during the assessment and evaluation of options for confirmed needs. This climate lens should explicitly address the GHG emissions associated with each proposed option in addition to the standard analysis that includes technical feasibility, economics, and reliability.

   IESO response: Non-wires alternatives will be considered as part of the analysis of options to meet the region's electricity needs identified in the IRRP process. Planning decisions and/or recommendations focus on cost and technical feasibility however, other factors as a result of community projects/priorities will also be invited and considered as part of this engagement. Note that GHG emissions are captured in the cost analysis with the inclusion of the federal carbon charge.

3. Feedback provider: Township of Ear Falls

   Feedback: It is important to the Township of Ear Falls in the long term to have access to a system that has the capability to expand to meet industrial growth. Industry, including large mining and forestry operations, comprise a large portion of our economic base, and if we do not have the capability to meet new industry power requirements it greatly impacts our ability to attract new investment into the community.

   IESO response: Thank you for your feedback. The IRRP will update the industrial load forecast and study the Dryden area system capability (including Ear Falls) to ensure that future needs can be met. New electricity infrastructure can have lengthy lead times so the IESO encourages all industrial customers to provide load forecasts and expansion plans as early as possible.

4. Feedback provider: Municipality of Sioux Lookout and Sioux Lookout Hydro

   Feedback: The Municipality of Sioux Lookout has been working diligently over the past seven years to attract commercial and industrial businesses development opportunities. Currently, we have two large commercial developments including Hillcrest Property, Bigwood Property and First Nation Partnerships (see feedback submission for more details). Sioux Lookout is constrained for

[1] The Northwest Technical Working Group consists of the five LDCs in the region (Synergy North, Atikokan Hydro, Sioux Lookout Hydro, Fort Francis Power Corp. and Hydro One (Distribution), the local transmitter and the IESO.

growing demand for the expansion of the community. The Northwestern Ontario Scoping Assessment noted that Sam Lake DS which serves the Municipality of Sioux Lookout "is already at capacity..."

There is significant pressure for more housing and a clear need for the community to expand the services it offers to the remote communities and development in the far north. Ensuring sufficient electrical load for both current identified demands as well as future requirements is essential and must be included in both future plans and implementation schemes.

IESO response: Thank you for your feedback. The IRRP relies on local distribution companies to provide load forecasts for their service territories. Sioux Lookout Hydro's forecast, along with other distributors in the Northwest region, will be refreshed at the beginning of the IRRP process to ensure that the latest information is captured.

The Needs Assessment recommended that the Sam Lake DS capacity need should be addressed through local planning between Sioux Lookout Hydro, Hydro One Distribution, and Hydro One Transmission since no upstream system voltage and flow violations were observed. The Scoping Assessment concurs with this recommendation. Engagement throughout the development of an IRRP will continue to monitor this item as local planning proceeds, invite input and look for opportunities to align with other reliability needs.

Reliability

5. Feedback provider: Municipality of Sioux Lookout and Sioux Lookout Hydro

Feedback: It is important to note that by electrifying 17 Far North communities (Watay) the growth and distribution of power will grow through the attraction and development of industry. Billions of dollars is going to be spent in the Far North to attract industry and socio and economic opportunities. Redundancy will be a major component to the success of this investment as we have seen numerous times in the region (Red Lake and Musselwhite).

Since Sioux Lookout is one of the communities fed by a radial feed, it is important to be able to have some redundancy in the event of a disaster such as a forest fire. Sioux Lookout Hydro feels that exploring a possible connection to the Watay Line as another source of power for the area to support redundancy and growth would be beneficial. The Watay Line runs to the east of the Town and is in closer proximity to where future developments are expected to materialize by the Municipality than the Sam Lake DS. Therefore, Sioux Lookout Hydro feels that the Sam Lake DS and/or a connection to the Watay line should be included in the scoping assessment for consideration.

We must emphasize that this is a regional project stretching far past Sioux Lookout's boundary and it will service Canada's largest economic development opportunity seen in decades.

IESO response: The IESO continues to monitor the demand forecast for remote communities connecting to new infrastructure as part of the Wataynikaneyap Transmission Project. The IESO welcomes municipalities and First Nation communities to continue to participate in regional planning and looks forward to collaborating in the IRRP.

The IRRP will study load security/restoration concerns particularly in areas with radial single-circuit supply. The K3D circuit supplying Sam Lake DS from Dryden TS is flagged in the Scoping Assessment report and will be included in this analysis. Note that, in this case, there is no violation of load security and restoration criteria but the Scoping Assessment recognizes that outages have high socio-economic costs for impacted communities. The IRRP will investigate cost-effective opportunities for incremental improvements where there is the potential for integration with other system needs.

Electricity Forecast

6. Feedback provider: Evolution Mining

   Feedback: Evolution Mining's Red Lake Operation was acquired from Newmont back in April 2020. As Evolution, the operation of the mine has been reassessed and it is anticipated the mine will operate at a lower grade and higher tonnage than in the past. This may increase power requirements for the site over the long term. While the forecast below is preliminary, it includes several new projects underway such as the portal beginning in March 2021 and changes to ventilation to support the new portal. (See feedback submission for detailed forecasted operational and demand changes.)

   IESO response: Thank you for the information. The forecast provided will be included in the IRRP's industrial load forecast update. Note that the focus of the IRRP is to ensure that regional infrastructure is adequate and will not specifically address local connection requests unless there is an opportunity to align with broader regional needs. Customers are responsible for their own application process for connecting new facilities or modifying existing facilities. More information can be found at: https://www.ieso.ca/en/Sector-Participants/Connection-Process/Overview

7. Feedback provider: Evolution Mining

   Feedback: The lack of available capacity in the Red Lake area should have been included as part of the Needs Assessment. It appears the area will be severely deficient, and the Scoping Assessment does not adequately identify this as a need.

   IESO response: The Scoping Assessment identified that a refresh of the Dryden area (including the Red Lake area) system capability should be included in the scope of the IRRP. This will include updating the industrial load forecast, studying the existing system capability and recommending any solutions necessary to meet future reliability needs. Continued engagement throughout the development of the IRRP will be great appreciated.

8. Feedback provider: Municipality of Sioux Lookout

   Feedback: Analysis predicts that power requirement in Sioux Lookout will double by 2030. This is based on the need for power up the line and to develop Canada's next largest industrial region, the Ring of Fire.

IESO response: Thank you for the information. The Needs Assessment load forecast for Sam Lake DS projects load to grow to approximately 33 MW by 2029 up from 20 MW today. The IRRP will include an updated 20-year load forecast with input from local distribution companies (in this case Sioux Lookout Hydro) to ensure load forecasts for their service territories are included.

9. Feedback provider: Common Voice Northwest Energy Task Force

Feedback: The Energy Task Force's data suggests a much higher load forecast: 644.2 MW by 2030 with an additional 8.7 MW post 2030. An additional 199 MW has been identified as being required but there is no indication as to the in-service requirement. (See feedback submission) for more details including load projections from emerging industry and other local development projections.)

IESO response: The IESO appreciates the information and analysis provided. This information supports the proposed recommendation in the Scoping Assessment to refresh the industrial demand forecast. The Scoping Assessment also includes provisions to bring other needs and studies into the planning scope and this feedback will be studied further throughout the development of the region's long-term electricity plan – IRRP.

Future Engagement

10. Feedback provider: Earthcare Thunder Bay

Feedback: EarthCare Thunder Bay would like to be included in future engagement related to the Thunder Bay sub-region.

IESO response: Thank you for your interest in continuing to engage in this important discussion. The IESO will ensure that all interested parties will have an opportunity to contribute input in future phases of this regional planning cycle for Northwest Ontario.

11. Feedback provider: Evolution Mining

Feedback: The way mining companies are consulted on their forecasts and future capacity requirements needs to be improved. Most industrial customers focus on their primary business and assume that if they require capacity in an area that is grid-connected it will be available when they need it.

IESO response: The IESO appreciates that energy is not the first order of business for many industrial customers and will continue to make best efforts to help prepare and include all interested parties, including industrial load, to ensure a meaningful opportunity to engage in future regional electricity planning activities for Northwest Ontario. The IESO encourages industrial customers to provide load forecasts/expansion plans as early as possible given the lead time to implement new, or reinforcements to existing, electricity infrastructure.