

Northern Ontario Connection Study Submitted Feedback and IESO Responses

Public Webinar – May 7, 2025

The Northern Ontario Connection Study will develop options to connect remote diesel-reliant First Nations communities to the electricity grid, improve reliability for grid-connected First Nation communities, support critical minerals mining development in the region, and enable the development of new hydro and renewable resources. The study was initiated in response to a request from the Government of Ontario.

On May 7, 2025, the IESO hosted a public webinar to increase awareness and understanding of the study and to seek feedback about the study scope, the findings, and any additional information the IESO should provide as part of future engagements. Input and feedback help inform planning to ensure future access to a cleaner and more reliable electricity supply to Northern Ontario and to further develop options to meet the region's future electricity needs. The presentation material and recorded webinar are available on the [engagement webpage](#).

Feedback from municipalities, Indigenous Communities, and stakeholders is important to our work and ensures that we understand concerns and opportunities, which will be considered by the IESO in the development of the study.

The following submissions were received by the IESO, and the summary of those submissions are provided below. Full submissions are available on the [Northern Ontario Connection Study webpage](#).

- [Corporation of the Township of Seguin](#)
- [Matawa First Nation](#)
- [Municipality of Greenstone](#)
- [NOMA Northwest Energy Task Force](#)
- [Ontario Power Generation](#)
- [Ontario Rivers Alliance](#)
- [Wyloo](#)

Northern Ontario Connection Study – Summary of Feedback

The section below summarizes the feedback related the study scope, the findings, and any additional information the IESO should provide as part of future engagements.

Considerations for the Northern Ontario Connections Study

Stakeholder responses consistently support the proposed North-South 230 kV transmission line, while also offering diverse insights to refine the project's planning and delivery. Notably, this line was seen as a critical enabler for economic development, mining development, community prosperity, and long-term investment in the region however it was emphasized that stakeholders want more information about timelines, cost estimates, routing options and technical maps. Timeliness and coordination with mining development was emphasized. There were also comments that the IESO needs to involve Indigenous Communities early and often in the process. Lastly, there were comments related to the aesthetics and environmental impacts of transmission infrastructure. The feedback related to these topics is summarized below.

Feedback	IESO Response
<p>There was general support for the North-South 230 kV transmission line as the most reliable and cost-effective solution to meet future energy needs, noting some other considerations around infrastructure reliability and optimization:</p> <ul style="list-style-type: none">• Municipality of Greenstone strongly supported the North-South 230 kV line to resolve capacity and outage issues on the A4L line, which has undermined public safety and economic development.• Ontario Power Generation called for reduced curtailments at Nipigon River hydro via transformer connections to the new 230 kV line. Emphasized that the new infrastructure would maximize clean generation.• Ontario Rivers Alliance noted that transmission expansion is a more cost-effective and environmentally responsible solution for meeting energy needs.	<p>Thank you for sharing this feedback indicating general support for the North-South option. The IESO is focused on developing a robust solution that meets the growing needs of the area while not running the risk of overbuilding.</p> <p>We note the feedback that have been raised around ensuring maximizing clean generation, reliability issues, and enabling more mining activity. We agree, and these considerations are reflected in the goals of the study, which are specifically to enable new supply resources including but not limited to hydro-electric generation and renewable generation, to improve the reliability for First Nation communities that are already grid-connected, and to support further mining development in the region.</p> <p>The North-South option would be expected to help meet the high and extreme growth scenarios, but consideration of other factors,</p>

Feedback	IESO Response
<ul style="list-style-type: none"> Northwest Energy Task Force endorsed the North-South route and emphasized redundancy and reliability through separation from existing radial lines to avoid failures from fires or storms. Wyloo stressed that transmission is critical for mining timelines and energy access; the project must be fast-tracked to ensure infrastructure is ready. 	<p>such as cost, must be considered. The final recommendations will have flexibility.</p> <p>The new proposed 230 kV line is expected to improve system strength in the area surrounding Lake Nipigon. Any curtailments linked to congestion in the Nipigon area will be reduced with the preferred option, which will help to maximize power transfer of clean resources into the electricity system.</p>
<p>Stakeholders called for structured, ongoing engagement with municipalities, First Nations, private landowners in unorganized territories, and to involve Indigenous partners early and substantively.</p> <p>There was support for Indigenous-led or co-developed infrastructure solutions, such as those proposed in partnership with Hydro One.</p> <ul style="list-style-type: none"> Corporation of the Township of Seguin called for engagement with municipalities, First Nations, and local stakeholders regarding visual, land use, and environmental impacts of transmission infrastructure. Matawa First Nations requested a more structured engagement process with IESO/MOE; emphasized the need for consultation. Municipality of Greenstone highlighted support for Indigenous partnerships, particularly with Hydro One, and asked that such efforts be explicitly reflected in planning documents. Ontario Rivers Alliance raised concerns about deregulation efforts that weaken 	<p>The IESO acknowledges the importance of engaging a wide range of communities and stakeholders as part of planning and development of future projects. The feedback we receive through engagements will help to inform the IESO's report back to the Ministry of Energy and Mines.</p> <p>The IESO is committed to helping ensure that interested parties are kept informed and are provided with opportunities for purposeful engagement to contribute to electricity planning initiatives. We are continuously striving to enhance our engagement practices to increase opportunities for input. The IESO regularly communicates with communities and stakeholders and interested parties through emails, IESO weekly Bulletin, public webinars, and targeted outreach meetings to help these groups stay up-to-date on the IESO's work and opportunities for engagement participation. We encourage any interested parties to visit the IESO website to subscribe to receive updates about key initiatives of interest.</p> <p>Engagement with Indigenous Communities and municipalities is a key priority for the IESO as it helps to understand the opportunities and considerations that exist,</p>

Feedback	IESO Response
<p>environmental consultation and potentially sideline Indigenous voices.</p>	<p>which in turn informs the planning process and the recommendations in the final report.</p> <p>A member of the IESO's Indigenous Engagement team will be in touch to schedule a series of ongoing meetings as per the Tribal Council's request. It is the IESO's desire to ensure that the input, feedback, and perspectives of the Matawa Tribal Council are reflected in the draft Northern Ontario Connection Study report, as well as any other IESO related initiatives the Council identifies as important or of interest.</p> <p>Studies provide the rationale for infrastructure investments. The detailed planning for electricity infrastructure, including routes, timelines, grid connections and other details are the responsibility of the project developer. The IESO understands the interest in these details, and they are addressed once the transmitter is selected and when more detailed planning is completed by the transmitter project team.</p> <p>We appreciate the comments related to Ontario's regulatory frameworks and related legislation and suggest that those are best raised with the government directly via email using MinisterEnergy@ontario.ca.</p>
<p>Feedback submissions agree that a new transmission line is a critical enabler for regional mining projects, municipal expansion, and long-term prosperity for both Indigenous and non-Indigenous communities. Feedback emphasized that infrastructure delivery must be timely and coordinated to align with development timelines, particularly in the Ring of Fire. Stakeholders tied energy access directly to</p>	<p>The study was initiated in response to a request from the Government of Ontario. This area of the province has become of strategic importance to both the provincial and federal governments, owing in part to the current geopolitical and trade climate.</p> <p>The concerns raised in the submitted feedback echo the IESO's goals for the study. This study is important in that it is helping to determine how best to connect remote diesel-</p>

Feedback	IESO Response
<p>job creation, local investment, and energy equity.</p> <ul style="list-style-type: none"> • Municipality of Greenstone noted the negative economic impact of current unreliable service and stressed that improved infrastructure would support future municipal growth. • Matawa First Nations emphasized the importance of interconnection planning (45/115 kV to 230/500 kV) to ensure First Nations can benefit from transmission development. • Northwest Energy Task Force identified communities and mines along Highway 11 that would benefit from the new transmission line; emphasized economic uplift for First Nations and the broader region. • Wyloo highlighted Eagle’s Nest mine as a major development dependent on timely infrastructure delivery; emphasized its strategic importance to Ontario and Canada. 	<p>reliant First Nations communities to the electricity grid, improve reliability for grid-connected First Nation communities, support critical minerals mining development in the region, and enable the development of new hydro and renewable resources.</p> <p>The IESO recognizes that reliable, affordable and sustainable sources of electricity in the region will help to support future economic growth and create other opportunities for people who live and work in the region.</p>
<p>Respondents called for more information about project timelines, costs, routing decisions, and governance responsibilities. Inaccuracies in IESO maps were flagged, and some feedback requested that the IESO to provide more transparent data.</p> <ul style="list-style-type: none"> • Matawa First Nations pointed out that IESO maps placed waterpower sites incorrectly, potentially undermining sound environmental planning. • Municipality of Greenstone requested an estimated project timeline and for the 	<p>The draft technical findings for each proposed option are intended to provide a general overview to support community feedback and insights on the transmission options under consideration. This early stage of transmission planning, IESO does not produce maps that address environmental factors such as topography, or known environmental or archaeological sites of interest, the maps are focused solely on illustrating the preliminary transmission options being studied.</p> <p>However, the IESO understands the interest in detail like timelines, cost, and connection points, and they will be addressed in an</p>

Feedback	IESO Response
<p>study to explicitly include local grid connections.</p> <ul style="list-style-type: none"> Northwest Energy Task Force urged future iterations of the study to clearly list local connection points and drop-ins to ensure benefits are distributed. Wyloo requested clear project timelines, phasing plans, proponent identification, and cost allocation philosophy. 	<p>implementation stage with a transmitter, subject to government or policy direction for the recommendation. Once a transmitter is selected, either through the Ontario Energy Board’s priority project designation process, or a competitive procurement process, it will be up to the transmitter to develop a detailed construction timeline and phasing plan for new energy infrastructure.</p> <p>Cost allocation methodology is outside the mandate of the IESO and the scope of bulk infrastructure recommendations. The Ontario Energy Board determines cost allocation for transmission investment adhering to the Transmission System Code (TSC) beneficiary pays principles. This process follows two key principles: approved projects must be “just and reasonable,” and the “beneficiary pays” approach. However, the government is considering changes to the transmission cost responsibility framework with the new authorities granted by the Affordable Energy Act. The IESO will support this work as it develops by sharing insights and inputs gleaned from the planning process.</p>

General Comments/Feedback

The feedback submissions from the Ontario Rivers Alliance and the Corporation of the Township of Seguin included additional information that is outside the scope of the Northern Ontario Connections Study and are captured within this general comments section.

Feedback	IESO Response
<p>The Corporation of the Township of Seguin voiced concern about the visual aesthetic and environmental impacts of the Barrie to Sudbury 500 kV circuit crossing near lakes,</p>	<p>Thank you for this feedback. The IESO’s Northern Ontario Bulk Study focused on supporting economic growth and enabling more generation in Northern Ontario by ensuring the bulk transmission lines from</p>

Feedback	IESO Response
<p>residential areas, and parks; stressed the need for mitigation strategies.</p>	<p>Barrie to Sudbury have adequate capacity and address existing bottlenecks.</p> <p>The IESO's electricity plans may provide recommendations including transmission in a specific area to meet needs identified through its technical studies; however, specific routes, and the environmental impact of routes, is not typically determined at this stage. Once a project is identified, it is the responsibility of the transmitter to obtain all the necessary permits and approvals, including Environmental Assessments, to identify project impacts and mitigation options. They are also responsible to engage with affected communities, including through the environmental assessment process and Duty to Consult. This engagement should happen not just during planning, but throughout construction, operation, and maintenance phases.</p>
<p>The Ontario Rivers Alliance expressed strong opposition to the development of new hydropower in Northern Ontario, citing its unreliability due to seasonal flow variability and increased drought conditions caused by climate change.</p>	<p>Thank you for this feedback. The government's policy position to meet Ontario's forecasted 75% increase in electricity demand by 2050 is through an "all options on the table" approach. Increased transmission in this region to complement hydropower will help to mitigate risks caused by seasonally variable generation and climate change. Should you wish to raise these concerns with the government, you may contact them via email using MinisterEnergy@ontario.ca.</p>