



FINAL ENVIRONMENTAL ASSESSMENT
Section 11.0 Conclusions
November 2023

Acknowledgements

We wish to acknowledge that the Waasigan Transmission Line Project is located within lands that represent the traditional territories and homelands of the Robinson-Superior Treaty (1850) and Treaty #3 (1873) First Nations, and traverse the Red Sky Métis Independent Nation, Northwestern Ontario Métis Community and Northern Lake Superior Métis Community.

Hydro One also wishes to acknowledge Indigenous artist, Storm Angeconeb, for developing the covering page and wildlife designs throughout the Final Environmental Assessment. Storm is a highly recognized visual artist from Lac Seul First Nation in Treaty #3 and currently resides in Red Lake. Many of her works include animals and birds as representations of herself or those close to her. The artist's description of the covering page is presented below.

Hydro One Environmental Study Art:

What stands out in this art piece is the symbolic representation of solar rays as “Bringing Power”; we can see the environment represented through the wildlife and Ojibwe floral visuals. This artwork is an excellent representation of Hope, Life, and Opportunity, visually portrayed through the Black Bear and her two cubs. The colour theme of this artwork comes from the Waasigan Transmission Line Project brand identity.

Artist: Storm Angeconeb

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11.0 Conclusions

Miiwan onowe gakina

This section provides an overview of the conclusions of the environmental assessment (EA) including the advantages and disadvantages of proceeding with the proposed undertaking. Hydro One is also seeking flexibility to implement an approach that will allow Hydro One to proceed with minor design refinements without amending the EA and has outlined the process if an EA amendment were required.

11.1 Overview of the Process

Hydro One Limited (Hydro One), through its wholly-owned subsidiaries, is Ontario's largest electricity transmission and distribution provider. Hydro One is the proponent of the Project and, following direction from the Independent Electricity System Operator (IESO), is responsible for the development of the Project, which includes completing this EA. The Project is a proposed new double-circuit 230 kilovolt (kV) transmission line between the Lakehead Transformer Station (TS) in the Municipality of Shuniah and the Mackenzie TS in the Town of Atikokan, and a new single-circuit 230 kV transmission line between the Mackenzie TS and the Dryden TS in the City of Dryden. The Project has been reviewed under a Comprehensive EA process in accordance with the approved Amended Terms of Reference (ToR) and Ministry of the Environment, Conservation and Parks (MECP) guidance, including the Code of Practice: Preparing and Reviewing Environmental Assessments in Ontario (MECP 2014a) and the Code of Practice: Consultation in Ontario's Environmental Assessment Process (MECP 2014b).

The IESO's assessment of northwestern Ontario's electricity forecast identified that additional capacity will be required in the region, and this Project is critical to meet Ontario's future electricity delivery needs. In particular, this Project is essential to support growth and maintain a reliable electricity supply to areas west of Thunder Bay and north of Dryden (IESO 2018). Industrial activities in northwestern Ontario, particularly in the mining sector, are expected to drive strong electricity demand growth in the coming decades. Considering these changes in demand and the connection of remote communities previously reliant on diesel generation to the electricity grid, the IESO forecasts a need for new supply to meet future demand in northwestern Ontario (IESO 2022).

As described in Section 2.0, an alternative route evaluation was completed to select a preferred route based on Indigenous culture, values, and land use; natural environment; socio-economic environment; and technical and cost considerations. Based on this analysis, the preferred route identified in Section 2.0 has more advantages and fewer disadvantages and is the preferred undertaking for which Hydro One seeks approval. Considering the preferred route that was selected, the Project includes the following main components:



- New overhead Alternating Current (AC) 230 kV transmission lines and associated components that will be located within a typical 46 m wide transmission line right-of-way (ROW), approximately 360 km in length.
- Modifications to existing infrastructure at the Lakehead TS, Mackenzie TS and Dryden TS, and separation of the existing 230 kV transmission lines (circuits F25A and D26A) out of the Mackenzie TS in Atikokan.
- Development of temporary supportive infrastructure associated with construction including, but not limited to, temporary access roads, temporary workspaces (including helicopter staging areas), construction camps, laydown areas, and waterbody crossings.
- Development of aggregate pits to support the Project.
- Development of associated permanent infrastructure, such as access roads and waterbody crossings, to support the operation and maintenance stage of the Project.

11.2 Advantages and Disadvantages

According to the Code of Practice: Preparing and Reviewing Environmental Assessments in Ontario (MECP 2014a), an EA should describe the process for evaluating alternatives and then choosing a preferred alternative, which will become the undertaking for which approval is sought. The evaluation is a trade-off process in which the advantages and disadvantages to the environment of the alternative courses of action are weighted in terms of their effects, both positive and negative, on the environment. This follows from the determination of net effects (MECP 2014a).

In the case of this Project, the approved Terms of Reference indicates that the EA will not include an assessment of “alternatives to” with the exception of the “do nothing” alternative. The rationale for proceeding in this manner was that a previous planning process, undertaken by the IESO, has already been undertaken which led to the identification and justification for the Project. In accordance with the *Environmental Assessment Act*, the EA includes an assessment and evaluation of the advantages and disadvantages of proceeding with the undertaking (the Project) against the “do nothing” or null alternatives.

Proceeding with the Project is predicted to cause net effects to the environment. However, based on the Project Description (Section 3.0) prepared at the time of submission of this report, the existing environment, and taking into account the implementation of the mitigation measures described in Sections 6.0 and 7.0, the net effects associated with the Project can be effectively mitigated by standard and site-specific environmental protection measures, such that no significant effects are predicted. The Project is expected to provide the following net benefits:

- Increase in labour demand from direct employment, indirect employment, and induced employment.



- Contracting opportunities and spending by local and regional consumers and service-oriented businesses of wages and income from the Project will support economic development.

The *Environmental Assessment Act* does not differentiate between the importance of the different elements of the environment (being, natural, social, economic cultural, built); however, the Code of Practice acknowledges that the effects to one environment may be greater than the effects to another (MECP 2014a). In the case of the Project, there are disadvantages to the natural and socio-environments as a result of the construction of the Project, but the need for the Project and the benefits outweigh the advantages of not undertaking the Project.

The selection of the Project as the preferred alternative is supported by the identification of the Project as a priority project for the province in the 2013 Long Term Energy Plan. Given the purpose of the Project to meet Ontario’s current and future electricity delivery needs, the relative advantages (e.g., to maintain a reliable and cost-effective long-term electricity supply to northwestern Ontario) offset the relative disadvantages.

Table 11.2-1 summarizes the relative advantages and disadvantages of the Project compared to the “do nothing” alternative.

Table 11.2-1: Advantages and Disadvantages of Alternatives to the Project

Alternative	Advantages	Disadvantages
Proceed with the Project	<ul style="list-style-type: none"> • Meets the need to ensure the long-term reliability of the electricity supply in northwestern Ontario • Economic benefits in the form of employment, contracts, business opportunities, or the procurement of goods and services • Promotion of economic growth in northwestern Ontario • Long term economic enhancement at a local level • Consistent with provincial priority initiatives 	<ul style="list-style-type: none"> • Potential effects on the environment, including landscape alteration, soil erosion and soil compaction, loss of vegetation and wildlife habitat in the Project footprint, and nuisance effects such as increased dust, noise, vibration, and vehicle emissions • Potential effects on land (including private land), resources, traditional activities, or other interests of local and Indigenous communities



Alternative	Advantages	Disadvantages
Do nothing	<ul style="list-style-type: none"> No potential effect on the environment No potential effect on land, resources, traditional activities, or other interests of local and Indigenous communities 	<ul style="list-style-type: none"> Does not meet the need to ensure the long-term reliability of the electricity supply for northwestern Ontario No economic benefits in the form of employment, contracts, business opportunities or the procurement of goods and services for local and Indigenous communities No economic growth in northwestern Ontario No long-term economic enhancement at a local level Not consistent with provincial planning priorities

11.3 EA Amendment Procedure

Detailed design and engagement for the Project are ongoing and will continue through the permitting phase and into construction. Hydro One and its contractor(s) will be continuing the technical analysis during detailed design. This analysis and ongoing engagement may result in site-specific refinements to the Project footprint that was assessed in this EA. As a result of such refinements, there may be instances when the commitments made in this EA Report cannot, or should not, be completely met for a specific location. To accommodate these potential refinements, Hydro One is seeking flexibility to implement an approach that will allow Hydro One to proceed with minor design refinements without amending the EA.

Under this proposal, there would be two scenarios:

- 1) If the refinements are within the agreed upon limits of work (which are described in Section 11.3.1 below), the refinements may proceed without an EA amendment or addendum.
- 2) If the refinements are outside of the agreed upon limits of work, an EA amendment would be required, following the steps in the amendment procedure outlined in Section 11.3.2 and per the requirements of the *Environmental Assessment Act*.

11.3.1 Limits of Work Approach

Hydro One is requesting approval to include limits of work as part of the EA. Within the limits of work, well-defined types of refinements to the Project design could be made after EA approval without triggering an EA amendment or addendum.

11.3.1.1 Rationale for Limits of Work

The request for a limits of work is based on the following:

- Proposed refinements to the Project design would be similar to those already assessed as part of the EA and would be located in areas already assessed in the EA.
- The types of refinements would be minor and would not result in a change to the conclusions of the predicted effects or significance determination of the EA.
- Conservatism when assessing environmental effects was already built into many aspects of the EA. For example, six construction camps were included in the preliminary Project design, but all six may not be required once detailed design is complete.
- Hydro One and its contractor(s) will implement a change management process, which is outlined in Section 11.3.3.
- The final Project design will be used in applicable regulatory permit applications, which will provide relevant agencies an opportunity to review and comment on the final Project design, inclusive of any refinements made after the EA.
- Indigenous communities and other stakeholders will be consulted as required.

11.3.1.2 Proposed Limits of Work

Proposed limits of work are defined to allow for design refinements after EA approval without triggering the need for an EA amendment. The following apply to all limits of work:

- The mitigation measures and monitoring requirements outlined in the approved EA and included in the Environmental Protection Plan (EPP), which will be prepared prior to construction, will be applied to the design refinements included under the limits of work.
- Any changes to the Project footprint must be limited to those areas that have not been flagged under the Stage 1 archaeological assessment as having archaeological potential unless a Stage 2 archaeological assessment is completed.
- Refinements to Project components under the limits of work on private land will be included under agreements with private landowners prior to proceeding.

The proposed limits of work are outlined below.

- Refinements to Project components under the limits of work are restricted to within areas previously assessed as part of this EA. For the purposes of the limits of work, this is defined as the terrestrial study area, which includes the Project footprint plus a 1 km buffer. Some refinements are further restricted, such as the 50 m movement noted below.



- The following project components can be moved up to 50 m (from the edge of each Project component) within the terrestrial study area assessed as part of this EA, if (1) notification, and where practical advance notice, is provided to affected Indigenous communities, (2) previously identified areas of ecological, cultural and spiritual significance to affected Indigenous communities are avoided to the extent possible, and (3) culturally appropriate mitigation and monitoring measures, developed collaboratively with affected Indigenous communities and outlined in the EPP, are implemented:
 - ROW and temporary pull sites;
 - Access roads; and
 - Water crossings.
- Other existing access roads may be used but work on such roads will be limited to minor repairs, such as grading or upgrading approaches (i.e., minimal clearing, if any). Hydro One will work with the applicable owner (e.g., forest management company, municipality, etc.) to perform these modifications. Where major access works are required to existing roads, notification, and where practical advance notice, will be provided to affected Indigenous communities, including information on the modifications or upgrades to the access road, as well as detailed location.
- To reduce the overall area disturbed, access roads may be shifted within existing disturbances (i.e., existing transmission line ROW), or within the approved Project transmission line ROW. Notification, and where practical advance notice, will be provided to affected Indigenous communities, including information on the modifications or upgrades to the access road, as well as detailed location.
- Ten percent of the access footprint area in hectares (ha) (approximately 148 ha of 1478 ha) (including new access roads and existing access roads with potential improvements) may be moved or changed beyond the 50 m shift noted above. This shift in access footprint may be needed, for example, when a sensitive site is identified by Indigenous communities resulting in a change that requires a component to be moved more than 50 m. This access road could either be moved beyond the 50 m limit or a new access road could be developed to avoid the sensitive feature; advanced notification to Indigenous communities will be made for changes beyond the 50 m limit. The new or revised access road could be longer or shorter depending on the design solution developed. Access adjustments outside of the primary ROW on private land will be discussed with and be included under negotiated agreement with private landowners prior to proceeding. This approach is based on the following:
 - The preliminary access plan included in the EA proposes multiple access road options to provide design flexibility after EA approval. In general, only one access road would be developed for a specific purpose, but the full access plan was assessed as part of the EA to be conservative. Therefore, this 10% of additional change will not increase the total area of access roads assessed as part of the EA.



- Applicable permitting of these areas, including watercourse crossing approvals, will be completed according to Ministry of Natural Resources and Forestry (MNR) and MECP requirements.
- Where improvements to existing access are required, Hydro One will work with the applicable owner (e.g., forest management company, municipality, etc.) to complete the improvements. Baseline data collection would be completed for these areas if sufficient existing data is not available.
- Where temporary helicopter staging areas are required, they will generally be approximately every 5 km along the new transmission line and will be located adjacent to the ROW. Approximate locations of the helicopter staging areas were included in the EA, but their locations will be confirmed once they are field verified and following ongoing engagement. As such, the helicopter staging areas are expected to be moved along the ROW as further construction planning is completed, avoiding previously identified areas of ecological, cultural and spiritual significance to affected Indigenous communities to the extent reasonably possible. Notification, and where practical advance notice, of changes to the planned locations of helicopter staging areas will be provided to affected Indigenous communities.
- Project footprint components would not be moved within 200 m of, or closer to if they are already located within this distance, a bat hibernacula. Features that require blasting would not be moved within 500 m of, or closer to if they are already located within this distance, a bat hibernacula.
- Project footprint components would not be moved to cross types of sensitive environmental features not previously assessed in the EA (e.g., new types of designated features) or within the stipulated protection buffers outlined in the EA.
- Aggregate sites may be relocated if more suitable sources of materials are identified; regulatory agency approval and Indigenous community consultation requirements will be completed as required, including addressing all concerns raised through the Indigenous consultation process. The total number of these sites will not increase and the total area of the aggregate sites combined will not increase. The locations of these sites will meet the setback areas, as applicable, as identified in Section 5.0 Operational Standards that apply to Aggregate Permits per MNR Category Aggregate Permit document (MNR 2006). Further, the sites will be constructed and operated at least 1.5 m above the groundwater table. Hydro One or its Contractor will prepare and submit the required aggregate permit packages to the MNR, including the Natural Environment Level 1 report, for approval.

11.3.1.3 Notice Commitments

Hydro One acknowledges the importance of providing notification to Indigenous communities, agencies and other interested parties of refinements covered as part of this limits of work. The proposed notification approach is outlined below:



- Hydro One will provide notification to Indigenous communities as described in Section 11.3.1.2.
- Indigenous monitors representing Indigenous communities will be notified of design refinements falling within the limits of work. For design changes requiring agency approval, Indigenous monitors will be engaged to confirm if any concerns exist that warrant discussion before proceeding with the change.
- Hydro One and its contractor(s) will notify landowners of refinements on private land made in accordance with the limits of work prior to implementing the change and acquire necessary land rights and permissions prior to work commencing. Concerns raised will be addressed and mitigated as reasonably possible.
- Hydro One will notify other applicable stakeholders of changes that occur on a land parcel where they hold an interest (e.g., trapline holders).
- Hydro One will maintain a public online platform showing the most current design.

11.3.2 Steps for Amendment Procedure

If Hydro One or its contractor(s) propose a change that is outside of the limits of work in Section 11.3.1, an EA amendment would be required. Hydro One will follow the amendment procedure steps outlined below.

- 1) Hydro One will notify the Director of the MECP Environmental Assessment Branch (EAB) of the proposed change and provide the Director with a brief description and depiction of the change. The Director will review the information provided and confirm whether the amendment procedure can be applied to this change. If Hydro One receives written confirmation from the Director that this is an appropriate process to follow for the proposed change, Hydro One will implement the next steps outlined below.
- 2) Hydro One will assess any new potential environmental effects of the change, identify any additional mitigation measures that may be required, and identify net effects and monitoring as necessary. This information, along with the description of the change, will be documented as an amendment to the EA. Hydro One will make clear that the amendment forms part of the approved undertaking and will identify which section(s) of the EA report are being amended.
- 3) Prior to finalizing the amendment documentation, Hydro One will engage with MECP, other relevant review agencies, Indigenous communities and affected parties by providing them with notice and information about the proposed change. This engagement will include a minimum 30-day public review and comment period, or such other engagement as may be required by MECP. Hydro One will also make available on its website a draft version of the amendment document for the purposes of engagement. Once a final version of the amendment document is prepared, this will also be made available on the website for the life of the undertaking.



- 4) Hydro One will consider and address, as appropriate, any comments or concerns received from interested parties as part of the engagement process on the proposed change. If necessary, Hydro One will attempt to resolve any issues raised through meetings, discussions, negotiations, etc.
- 5) Hydro One will submit the final amendment documentation, along with a record of engagement that describes in detail the results of steps 3 and 4 to the EAB Director. MECP will review the documentation and, as part of its review, may conduct additional engagement with interested parties, if required. MECP may also require that Hydro One undertake, and document, additional engagement efforts with affected/concerned parties or agencies to resolve any outstanding issues.
- 6) Once MECP has completed its review of the amendment documentation, and any additional engagement has been undertaken to its satisfaction, MECP will inform Hydro One, in writing, whether or not it can proceed to implement the proposed change. Hydro One will only implement the proposed change if MECP approval is given to proceed.

11.3.3 Change Management

Hydro One and its contractor(s) will implement a change management process to document and assess any changes to the Project. The change management process will follow this process:

- Changes identified will follow an internal process for tracking (documentation) and assessment;
- For changes with the potential for effects, a site-specific plan will be created that outlines the proposed change, potential constraints (e.g., environmental) and additional mitigation, as required;
- The Plan will be reviewed internally. If potential concerns or constraints are identified that have not been addressed, external parties would be engaged, as necessary (e.g., regulators, Indigenous communities and landowners);
- The change will then be reflected in the Project mapping system (i.e., shapefiles) and relevant documentation for the Project;
- Any changes to mitigation or other commitments will be reflected in a revised EPP; and
- The change will be implemented.





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