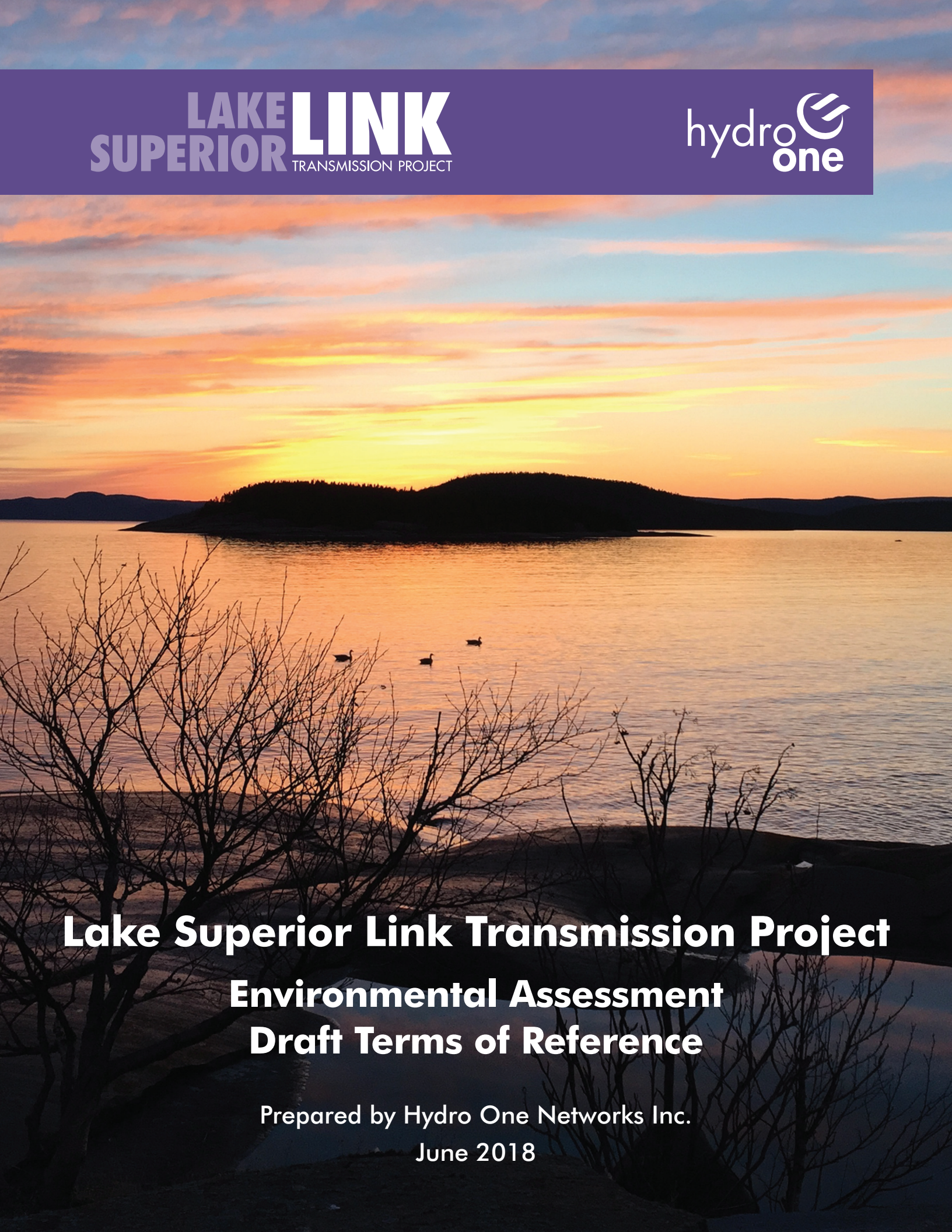


**LAKE SUPERIOR LINK**  
TRANSMISSION PROJECT

A scenic photograph of a sunset over a large body of water, likely Lake Superior. The sky is filled with horizontal bands of orange, yellow, and blue. A dark, forested island is silhouetted against the bright horizon. In the foreground, the dark, bare branches of trees are visible, framing the view. Several swans are swimming in the water in the middle ground.

**Lake Superior Link Transmission Project  
Environmental Assessment  
Draft Terms of Reference**

Prepared by Hydro One Networks Inc.  
June 2018

**Lake Superior Link Transmission Project**

**Individual Environmental Assessment**

**Draft Terms of Reference**

DRAFT

Prepared for and by:  
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June 2018



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## Acronyms

AACI	Accredited Appraisal Institute of Canada
ACSR	Aluminum Conduit Steel Reinforced
ANSI	Areas of Natural and Scientific Interest
BMPs	Best Management Practice(s)
CEAA	Canadian Environmental Assessment Agency
<i>CEA Act</i>	<i>Canadian Environmental Assessment Act</i>
CIC	Community Information Centre
CLI	Canada Land Inventory
DFO	Fisheries and Oceans Canada
EA	Environmental Assessment
EAPB	Environmental Assessment and Permissions Branch
ELC	Ecological Land Classification
EMF	Electric and Magnetic Fields
ESA	Environmentally Significant Areas
GIS	Geographic Information System
HEPCO	Hydro-Electric Power Commission of Ontario
IEA	Individual Environmental Assessment
IESO	Independent Electricity System Operator
ISC	Indigenous Services Canada
IPSP	Integrated Power System Plan
Km	Kilometre
kV	Kilovolt
LACP	Land Acquisition Compensation Principles
LIO	Land Information Ontario
LTEP	Long-Term Energy Plan
MAH	Ministry of Housing
MDS	Minimum Distance Separation
MMA	Ministry of Municipal Affairs
MNDM	Ministry of Northern Development and Mines
MNRF	Ministry of Natural Resources and Forestry
MOECC	Ministry of the Environment and Climate Change
MOU	Memorandum of Understanding
MTO	Ministry of Transportation
ONERC	North American Electric Reliability Corporation
NHIC	Natural Heritage Information Centre
OEB	Ontario Energy Board
OGCC	Ontario Grid Control Centre
OLID	Ontario's Land Information Directory
OM&A	Operation, Maintenance and Administration
OPA	Ontario Power Authority
OPGW	Optical Ground Wire
PNP	Pukaskwa National Park
PSW	Provincially Significant Wetlands
ROW	Right-of-way
SAR	Species at Risk

ToR  
TRCA  
TS

Terms of Reference  
Toronto and Region Conservation Authority  
Transformer Station

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## 1. Introduction

The Terms of Reference (ToR) as defined by the Ontario Ministry of Environment and Climate Change (MOECC) is a document prepared by the proponent and submitted to the Minister of the Environment and Climate Change for approval. The ToR establishes the framework for the planning and decision-making process to be followed by the proponent during the preparation of the Environmental Assessment (EA) Report. Supporting material filed in addition to the ToR includes the Record of Consultation and supporting documentation that is submitted under a separate cover. The Record of Consultation outlines agency, public, Indigenous (First Nation and Métis) and other stakeholder consultation undertaken during the development of the ToR. Supporting documentation provides additional detail regarding the Hydro One Networks Inc. (Hydro One) Lake Superior Link Project (the Project or undertaking).

The Project is one of several identified by the Independent Electricity System Operator (IESO) to meet Ontario's current and future electricity delivery needs. Industrial activities in Northwestern Ontario, particularly in the mining sector, are expected to drive strong electricity demand growth in the coming decades. Coupled with changes in the region's supply situation, the IESO forecasts a need for new supply to meet future demand in Northwestern Ontario. The identified future demand can be met with additional transmission and/or generation. The IESO analyzed both transmission and generation supply options and recommended the expansion of the existing 230 kilovolt (kV) East-West Tie to ensure the long-term reliability of the electricity supply in Northwestern Ontario (OPA 2011). This recommendation is contained in a series of Ontario Long-Term Energy Plan (LTEP) documents (OPA/IESO 2010, 2013, 2017a), that outline specific energy projects and other initiatives. The LTEPs identify the East-West Tie project as a priority project based on projected industrial growth within Northern Ontario. This recommendation was based on technical, economic and other considerations. The need for the project was recently confirmed in the *Updated Assessment of the Need for the East-West Tie Expansion* (IESO 2017b), with a specified a targeted in-service date of the end of 2020 for the new line.

The Lake Superior Link project consists of a new, approximately 400 kilometre (km) double-circuit 230 kV transmission line that generally parallels an existing double-circuit 230 kV transmission line corridor (the existing East-West Tie) connecting the Wawa Transformer Station (TS) to the Lakehead TS near Thunder Bay (with a connection at the Marathon TS), which is referred to as the Reference Route. The Reference Route and Reference Route Alternative that are to be examined in the EA are presented in Figure 1. The Reference Route and Reference Route Alternative identified in the ToR differ in the section around Pukaskwa National Park (PNP). Further details regarding the Project, including the Reference Route and Reference Route Alternative, are provided in Section 4.

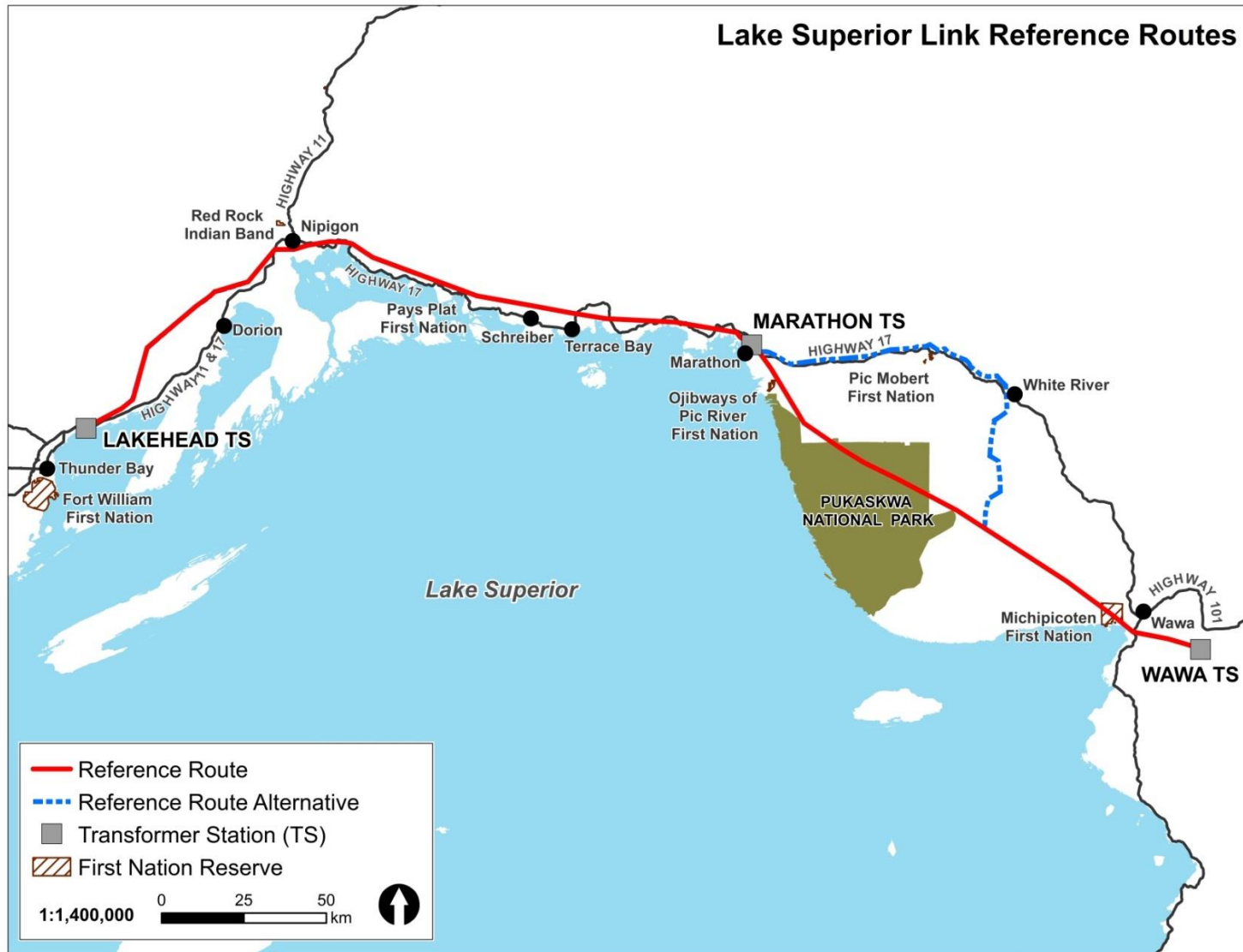


Figure 1 – Proposed Lake Superior Link transmission line routes

The Project requires approval under the Ontario *Environmental Assessment Act, 1990 (EA Act)* including Ontario Regulation 116/01 (O. Reg. 116/01). O. Reg. 116/01 requires the preparation of an Individual EA for a project of this nature and size. The first key step of the EA is the preparation of a ToR. Hydro One has prepared this ToR for consideration and approval by the Minister of Environment and Climate Change. The ToR serves as the foundation for the EA process. Hydro One will prepare the EA in accordance with the framework laid out in the ToR document in accordance with the *Code of Practice: Preparing and Reviewing Terms of Reference for Environmental Assessments in Ontario* (MOECC 2014).

## 1.1 Background on the Electricity Sector in Ontario

This section summarizes the background of the electricity sector planning in Ontario and its relation to the current Project.

Over the past two decades the electricity sector in Ontario has changed significantly due to a number of key pieces of legislation. In October 1998, the Ontario Legislature enacted the *Energy Competition Act, 1998*, authorizing the restructuring of Ontario Hydro with the aim of introducing competition in the wholesale and retail electricity markets in Ontario. Of note, the *Energy Competition Act, 1998* changed the landscape of the electricity market in Ontario and introduced market deregulation. On April 1, 1999, in accordance with the *Energy Competition Act, 1998*, Ontario Hydro was restructured principally into three separate entities: (1) Ontario Power Generation Inc., (2) Ontario Hydro Services Company Inc., later renamed Hydro One Inc., and (3) the Independent Electricity Market Operator, later renamed Independent Electricity System Operator (IESO).

The Ontario government established the the Ontario Power Authority (OPA) through the *Electricity Restructuring Act, 2004*. This legislation made changes to the institutional arrangements of the electricity sector in Ontario and established the OPA as the province’s long-term energy planner. Specifically, the OPA was given the mandate to develop integrated electricity plans that look forward several years, with the purpose of providing sustainable electricity solutions to Ontarians into the future.

- the OPA (merged with the IESO in 2015) was given the mandate to develop an Integrated Power System Plan (IPSP) and address the looming supply–demand imbalance in Ontario through conservation and generation procurements. O. Reg. 276/06 designates and exempts the IPSP from the *EA Act*. Undertakings resulting from this planning process, however, are required to complete an EA if they would otherwise be required to do so;
- the Government was given the discretion to determine the future “supply mix” for the Province as a starting point for the IPSP; and,
- the OEB was given the authority to review and approve the IPSP.

The OPA prepared a 20-year energy plan in 2007 and together with subsequent public policy initiatives (primarily the *Green Energy and Green Economy Act, 2009*), transformed how Ontario produces and uses electricity. Implementation was planned through generation procurement and conservation measures, and by developing transmission. On January 1, 2015 OPA merged with the IESO to create a new organization that combines the OPA and IESO mandates. The IESO is now directly responsible for establishing the need for new transmission facilities.

There has been, and continues to be, significant interest in connecting renewable generation to both distribution and transmission systems as a consequence of the passage of the *Green Energy and Green Economy Act, 2009*. However, the ability of existing or approved transmission facilities in Ontario to accommodate more generation is limited. Given this, the Ontario Energy Board (OEB) issued a policy document titled Framework for Transmission Project Development Plans on August 26, 2010, which sets out the policy of the OEB for a framework for new transmission investment in Ontario (OEB 2010).

## 1.2 Background on the East-West Tie Expansion

The East-West Tie Expansion Project is required to ensure an adequate, safe, reliable and affordable supply of power to enable future growth and development in Northwestern Ontario.

The 2010 LTEP was published by the Ministry of Energy to serve as an update to the 2007 IPSP, given developments in technology, demographic and economic trends, and growth of the renewable energy sector. The Ministry of Energy's 2013 LTEP notes that the project is a priority project and that engineering and engagement should commence on the East-West Tie Expansion project to meet anticipated electricity supply needs in Ontario's northwest. The *Updated Assessment of the Need for the East-West Tie Expansion* (IESO 2017b) states that a new transmission line "...continues to be the recommended alternative to maintaining a reliable and cost-effective supply of electricity in Northwestern Ontario for the long term."

In August 2013, the OEB, through a designation process, awarded Upper Canada Transmission Inc. (NextBridge Infrastructure L.P. or NextBridge) the development phase of the East-West Tie project. Hydro One, as the owner of the existing stations, is responsible for connecting the new East-West Tie transmission lines by upgrading the associated transmission station infrastructure.

On July 31, 2017, NextBridge applied to OEB for Leave to Construct for the line portions of the project. On August 4, 2017, the Minister of Energy addressed a letter to the President and CEO of the IESO expressing concerns of the scale of cost increases of NextBridge's budget estimates of \$777.2 million, up from the original estimate of \$419 million. In response, the Minister of Energy directed the IESO to review all options to ensure that ratepayers are protected and to update the need assessment for the project based on the latest costs and system needs. Previously, in the 2017 LTEP the government had stated the following regarding the cost of East-West Tie transmission project:

“As the project has moved through development, estimates on its total cost have increased. This is a concern, as Ontario is focused on making the electricity system more cost-effective. The government will review all options to protect ratepayers as the project continues to be developed.”

In response to the concerns regarding the cost of the project, as well as its environmental impacts, Hydro One is proposing its East-West Tie Line project, called “Lake Superior Link”, to protect the interests of the public and ratepayers. As compared to the current NextBridge proposal, the proposed Lake Superior Link project, including its two routing alternatives, has a lower estimated cost, a smaller environmental footprint, reduced annual maintenance costs, and enhanced opportunities for Indigenous communities to participate with equity stakes in the Project.

A brief summary of the East-West Tie project chronology to date is presented below:

- In 2012 the OEB initiated a competitive process to designate an electricity transmitter to develop a 230kV high voltage transmission line between Thunder Bay and Wawa;
- In 2013 a designated electricity transmitter was chosen by the OEB for the development phase of the project;
- In May 2014, NextBridge’s Amended Individual EA Terms of Reference was issued;
- In 2016, through an Order-in-Council, the East-West Tie was declared a priority project;
- Summer 2017, the designated electricity transmitter’s Leave to Construct updated construction cost projections substantially exceeded the costs submitted in the designation proceeding;
- In August 2017 the Minister of Energy asked the IESO to explore options and update the Needs Assessment of the project. The IESO reconfirmed the project as the preferred alternative to meet the need of long-term electricity supply for the northwest on December 1, 2017;
- On February 15, 2018 Hydro One filed a Section 92 Leave to Construct application with the OEB for a new transmission facility - “Lake Superior Link”. Relative to the NextBridge alternative, the Lake Superior Link reference route provides in excess of approximately \$140 million of capital savings and over \$3 million annually in operations, maintenance and administration savings.

### 1.3 Proponent

Hydro One is the proponent for Lake Superior Link and is responsible for the development of the ToR and subsequent EA document. Hydro One is a wholly-owned subsidiary of Hydro One Inc., and is Ontario's largest electricity transmission and distribution provider with more than 1.3 million valued customers, \$25 billion in assets and 2017 annual revenues of nearly \$6 billion. Our team of over 7,400 skilled and dedicated regular and non-regular employees proudly and safely serves suburban, rural and remote communities across Ontario through our 30,000 circuit km of high-voltage transmission and 123,000 circuit km of primary distribution networks. Hydro One is committed to the communities we serve, and has been rated as the top utility in Canada for its corporate citizenship, sustainability, and diversity initiatives. We are one of only five utility companies in Canada to achieve the Sustainable

Energy Company designation from the Canadian Electricity Association. We also provide advanced broadband telecommunications services on a wholesale basis utilizing our extensive fibre optic network. The common shares of Hydro One Limited, the parent corporation of Hydro One Inc., are listed on the Toronto Stock Exchange (TSX: H).

## 1.4 Purpose of the Study and Undertaking

The purpose of the undertaking is to ensure an adequate, safe, reliable and affordable supply of power to enable future growth and supply in Northwestern Ontario. The ToR is required under the *Environmental Assessment Act* to initiate the EA. The ToR provides the framework for the EA and discusses the major aspects of the EA and how it will be approached.

## 1.5 Outline of the Terms of Reference

This ToR sets out the detailed requirements for the preparation of the EA document for the Lake Superior Link project in accordance with the requirements of the *EA Act*. If approved by the MOECC, the EA must be prepared in accordance with the detailed requirements set out in the approved ToR.

In accordance with the *MOECC Code of Practice: Preparing and Reviewing Terms of Reference for Environmental Assessments in Ontario*, (MOECC 2014) the ToR contains the following information:

- Identification of the proponent;
- Indication of how the environmental assessment will be prepared;
- Purpose of the study or undertaking;
- Description of and rationale for the undertaking;
- Description of and rationale for alternatives;
- Description of the existing environment and potential effects of the undertaking;
- Assessment and evaluation;
- Commitments and monitoring;
- Consultation plan for the environmental assessment;
- Flexibility to accommodate new circumstances;
- Other approvals required.

Taken together, the following sections of the ToR are intended to satisfy the requirements under Section 6(2)(c) and 6.1(3) of the *EA Act*:

- Regulatory Framework (Section 2)
- Overview of the EA Process and Approval Requirements for the Project (Section 3)



- Description of the Undertaking and Evaluation of Alternative Methods (Section 4)
- Consultation (Section 5)
- Existing Environmental Conditions in the Study Area (Section 6)
- Environmental Effects Evaluation and Mitigation Measures (Section 7)
- Commitments and Monitoring (Section 8)

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## 2. Regulatory Framework

Hydro One will identify all necessary approvals that may be required during project planning and construction. Where practical, Hydro One will begin preparation of construction-related applications concurrent with the EA process. It will be necessary to initiate some permit and approval activities or applications during the EA process including any required consultation activities with members of the public, municipalities, agencies, and Indigenous communities and groups. It should be noted that some permits and approvals for construction typically rely on more detailed engineering and design information than is available during the EA process. In this event, Hydro One will carry out required studies necessary to support those approvals prior to start of construction. The following sections outline the framework for regulatory approvals in Ontario for electricity transmission projects and how they apply to the Project.

### 2.1 Ontario's *Environmental Assessment Act*

In Ontario, new and expanded transmission lines are subject to the *EA Act*. Ontario's Electricity Projects Regulation (O. Reg. 116/01), formed under the *EA Act*, stipulates the EA requirements for electricity projects in Ontario on the basis of the project type (e.g., transmission lines, transformer stations, power generation plants, etc.) and, in the case of transmission lines, the voltage of the line and distance traversed. The voltage of the line and length of the Lake Superior Link project requires that an Individual EA application be prepared and submitted under Section 5 of the *EA Act* to the Minister of the Environment and Climate Change for approval, which includes preparation, submission and approval of a ToR and an EA Report.

*The Guide to Environmental Assessment Requirements for Electricity Projects* (MOECC 2011) differentiates between Class EAs and Individual Environmental Assessments (IEA). Class EAs are EAs approved under the *EA Act* to pre-approve certain classes of projects that have predictable and mitigable environmental effects. IEAs is a term used to differentiate an EA performed under subsection 5(1) of the *EAA* from Class EA projects and generally have more uncertainty or potential for greater environmental impacts.

Hydro One is required to complete and submit a ToR to the MOECC for approval as illustrated on Figure 2. The purpose of the ToR is to provide the overall study framework that will be followed during the EA. The public, Indigenous communities, government agencies and other interested individuals are provided with opportunities to comment.

**Prescribed Deadlines  
(Ontario Regulation 616/98)**

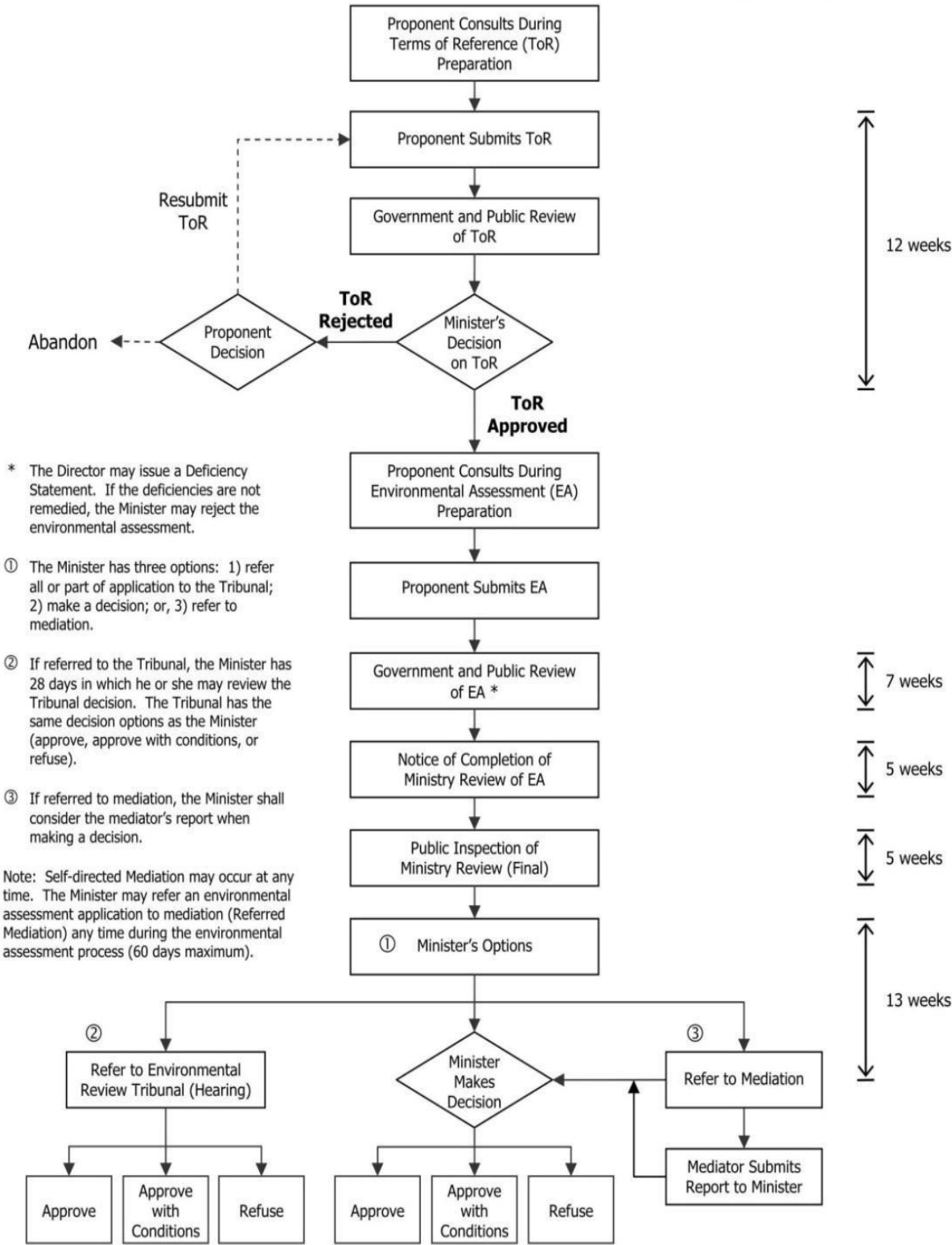


Figure 2 – Environmental assessment timeline. Source: MOECC 2016

Should the ToR be approved by the Minister of the Environment of Climate Change, it will be used by Hydro One to guide the completion of the EA to ensure that it meets the intent of the EA Act. The results of the EA process will then be documented in an EA Report to be submitted to the MOECC for review and approval.

There are two key documentation requirements for the application:

- the development, submission, review and approval of the ToR; and,
- the preparation, submission, review and approval of the EA document in accordance with the framework set out in the MOECC approved ToR.

Under the *EA Act*, an EA can proceed under section 6.1(2) which includes an assessment of “alternatives to” the undertaking and “alternative methods of carrying out the undertaking or it can proceed in accordance with subsections 6(2)(c) and 6.1(3) of the EA Act which allow focusing of the EA. The reason for proceeding with this undertaking has been established by the IESO and is documented in Section 1.4. The IESO concluded that a new transmission line is the most practical and cost-effective method of bolstering electricity capacity in Northwestern Ontario. As such, this ToR proposes that the focused EA be prepared in accordance with subsections 6(2)(c) and 6.1.(3) of the *EA Act*. Table 1 provides a comparison of Section 6 requirements and the proposed Lake Superior Link EA documentation.

**Table 1 – EA and ToR Requirements.**

<b>Section of EAA 6.1(2)</b>	<b>Described in Terms of Reference</b>	<b>To be Described in EA Document</b>
(a) description of the purpose of the undertaking.	The ToR describes the purpose of the undertaking (Section 0).	The EA will describe the purpose of the undertaking.
(b) description of and statement of the rationale for  (i) undertaking  (ii) alternative methods of carrying out the undertaking and  (iii) alternatives to the undertaking	<p>i) The ToR provides a description of and rationale for the undertaking (Section 0).</p> <p>ii) The ToR presents two route alternatives for carrying out the undertaking (Section 4) and how those alternative methods will be assessed through the EA process.</p> <p>iii) The ToR provides a rationale for a focused EA that does not consider a “do nothing” alternative nor contemplates alternatives to the undertaking (Section 4).</p>	<p>i) The EA will provide a description of and rationale for the undertaking.</p> <p>ii) The EA will assess two alternative reference routes.</p> <p>iii) The EA will reiterate the rationale for a focused EA that was presented in the ToR.</p>

<b>Section of EAA</b> <b>6.1(2)</b>	<b>Described in Terms of Reference</b>	<b>To be Described in EA Document</b>
<p>(c) description of</p> <p>(i) environment that will be affected or that might reasonably be expected to be affected, directly or indirectly</p> <p>(ii) the effects that will be caused or that might reasonably be expected to be caused to the environment; and,</p> <p>(iii) the actions necessary or that may reasonably be expected to prevent, change, mitigate or remedy the effects upon or the effects that might reasonably be expected upon the environment by the undertaking</p>	<p>i) The ToR generally describes the environment that will be affected or that might reasonably be expected to be affected by the Project either directly or indirectly. (Section 6)</p> <p>ii) The ToR describes the framework of how the EA will assess and identify any effects on the environment that will be affected or that might reasonably be expected to be affected by the Project. (Section 7)</p> <p>iii) The ToR describes how the EA will address any identified effects either through prevention, change or mitigation. (Section 7)</p>	<p>i) The EA will describe, in greater detail, the environment that will be affected or that might reasonably be expected to be affected, directly or indirectly by the Project.</p> <p>ii) The EA will assess and identify any effects that will be caused or that might reasonably be expected to be caused to the environment.</p> <p>iii) The EA will evaluate any effects identified and address them through prevention, change or mitigation.</p>
<p>(d) an evaluation of the advantages and disadvantages to the environment of the undertaking.</p>	<p>The ToR provides a commitment to describe advantages and disadvantages in the EA document (Sections 4, 7).</p>	<p>The EA will provide an evaluation of the advantages and disadvantages to the environment of the undertaking.</p>
<p>(e) a description of the consultation about the undertaking by the proponent and the results of the consultation.</p>	<p>The ToR describes the Indigenous, public and stakeholder consultation that was conducted for the development of the ToR. (Section 5)</p> <p>The ToR provides a list of contacts and a record of consultation developed through the ToR process. (Section 5)</p> <p>The ToR also describes the</p>	<p>The EA will provide a description of the Indigenous, public and stakeholder consultation that was conducted throughout the EA process. The EA will identify a list of contacts consulted with and provide a record of consultation, status of consultation, summary of issues and summary of issue resolution.</p>

Section of EAA 6.1(2)	Described in Terms of Reference	To be Described in EA Document
	consultation framework that will be undertaken during the EA process to consult with Indigenous communities, the public and stakeholders. (Section 5).	

## 2.2 Other Applicable Provincial EA Processes

The Project is also subject to the Ministry of Natural Resources and Forestry (MNRF) EA requirements for disposition of Crown lands in sections of the route that traverse public lands, including provincial parks and conservation reserves, and more specifically the MNRF Class EA for Resource Stewardship and Facility Development Projects and the MNRF’s Class EA for Provincial Parks and Conservation Reserves. Discussions with the MNRF have commenced and will continue during the EA phase to assist with the disposition of Crown land for the Project. In addition, public lands transactions under the jurisdiction of Infrastructure Ontario are subject to the requirements of the Ministry of Infrastructure Public Work Class EA. It is Hydro One’s intention that these other EA process requirements will be met through the Individual EA process for the Project.

## 2.3 Ontario Energy Board Act

The Lake Superior Link project requires OEB approval. The OEB regulates Ontario’s natural gas and electricity industries and is responsible for ensuring construction and operation of proposed transmission facilities are in the public interest. The OEB’s role is to review a transmission project’s effect on consumers with respect to prices, reliability and quality of electricity service. The OEB operates as an adjudicative tribunal and carries out its functions through oral or written public hearings. There are potentially two applications with the OEB related to the Project:

- Leave to Construct - The Project is subject to “Leave to Construct” approval under Section 92 of the *OEB Act*. The OEB review of Hydro One’s application for Leave to Construct approval examines technical aspects, consumer protection and also includes provisions for engagement/consultation. Hydro One submitted a section 92 Leave to Construct application to the OEB on February 15, 2018.



- Early Access to Land (subsection 98 (1.1) of the *OEB Act*). Early access allows Hydro One employees and representatives to access private properties affected by the proposed Project in order to undertake a limited number of activities (including biological and archaeological field studies, data collection, legal surveys and soil testing) while the Section 92 application is under consideration by the OEB. This early access is required to gather seasonal data for the EA and other approvals and to bring the project in-service by the required due date.

## 2.4 *The Expropriation Act*

Hydro One's goal is to secure voluntary property settlements with affected property owners ("Property Owners") in a timely manner, to the extent practicable, for the portion of properties to be utilized for the Project. Property Owners will be offered the choice of Hydro One acquiring either an easement or the fee simple interest in the lands required for the Project. Hydro One's offers will be based upon appraisal reports prepared by external, independent Accredited Appraisal Institute of Canada (AACI) appraisers retained by Hydro One.

Hydro One's primary intent is to negotiate easement rights with landowners. In some cases, it will be necessary to purchase entire properties where current uses are incompatible with a transmission corridor e.g., a permanent structure or residence under a transmission line.

These project-specific land acquisition compensation principles are founded upon Hydro One's past experience pertaining to land acquisition matters for new transmission projects. Hydro One's central consideration has been the need for Property Owners to have flexibility and choice while balancing Hydro One's desire to achieve timely acquisition of property interests and its obligation to ensure that expenditures are fair and reasonable to ratepayers.

Should voluntary property settlements meet an impasse, Chapter E.26 under the *Ontario Expropriations Act*, outlines the conditions and restrictions under which a claim for expropriation can be submitted, and the rights of residents facing the claim. The expropriation plan must be approved and registered under both the *OEB Act* and the *Expropriations Act* prior to commencement of construction of the new line. Expropriations would also need to be approved by the OEB under s.99 of the *OEB Act*.

## 2.5 *Canadian Environmental Assessment Act*

An electricity project subject to the *EA Act* may also be subject to the *Canadian Environmental Assessment Act (CEA Act)*. CEA Act includes a list of projects or activities (also known as Regulations Designating Physical Activities), which identify major projects with the greatest potential for significant adverse environmental impact and thus require a federal EA under *CEA Act*.

The Lake Superior Lake project is not considered a “designated project” as the Project does not meet the requirements as stipulated in the regulation designating physical activities, and therefore the CEA Act does not apply. In the event that the Project is modified and meets the criteria at a future date, thereby becoming a “designated project” under the CEA Act, Hydro One will notify the Canadian Environmental Assessment Agency (CEAA).

Although the Lake Superior Link project is not a designated project under the *CEA Act*, the Project may require federal approvals or authorizations where the transmission route crosses federal lands. Federal lands include two First Nation reserves (Michipicoten First Nation Reserve and Pays Plat First Nation) under Indigenous Services Canada (ISC) jurisdiction (formerly Indigenous and Northern Affairs Canada) and one National Park (Pukaskwa National Park) under Parks Canada jurisdiction.

Authorization for works within Pukaskwa National Park will be required from Parks Canada. Hydro One currently has a License of Occupation for its existing infrastructure and this license is currently being renewed, remaining in effect until such renewal is complete. Upgrades to infrastructure within the Park are allowable within the existing license agreement as they are not considered new development. Parks Canada has confirmed in a letter sent on 27 November 2017 that Parks Canada is prepared to continue to consider the Hydro One request in accordance with the License of Occupation, applicable laws and policies, and Indigenous consultation obligations. Additionally, mitigations would need to be identified and more information on construction impacts, as per Article 8.01 of the current License Agreement, is required, as well as completion of either a Basic or Detailed Impact Assessment under Section 67 of the *CEA Act*. An updated Environmental Evaluation Report was provided to Parks Canada on January 24, 2018, which satisfies the requirements of the agreement. Studies and consultation will address impacts and mitigations within the Park area and the Impact Assessment will be provided to Parks Canada per Section 67.

The usage of First Nation reserve land would require Indigenous Services Canada (ISC) authorization. Requirements to this end may be via Project Description Report and/or through a Land Use Permit. Consultation with local First Nations is ongoing throughout the lifecycle of the project and will include further determination of approvals for use of reserve land. Hydro One will consult with CEAA and will work closely with federal authorities to provide specific details about the location and extent of the project, including providing a project description, to enable a determination of any permit or authorization requirements.

## **2.6 Other Relevant Provincial Legislation, Permits and Policies**

Based on current information, a number of permits, licences and approvals under Provincial legislation may be required. In some cases, a final determination cannot be made until the detailed design phase for the project. These may include, but are not limited to, the following:

- approval under the *Lakes and Rivers Improvement Act*, to undertake work on shore lands and works within a water body (Consolidated Work Permit);
- approval for ownership/easement of land on which structures are built from the MNRF under the *Public Lands Act*;
- permits from the MNRF under the *Public Lands Act*, for site alteration on Crown lands or infrastructure on or over Crown lands;
- work permit controls, at all times of the year, for clearing within 300 m of a forest or woodland from the MNRF Forest Management Branch under the *Forest Fires Prevention Act*;
- approval under *Aggregate Resources Act*, to extract aggregate within Crown lands.
- Forest Resource License to harvest timber on Crown lands as per the *Crown Forest Sustainability Act*;
- Fish Scientific Collectors Permits and Wildlife Scientific Collection Authorizations from the MNRF under the *Fish and Wildlife Conservation Act*;
- Approvals to work within provincial parks, if required under Provincial Parks and *Conservation Reserves Act*;
- Authorization under *Fish and Wildlife Conservation Act*, should the Project potentially impact wildlife;
- permits for application of pesticides from the MOECC under the *Pesticides Act*, for vegetation management during the operation phase;
- under the *Ontario Heritage Act*, an archaeological assessment(s) is required to obtain Ministry of Tourism, Culture and Sport (MTCS) clearance.
- heritage and heritage landscape compliance with the *Ontario Heritage Act*.
- approval of new structures, encroachment entrances or construction that may affect existing and planned highways from the Ministry of Transportation under the *Provincial Transportation and Highway Improvement Act*;
- compliance with industrial design/construction safety regulations, including filing notice of project before construction commences, of the Ontario Ministry of Labour under the *Occupational Health and Safety Act*;
- compliance with health regulations of the Ministry of Health under the *Public Health Act*;
- withdrawal of staking rights or lands from prospecting under the *Mining Act, 1990*;
- permits under the *Ontario Water Resources Act* (section 53) for water taking or discharge, dewatering.
- approvals under the Ontario's *Environmental Protection Act* (section 9) on airborne emissions, noise, hazardous waste and sewage/waste management.
- Provincial Policy Statement [Ministry of Municipal Affairs and Ministry of Housing (MMA, MAH), 2014];
- Water Management Policies and Guidelines (MOECC), Policy 1 and 2; and,
- permits may be required under the *Endangered Species Act*.

## 2.7 Other Relevant Federal Legislation, Permits, and Policies

Other relevant federal legislation and policies include, but are not limited to:

- *Species at Risk Act* (Environment and Climate Change Canada);
- *Migratory Birds Convention Act* (Environment and Climate Change Canada);
- *Fisheries Act* (Fisheries and Oceans Canada);
- *Navigation Protection Act* (Transport Canada);
- *Aeronautics Act* (Transport Canada);
- *Railway Safety Act* (Transport Canada);
- *Parks Canada Agency Act* (Parks Canada);
- *Indian Act* (Indigenous Services Canada); and,
- *Canada Transportation Act*.

Federal policies regarding species and habitat protection include:

- Policy on Wetland Conservation;
- Canadian Biodiversity Strategy;
- Convention on Biological Diversity; and
- Wildlife Policy for Canada.

All approvals that are necessary for the Project to proceed will be outlined in the EA document. It may not be practicable to complete all required surveys in relation to other approvals prior to submission of the EA document, but Hydro One will commit to continue and complete all information collection prior to construction.

### 3. Overview of the EA Process and Requirements for the Proposed Project

The EA study will comply with requirements set out in the *EA Act*. Hydro One will submit the EA for review and approval to the Minister of Environment and Climate Change, following an extensive engagement/consultation process. As previously discussed in Section 2.1, the MOECC states: “A proponent should use subsections 6(2)(c) and 6.1(3) if there is a more defined planning process and more details of the proposal are already known (for example, the potential alternatives it wishes to evaluate).” Based on the previously conducted needs assessment and the prioritization of the project from regulatory bodies, a more focused approach to the EA will be utilized.

The EA will consist of the following components:

- a description and purpose of the Project based on the recommendations and decisions of the IESO and the government;
- a description of and statement of the rationale for the Project;
- the EA will not include a description and rationale for the Do Nothing alternative as the Project has already been identified by the regulator as a priority project;
- the EA will not include a description and rationale of alternative methods of carrying out the Project as it has already been extensively studied by the regulator and the preferred alternative has already been identified. However, the identified reference route and reference route alternative will be considered for the Project as well as design considerations and local refinements;
- a description of the environment that will be affected, or might reasonably be expected to be affected directly or indirectly by the Project and the alternative routes considered;
- a description of the advantages and disadvantages that will be caused or might reasonably be expected to be caused to the environment as a result of the Project, and the alternative methods of carrying out the Project;
- a description of the actions necessary or that may be reasonably expected to be necessary to prevent, change, remedy or mitigate any effects;
- description of the advantages and disadvantages of the alternative route methods;
- description of the public, agency and stakeholder consultations and Indigenous communities and groups engagement and consultation undertaken during the EA process;
- pre- and post- development environmental monitoring plan (as necessary); and,
- supporting documents, maps, etc., as required under the EA Act and its regulations.

An outline of the ToR and its contents can be found in Section 1.5 which will contribute to the overview of the EA process and requirements for the proposed Project. The project as a whole will be assessed using the best information available with levels of detail tailored to maximize the clarity of the process.

### 3.1 Flexibility to Accommodate New Circumstances

The lifecycle of a complex and geographically extensive and diverse project from the conceptual stage to operation may be subject to project changes. In addition, the time gap between a ToR and a successful EA submission potentially allows for new circumstances to arise. To address these changes, there is a requirement for flexibility within the document to lay out a framework for a successful EA submission and subsequent construction and operational phases. Project design updates, study area changes, novel information, and implementation of input from the consultation process are examples of new circumstances arising during a project lifecycle. These degrees of flexibility allow proponents reasonable measures to address unforeseen circumstances but still maintain regulatory compliance throughout the project phases without starting the ToR and EA process anew. Some of these changes are likely to be minor and have limited consequences while others may be more significant and require consultation with a number of stakeholders and agencies. Hydro One has prepared this ToR with the most complete state of knowledge at the time of its preparation but acknowledges the Project need to adapt to new circumstances.

### 3.2 EA Document Preparation and Submission

The EA will be consistent with the requirements on the EA Act described in Section 2.1. As described in the MOECC's *Code of Practice on Preparing and Reviewing Environmental Assessments in Ontario*, the EA will include:

- an Executive Summary;
- list of studies and reports;
- Terms of Reference requirements;
- identification of the proponent;
- commitments and monitoring;
- other approvals;
- consultation summary; and,
- appendices.

In addition, commitments to post-approval actions including project notification, remedial action plans, etc. will also be described. The EA will document need, the purpose for the undertaking, alternative routes, engagement/consultation undertaken, a description of and rationale for the undertaking, environmental baseline, environmental effects and proposed mitigation measures associated with the undertaking, commitments to compliance monitoring, and future commitments to be satisfied at subsequent design stages. Further information will be included if warranted.



In addition to the EA, reference reports will be prepared at appropriate stages of the EA to document technical work that is undertaken to support the decision-making process. These reference reports will be included as technical appendices to the EA as described in the Code of Practice.

A draft EA will be made available to the public, federal and provincial government agencies, municipalities and Indigenous communities and groups for review prior to formal submission to the MOECC. The documentation will be available at government offices, public libraries and on the project web site. Hard copies will be made available to the Bands to allow for comments by their members.

Subsequent to the pre-submission review and consideration of any comments received, the EA will be formally submitted to the MOECC for an approval decision.

The EA will provide a comprehensive list of all relevant commitments made during the preparation of the ToR and the EA to guide future environmental work and engagement/consultation as well as effects and compliance monitoring. All monitoring will be consistent with MOECC requirements.

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## 4. Description of the Undertaking and Evaluation of Alternative Methods

The project consists of a new approximately 400 km long double-circuit 230 kilovolt transmission line connecting the Lakehead TS to the Wawa TS, with a connection at the Marathon TS. The majority of the new transmission line will be constructed on a new right-of-way (ROW) that is largely on or adjacent to the existing Hydro One transmission corridor (the existing East-West Tie, or EWT). There are two exceptions to this routing. The first is the section of approximately 35 km in the Reference Route through Pukaskwa National Park where existing infrastructure will be renewed and replaced, with no corridor widening required. Two new circuits and the two existing circuits would be installed on new quad-circuit structures. The second is in both the Reference Route and Reference Route Alternative and includes the routing of the line around the communities of Dorion and Loon Lake (approximately 57 km in length) within the section between Nipigon and Lakehead TS, which deviates from the existing EWT. See Figure 1 for further details on these route alternatives. Temporary and permanent access roads, storage and laydown yards, will be form part of the project facilities and are discussed further in Section 4.

### 4.1 Study Area

The Project is located in the Province of Ontario and extends from the Municipality of Shuniah near the City of Thunder Bay to east of the Municipality of Wawa. A key map showing the location of the Project and routing of the transmission line is presented in Figure 1. The majority of the Project is located on provincial Crown land, with some sections within easements acquired from private landowners. The EA will study both reference route and reference route alternative study areas.

It should be noted that another proponent, NextBridge, has done studies in the area of the proposed corridor. Where there is an overlap of the study areas, Hydro One is generally not duplicating these studies, but using the information available publicly through an EA document already funded by the ratepayers of Ontario.

### 4.2 Alternative Methods

The *Environmental Assessment Act* requires proponents under Section 6.1 (2) to conduct an alternatives assessment to demonstrate the advantages and disadvantages of the preferred alternative in comparison to other alternatives considered. The East-West tie project has been identified by the Ministry of Energy, the OEB and the IESO as a priority project, as per an Order-in-Council issued by the Lieutenant Governor in Council on March 4, 2016 and will utilize a focused method. An extensive alternatives assessment process has been previously performed by these agencies in the needs

assessments and rationale for the East-West Tie Expansion project conducted by OPA and IESO. In these assessments, other alternatives to the undertaking, such as increased local generation and other transmission solutions were assessed and the proposed East-West Tie transmission project was identified as the preferred option (IESO). Under subsections 6(2)(c) and 6.1(3) of the focused EA the assessment of alternatives and approach will take into account the IESO recommendations. As such, the need and method for the goals of the project have been clearly identified and the ToR will not contain an assessment of alternatives to the undertaking. Instead, the evaluation of alternatives will focus on the assessment of alternative methods for carrying out the undertaking, in the form of routing alternatives. A reference route will be evaluated against an alternative route to compare the advantages and disadvantages of each option in the context of the natural environment, socio-economic environment and technical-administrative and cost considerations.

The sections below identify the transmission route that will be assessed and will describe the local refinement and design considerations.

### **4.3 Do Nothing Alternative**

The “Do Nothing” alternative represents what is expected to happen if none of the alternatives being considered is carried out (MOECC 2014). As with the alternative methods outlined above, the need and rationale for the Project has been clearly identified by the government. The EA will not assess a “Do Nothing” alternative but instead focus on the comparative advantages and disadvantages of the proposed reference route and reference route alternatives.

### **4.4 Reference Route and Reference Route Alternative**

Hydro One has put forward two route alternatives for assessment. Each of the proposed routes fulfills the connection criteria outlined by the government and have been developed to be located adjacent to existing transmission corridors, where possible, in accordance with the Provincial Policy Statement. Figure 3 shows the reference route (solid line) and reference route alternative (dotted line). The reference route travels from the Wawa TS through Pukaskwa National Park to the Marathon TS along the existing Hydro One ROW. From there, it follows the shore of Lake Superior until Dorion where it travels north of the existing ROW and connects to the Lakehead TS. The reference route alternative follows the same route as the reference route, except that, prior to entering Pukaskwa National Park from the east, it travels north to White River and follows Highway 17 west to the Marathon TS to avoid the area through Pukaskwa National Park.

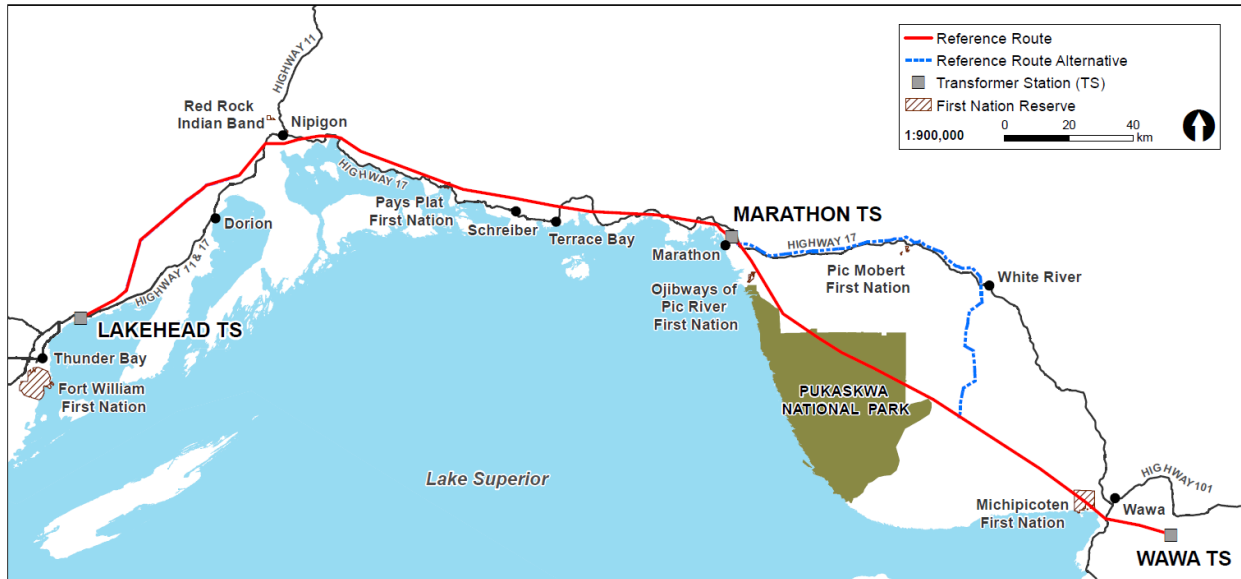


Figure 3 – Reference route (solid red line) and reference route alternative (dotted blue line).

At a minimum, the alternatives assessment will consider the following questions, as outlined in Section 5.2.5 of the *Preparing and Reviewing Terms of Reference for Environmental Assessments in Ontario* (MOECC 2016) document:

- Do they provide a viable solution to the problem or opportunity to be addressed?
- Are they proven technologies?
- Are they technically feasible?
- Are they consistent with other relevant planning objectives, policies and decisions (for example, Official Plan, Provincial Policy Statement, Growth Plans under the *Places to Grow Act, 2005*)?
- Are they consistent with provincial government priority initiatives (for example, waste diversion, energy efficiency, source water protection, reducing greenhouse gas emissions)?
- Could they affect any sensitive environmental features (for example, provincially significant wetlands, prime agricultural area, endangered species habitat, floodplains, archaeological resources, built heritage)?
- Are they practical, financially realistic and economically viable?
- Are they within the ability of the proponent to implement?
- Can they be implemented within the defined study area?
- Are they appropriate to the proponent doing the study?
- Are they able to meet the purpose of the *Environmental Assessment Act*?

#### 4.4.1 Local Refinements of the Reference Route

The project team, in consultation with affected/interested persons, will highlight specific areas where the reference route could be refined if an alternative will result in potentially significant benefits, all factors considered.

As a result of consultation, the EA will work to seek other local route refinements and evaluate them. The evaluation will examine the differences in net effects and costs associated with local alignment configurations. After engagement/consultation with landowners, agencies, municipalities, Indigenous communities and groups, and interest groups, the project team may refine the reference alignment. Hydro One acknowledges that consideration of local refinements may require additional and timely notification of new potentially affected landowners. The decision-making process will be clearly documented and presented to stakeholders for input and comment, and to ensure that issues have been addressed.

When route refinements are being considered, a local study area will be established. Data will be collected for environmental features within the study area to identify the preferred route alternative. This data is intended to assist in determining the overall effect of the ROW alignment on the natural and socio-economic environments to develop appropriate mitigation measures. These evaluation criteria and indicators may be subject to refinement and modification during the EA process based on study findings, consultation and provincial policy. Technical, administrative and cost criteria will also be considered in this process.

Route refinement selection will be evaluated in a comparative manner by different factor groups (natural environment, socio-economic environment, technical-administrative-cost); criteria (human and natural components of the environment that potentially could be affected by the project); and indicators (direct quantitative measures that can be used to represent the measurements of potential effects for each criterion). Data sources will be identified for each indicator. For consistency and reliability, data sets will be limited to secondary source data readily available to Hydro One, for example, in a consistent Geographic Information System (GIS) format for the various options. Some examples of indicators to be used for each criterion include the following:

- Natural Environment (proximity to known Species At Risk)
- Socio-economic Criteria (number of properties crossed)
- Technical, Administrative and Cost Criteria (total route distance and area)

Other factors will be considered depending on stakeholder and Indigenous community input. For consistency and reliability, data sets will rely on secondary source data readily available to Hydro One, supplemented, as appropriate, by primary data collected from interest groups, agencies, utilities, members of the public, Ministries, Indigenous communities and field studies. Published secondary source data for the evaluation of alternative methods, such as aerial photos and GIS data, will be obtained from agencies and municipal Official Plans. The analysis and results of the methodology described above will be prepared and documented in the EA and its appendices. Appendix 2 contains a list of criteria and their indicators.

## 4.5 Evaluation of Alternative Methods

The alternatives evaluation will examine the differences in net effects and costs associated with alignment configurations. These following general principles will be applied by Hydro One during the EA process in the development and evaluation of alternative methods:

- maximizing paralleling existing infrastructure corridors;
- minimizing the affected land area;
- minimizing negative effects on existing and designated land uses;
- minimizing negative effects on agricultural lands and operations;
- minimizing negative effects on natural systems, with particular emphasis on natural features, functions and communities (including treed lots and vegetation);
- minimizing negative effects on built-up areas that provide a cultural, recreational, social and economic benefit;
- minimizing negative effects on businesses, farmers and landowners; and,
- maximizing opportunities to enhance positive effects on the natural and socio-economic environment.

These principles for evaluating alternative methods are intended to minimize significant environmental effects. Modifications to the project design will occur throughout the project planning in conjunction with discussions with stakeholders and Indigenous communities and groups. Evaluation methodologies will be fully documented within the EA.

## 4.6 Technical Overview of the Undertaking

The general location of the Project and certain technical specifications has been determined by the OEB. Specifically, on December 20, 2011, the OEB issued an Information Package on the East-West Tie Line to Electricity Transmitters that registered to participate in the bid process for the Project. The information package provided a definition of the Project for designation purposes, as well as the minimum technical requirements for the Project.

The project will comply with North American Electric Reliability Corporation (NERC), Northeast Power Coordinating Council, Inc., and IESO reliability standards. Climate Change will be taken into account during the design of the Project. The following sections outline the technical portions of the Project.

### 4.6.1 Design Considerations

The project will enhance safety and security of electrical supply and design considerations will be evaluated consistent with this purpose. Alternative design considerations involving span length, tower height, alignment of access roads, timing of construction and tower design will be evaluated based on site-specific environmental and technical considerations and stakeholder input. The criteria and



principles defined above will also be used to evaluate design considerations. Changes to project design will be made to accommodate landowner concerns if it is practicable to do so without negatively affecting other landowners, environmental features or significantly negatively affecting overall project costs. Hydro One will document landowner issues, how these decisions were made, and the results.

Alternative design considerations available to mitigate potential effects include:

- span length between the towers to avoid environmental features (such as ANSIs, ESAs, hazard lands, or crossing water bodies), where required;
- tower height to avoid environmental features, where required;
- access road specifics, including alignment, location, and removal or possible retention after construction is complete, if required;
- site-specific vegetation management regimes;
- construction timing (seasonal) and staging along the ROW to minimize potential effects on the natural environment and farming operations; and,
- tower siting and placement for specific applications to minimize aesthetic effects on the local public and the traveling public or disturbances to farming operations.

#### 4.6.2 Transmission Line

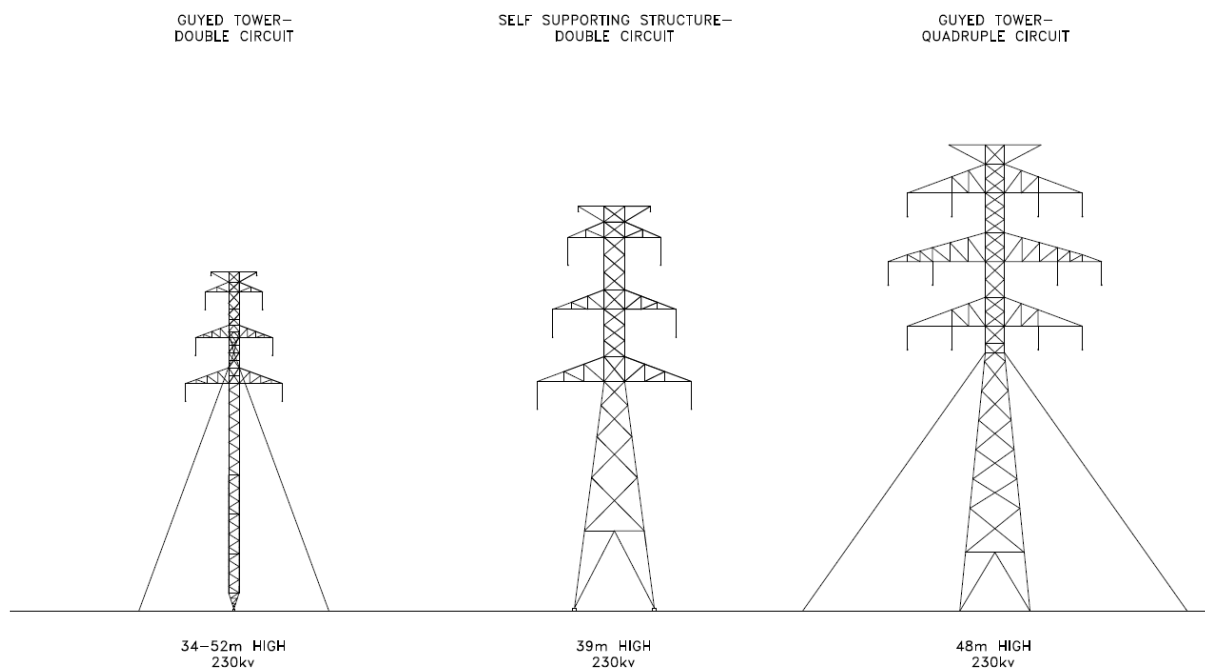
The transmission line will be designed to be an overhead 230 kV Alternating Current (AC) double-circuit transmission line. The transmission line will consist of transmission structures, insulators, conductors, overhead shield wires (OHSW), optical ground wire (OPGW) and grounding.

Where the proposed route is adjacent to the existing East-West Tie Transmission Line the ROW will typically be up to 37 metres (m) wide. A ROW, typically up to 46 m wide, will be cleared of vegetation to accommodate the transmission line around the communities of Dorion and Loon Lake between Nipigon and Lakehead. For the section of line through PNP, the corridor will not be widened and as such no vegetation removals are required outside the existing ROW. The ROW width for the line has been determined primarily through consideration of the design of the structures to be constructed, the span between structures, the sag of the conductor, and ability to utilize areas within the existing EWT corridor during construction. During construction, the requirement for additional permanent ROW easements may be identified to accommodate tower assembly and erection; and conductor stringing and tensioning, angles in the route, or long spans.

#### 4.6.3 Transmission Line Structures

Three (3) different transmission structure types will be used, depending on the line location, which may include guyed towers and self-supporting structures. Figure 4 shows the different types of proposed structures.

The actual number of structures and type of foundation will depend on span distances between the structures, as determined by topographic, meteorological, technical environmental and socio-economic constraints. This will be confirmed in the detail design stage for the Project.



**Figure 4 – Proposed typical structure types and heights.**

#### 4.6.4 Access Roads

Temporary access roads will be required for the construction of the Project in some areas. Construction requires temporary access to the ROW for clearing and site preparation, construction of the dead-end structures, for cleanup and site restoration. It is the intention to upgrade and utilize, where possible, the existing access roads that were used to build the existing East-West Tie line, built in the 1960's. Also, where scheduling permits, it is the intention to use winter roads as a means of access.

All-terrain vehicles will be used to carry out ground based inspections and right of way maintenance. Maintenance of the transmission line and any emergency repairs will be carried out using helicopters for both access and the delivery of materials and equipment.

#### 4.6.5 Storage, Laydown and Fly Yards

Storage, laydown and fly yards will be required to receive and distribute materials and equipment needed for construction of the transmission line. The EA will assess sites for potential usage as yards and it is expected that these yards will be established in strategic locations near the Project and communities. Materials, equipment and supplies from the storage yards will be transported by truck to laydown yards or to structure locations within the ROW, as required. The contractor may choose to transport materials by helicopter to structure locations not accessible by ground vehicle, and more specifically to those tower locations within PNP. Permits and/or authorizations for the storage and fly

yards will be obtained prior to their use, where applicable. Further details on number and size of yards will be determined later in the EA process.

#### **4.6.6 Construction Offices**

The contractor will establish temporary construction offices and communications. The exact locations and number of offices will be determined by Hydro One's contractor. Typically, these facilities are leased or rented and may be located in the City of Thunder Bay, Township of Nipigon, Town of Marathon and/or Municipality of Wawa or near laydown yards, storage yards, or other temporary facilities. The construction offices will be decommissioned and/or returned to existing uses following completion of construction activities.

#### **4.6.7 Temporary Construction Easements**

Temporary construction easements are anticipated to be required at select locations along the corridor such as at dead-end structures to provide adequate space for equipment and materials to enable conductor pulling/tensioning. Once construction has been completed, all temporary construction easement areas will be decommissioned and restored as required.

### **4.7 Project Phases**

The project includes the planning, design, construction, and operation and maintenance of the above project components. Project activities include:

- site preparation, including clearing of vegetation for construction access along the ROW;
- construction of new access roads and upgrades to existing roads;
- transportation and delivery of construction equipment and materials along the ROW;
- construction of tower foundations, tower structure assembly and erection, and conductor stringing and tensioning;
- tower replacement within Pukaskwa National Park;
- tie-in to existing transformer stations (Lakehead, Marathon and Wawa);
- construction demobilization and restoration; and,
- operation and maintenance of the new and modified power transmission line.

#### **4.7.1 Construction**

The construction and commissioning of the Project is expected to occur over an approximately 30-month period, after acquiring all the necessary approvals, permits and clearances to construct. Construction activities will continue year-round, with some construction activities being staged and

implemented to avoid or minimize potential effects on environmentally sensitive areas or life cycle periods of wildlife, such as avoiding clearing of vegetation during the migratory bird nesting season. The detailed construction staging and sequencing of the Project will be determined by Hydro One in discussion with its construction contractor. Construction activities will typically occur during the working hours of 07:00 to 19:00 from Monday to Friday. However, regularly scheduled night-time work and/or weekend work may be required to address schedule delays caused by weather or other unexpected conditions. Project commissioning and start-up is expected to occur shortly after construction and testing is completed. The main construction activities that have the potential to affect the natural environmental and socio-economic features include the following, in sequential order:

- surveying, staking and geotechnical investigations;
- clearing and grubbing of vegetation;
- construction of supportive infrastructure (e.g., access roads, watercourse crossings, laydown yards, and construction camps);
- material delivery/distribution to sites;
- foundation installation for transmission structures;
- assembly and erection of transmission structures;
- conductor installation (pull, sag and clip);
- clean-up and restoration; and,
- testing and commissioning.

#### **4.7.2 Operation**

Activities such as vegetation maintenance and transmission line assessments would be regularly performed on the transmission line. Vegetation management activities are performed to manage and mitigate safety and reliability risks due to vegetation growing both on and off the ROW.

The operating services to be conducted include:

- structure climbing and helicopter inspections;
- line hardware and insulator thermography;
- ROW inspections;
- visual ground patrol;
- Vegetation management; and,
- Repairs and maintenance.

#### **4.7.3 Decommissioning**

The Project will be operated for an indeterminate time period and retirement (or decommissioning) is not anticipated. Should decommissioning activities eventually be considered for some or all Project components, decommissioning will be planned and conducted in accordance with the relevant standards and regulatory requirements in effect at that time.

## 5. Consultation

Effective consultation for both the ToR and EA is a vital part of the Project lifecycle. Interested parties can raise concerns about the project during the ToR and EA process so that Project planning can resolve issues before they arise. Consultation can result in mitigation of impacts to individuals and communities, fewer conflicts and delays and helps to improve transparency around the ToR, EA and Project planning process.

The objectives of the consultation plans are to:

- consult with all potentially affected and interested stakeholders;
- provide sufficient information in a user-friendly format;
- provide opportunities for input before decisions are made;
- provide appropriate, flexible and convenient opportunities for consultation that meet the needs of stakeholders;
- be responsive by listening to comments, giving them careful consideration, making changes to Project proposals where appropriate and providing a rationale where no change is made;
- document the consultation program as well as the issues raised by stakeholders and provide written responses to key issues; and,
- evaluate the effectiveness of the program on an ongoing basis and make changes for improvement.

Meaningful consultation lasts the life of the Project. Figure 5 identifies the key decision-points in the project and the proposed consultation activities for each. The timelines in the figure are required to meet the project need date. Specific consultation activities are described below.

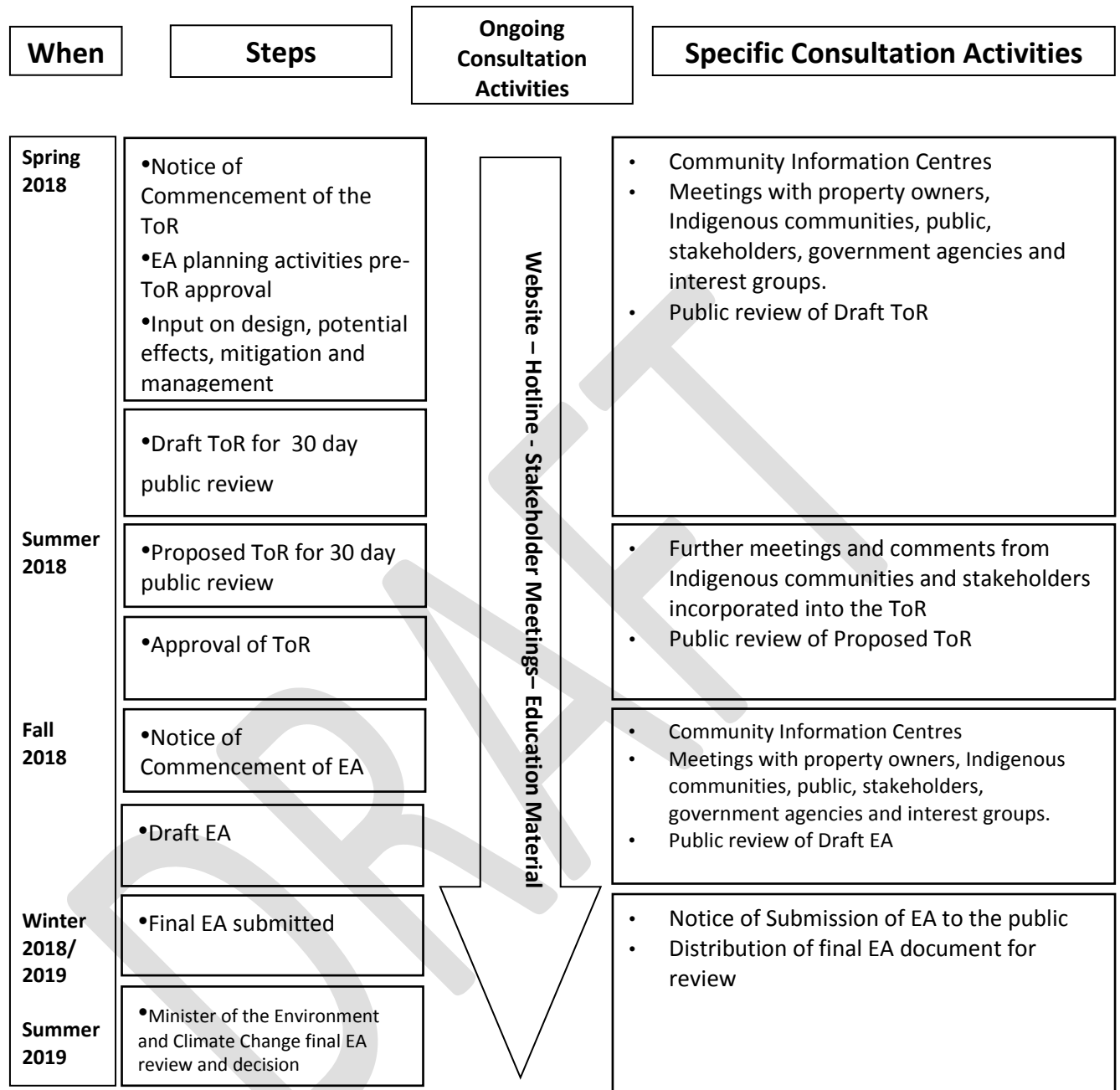


Figure 5 – Key decision points during the EA process

## 5.1 Principles and Approach

Consistent with the MOECC Code of Practice and best practices in public consultation and engagement, a number of key principles underpin the approach, for this project, including:

- early, ongoing, clear, timely and respectful communication and dialogue with all stakeholders;
- a ‘no surprises’ for elected officials by providing advance copies of information being circulated in the public domain;
- provision of multiple and ongoing opportunities for all affected and interested parties to communicate with members of the project team and to provide input in a way that meets their needs;
- open, transparent, and flexible planning and decision-making processes; and,
- thorough documentation of input received during the consultation process and follow-up with all participants on how their input was incorporated into project plans, or an explanation of why it could not be incorporated.

The Lake Superior Link team will approach communication and consultation with:

- a focus on building local relationships by communicating with the residents and officials, media and interest groups in the immediate project area and identifying opportunities for face-to-face meetings;
- a commitment to ongoing conversations with communities along the route, including Indigenous communities, about what tangible benefits we can bring to the region; and,
- dedicated property agents to communicate personally with property owners adjacent to the proposed corridor (two agents for the permanent rights and one for temporary rights).

## 5.2 Stakeholder Identification

There are a wide range of project interests and stakeholders. Interactions with stakeholders will be compiled and consultation commitments will be tracked. The following stakeholders will be consulted with in regard to both reference and alternative routes:

- owners and occupants (tenants) of property within the proposed transmission corridor;
- residents within the area of the transmission line route;
- non-government organizations and groups with an interest in the project;
- agencies with an interest in the project including the Government Review Team;
- municipalities affected by the project;
- Indigenous communities as identified by the Crown via the Ontario Ministry of Energy; and,
- interested members of the public.



Early in the Project planning stage a Government Review Team Master Distribution List was obtained from the MOECC. This list is used to ensure that the distribution of Project materials is directed to the appropriate Federal, Provincial and Municipal agencies.

Stakeholders, interest groups and members of the public have been identified in various ways. Geographical Information System data was used to identify directly and potentially impacted property owners. A third party realty team was used to gather names, addresses and contact information through publicly available sources. Stakeholders and interest groups were identified through research and previously completed publicly available environmental assessment information.

In delegating procedural aspects of consultation, the Ministry of Energy has identified fourteen First Nations and four Métis Groups as having a potential interest in the Project.

A comprehensive contact list is being maintained from the outset of the Project. The list is updated regularly as contacts change and new contacts are identified through consultation activities. It is important to keep people up-to-date about what is happening on the project and inviting input from stakeholders. The following on-going consultation activities are planned for the project:

- **Website** – A dedicated project website will continue to be updated throughout the EA process and will offer visitors access to project information and the opportunity to comment on the proposal. The purpose of the website is to provide a widely accessible venue for a large number of stakeholders to obtain and download a wide range of information in a timely manner throughout the life of the project. However, internet access is not universally available and thus, alternative options for obtaining information will be available. The website can be found at <https://www.hydroone.com/lakesuperiorlink>. An email address [community.relations@hydroone.com](mailto:community.relations@hydroone.com) is available on the website for comments and questions to be submitted to the project team;
- **Hotline** – The project hotline, 1-877-345-6799, will provide 24 hour voicemail access throughout the life of the project. This will give stakeholders another opportunity to leave comments or request information regarding the project;
- **Frequently Asked Questions (FAQs)** – A list of FAQs has been posted to the project web site and will be updated periodically to reflect new issues and concerns;
- **Media** – Media will be provided with project information, including a letter, contact card, newsletter, FAQs and technical briefings if needed; and,
- **Documents distributed and posted in public places** – Draft and final ToR and EA documents will be distributed to agencies, key interest groups, and municipal officials and staff of communities along the project route. Hydro One will make documents available locally for review by members of the public. Documents will also be available for download from the project website for those with internet access.

## 5.3 Duty to Consult with Indigenous Peoples

It is the responsibility of the Crown to determine whether a Duty to Consult has been triggered and, if so, the appropriate depth of consultation to be undertaken. If the Crown has determined that consultation is required with respect to the Project, then the Crown will:

- Advise Hydro One in a timely manner of the Indigenous communities to be consulted and the depth of necessary consultation with respect to each community; and,
- Notify the identified Indigenous communities that it has delegated procedural aspects of consultation on the Project to Hydro One; and Undertake any preliminary and ongoing assessment of the depth of consultation required for each identified community.

The courts have established that the constitutional duty to consult rests with the Crown. However, government can delegate some of the procedural aspects of the duty to consult upon project proponents. Also, government may coordinate consultation activities of agencies and proponents. Project proponents are obliged under the *EA Act* to consult with all interested parties. In addition, the public consultation process is also open to the Indigenous communities and groups. On March 2, 2018, Hydro One was delegated procedural aspects of consultation with First Nation and Métis communities in the project area on behalf of the Crown via written letter from the Ministry of Energy.

Hydro One is committed to working closely with the Crown to ensure that the duty to consult Indigenous communities and groups is fulfilled. Hydro One will develop an engagement and consultation plan for executing its responsibilities during the course of the Environmental Assessment and other processes undertaken by the Crown. Hydro One will work directly with Indigenous leadership to disseminate clear and concise information to their communities.

## 5.4 Consultation Plan for the ToR

Hydro One has a detailed consultation plan for the ToR. It involves keeping all potentially interested stakeholders informed of the project and soliciting their input at key points. The following describes the public and Indigenous consultation activities undertaken or to be undertaken in relation to the preparation of the ToR.

### 5.4.1 Agency and Public Consultation

Community Information Centres (CICs) were held in March 2018 in nine communities to introduce the project and to let people know that Hydro One was applying for OEB Section 92 approval to build the transmission line between Lakehead TS and Wawa TS.

Hydro One published the Notice of Commencement of ToR and invitation to Community Information Centres in French and English the week of May 28 and June 4, 2018 in the Thunder Bay Source, Nipigon Red Rock Gazette, Terrace Bay Schreiber News, Marathon Mercury, Wawa Algoma News Review, mywawa.ca and the Thunder Bay Chronicle.

A community flyer, double-sided in French and English, was delivered to 39,000 subscribers and non-subscribers of the Thunder Bay Chronicle. Over 5,000 households in communities east of Thunder Bay to Wawa received the flyer via Canada Post unaddressed Ad mail.

Radio advertisements publicizing the project and CICs will be running the week of June 4 and June 11 on the following radio stations CFNO (Marathon, also covering Red Rock and Nipigon); CJSJ, CKPR, CKTG and CJUK (Thunder Bay, also covering Schreiber and Dorion); and WJWA (Wawa, covering White River and Wawa).

Government Review members and stakeholders have been sent the NoC and the draft ToR. Property owners were sent letters to notify them of the NoC, the CIC and the draft ToR.

There will be a series of nine CICs held the week of June 11, 2018. The sessions are as follows:

**Monday June 11, 2018**

***Thunder Bay***

5 p.m. - 7:30 p.m.

Valhalla Inn – Viking Room

***Nipigon***

5 p.m. - 7:30 p.m.

Royal Canadian Legion Branch 32

**Tuesday June 12, 2018**

***Red Rock***

12 p.m. – 2 p.m.

Royal Canadian Legion Branch 226

***Dorion***

5 p.m. - 7:30 p.m.

Dorion Community Centre

***Terrace Bay***

5 p.m. - 7:30 p.m.

Terrace Bay Cultural Centre

**Wednesday June 13, 2018**

***Schreiber***

5 p.m. - 7:30 p.m.

Schreiber Municipal Gym

***Marathon***

2 p.m. – 7 p.m.

Marathon Centre Mall

**Thursday June 14, 2018**

**White River**

5p.m. - 7:30 p.m.

White River Community Centre

**Wawa**

5p.m. - 7:30 p.m.

Royal Canadian Legion

Branch 429

The draft ToR will be available for review and comment at the CICs, at the local Municipal offices and on the Hydro One website from June 11 to July 10, 2018. Once comments have been incorporated, the proposed ToR will be submitted to the MOECC and made available for review in the summer of 2018.

Meetings have been held with as MNRF and Parks Canada. Future meetings have also been set-up. Government Agencies that were identified as being potentially interested in the project were phoned on June 8, 2018 and asked if they would like to discuss the Project and notified that the Draft ToR was being released for comments on June 11. This will be followed up on June 11 by an e-mail to the stakeholder list with a link to the draft ToR on the Hydro One Projects webpage.

#### **5.4.2 Indigenous Communities and Groups**

Hydro One acknowledges the importance of conducting consultation through a process that is in alignment with community values, culture and protocols and is prepared to work with Indigenous communities and organizations to make necessary revisions to this Plan to ensure that it is respectful of community consultation protocols. Hydro One commits to ensuring that all regional and community protocols will be respected.

Hydro One recognizes the importance of engaging the Indigenous communities and groups regarding the Project.. In delegating procedural aspects of consultation, the Ministry of Energy has identified fourteen First Nations and four Métis Groups as having a potential interest in the project:

- Animbiigoo Zaagi'igan Anishnaabek First Nation ;
- Biinjitiwaabik Zaaging Anishinaabek First Nation;
- Biigtigong Nishnaabeg;
- Bingwi Neyaashi Anishinaabek
- Pic Moberg First Nation;
- Fort William First Nation;
- Ginoogaming First Nation;
- Long Lake #58 First Nation;
- Michipicoten First Nation;
- Missanabie Cree First Nation;
- Ojibways of Batchewana;
- Ojibways of Garden River;

- Pays Plat First Nation;
- Red Rock Indian Band (Lake Helen);
- MNO (Métis Nation of Ontario) Greenstone Métis Council;
- Red Sky Métis Independent Nation;
- MNO Superior North Shore Métis Council; and,
- MNO Thunder Bay Métis Council.

Hydro One acknowledges that there may be additional Indigenous communities, not included in the preceding list that may come forward with information on the potential effects of the Project upon their section 35 rights. Hydro One will advise the Crown and seek a determination as to whether the Duty to Consult has been triggered and if so, the depth of required consultation.

All eighteen Indigenous Communities that were in the delegation letter from the Ministry of Energy were sent the NoC. Follow-up phone calls were made offering to meet and discuss the project.

The administration offices of all eighteen Indigenous Communities will receive a hard copy of the draft ToR for their review and comment between June 11 and July 10, 2018. Hydro One will contact each office to arrange to meet and discuss the ToR. CICs are being scheduled in Indigenous Communities to provide community members with Project details, inform them of the ToR and provide an opportunity for comment. Current CIC schedule includes:

**Wednesday June 13, 2018**

Biinjitiwaabik Zaaging Anishinaabek First Nation  
1p.m. - 5 p.m.

**Red Rock Indian Band**

5p.m. - 8 p.m.

**5.4.3 Consultation Record**

Hydro One will maintain a comprehensive consultation record and track issues to document all stakeholder, public, agency and Indigenous engagement activities material to the ToR. The records will be used to:

- document concerns and follow-up actions and responses;
- maintain a current record of staff and community representatives; and,
- maintain a record of all communications (including phone calls and e-mails) and information provided to interested parties as well as consultation events/activities with each community.

The consultation log will be updated to reflect each communication and activity. A copy of the aggregate consultation record will be provided to regulators as required by the regulator and each Indigenous community will be provided with a copy of the consultation record pertaining to that community concurrent with the submission to regulators. The consultation database will include the following information relating to each engagement and consultation event or activity:

- date on which the communication, event or activity occurred;
- method of communication: e.g. letter, e-mail, phone call, face-to-face;
- identification of initiator and recipient of communication or in the case of a meeting, organizer and participants attending at the meeting;
- copy of or link to communication in the case of written communication as well as copy of/or link to any other relevant documentation provided or generated as part of the communication, including all regulatory information provided, notices for community meetings, draft versions of all materials prepared for EA, summary of any resources and/or funding offered, requested/provided to the Indigenous community by Hydro One;
- summary of communication or in the case of a meeting, meeting notes; and,
- identification of issues raised or discussed and any follow-up action or undertaking.

## 5.5 Consultation Plan for the EA

The Consultation Plan for the EA will apply the same consultation principles as used in the ToR and will take into account feedback from Indigenous communities, stakeholders, and the public

### 5.5.1 Public Consultation

The following outlines the specific consultation activities that are planned for the EA:

- **Notice of Commencement of the EA** – The Notice will announce the initiation of the EA. The Notice of Commencement will be published in local newspapers and include a brief explanation of the project, key contact information. This activity is a mandatory requirement of the ToR and EA process.
- **Community flyers** – Community flyers will continue to be produced at key decision points to keep stakeholders up to date on the progress of the EA and to invite them to consultation opportunities. Community flyers will be made available on the project website and will be mailed to directly affected property owners within the project routing area and others on the contact list. Community flyers will be produced and distributed via newspaper insert and unaddressed ad mail.
- **Issues Workshops** – Workshops provide an opportunity for interested members of the public to assist in the EA process. Workshops may be held as appropriate with property owners to confirm and develop design alternatives, apply evaluation criteria and establish the relative importance of criteria. If specific issues are identified during the EA process, workshops may be utilized to address the issues.
- **Community Information Centres (CICs)** – The purpose of the CICs will be to provide an opportunity for face-to-face discussion among municipal officials, affected property owners, interested individuals, interest groups and the project team. A series of CICs will be held in the fall of 2018 in the same communities as for the ToR. These CICs will be widely advertised with similar methods used for the ToR. Comment forms will be distributed at the CICs to acquire responses to specific questions and to allow an opportunity for participants to provide further

comments on the proposal. CIC panels and any handouts available at the CICs will also be posted on the project web site for review by those unable to attend the CICs. This series of CICs will allow members of the public to provide input on the proposed project, design (towers design and location, access road location and construction), mitigation and effect management, as well as review draft EA documents.

- **Meetings with property owners** – Property agents and EA team members will meet with directly affected property owners where environmental effects have been identified to provide updated information on the project, identify issues and discuss the property acquisition process. This will provide another opportunity for affected property owners to meet face-to-face with project staff and identify any outstanding issues and concerns. Property owners will also be notified directly of upcoming CICs and that the draft EA document is available for review through a mailing. The mailings will include a project newsletter informing affected landowners of dates and locations of scheduled CICs and where and when they can review the draft EA and EA.
- **Interest group meetings** – Key interest groups may request meetings with the project team during the EA process and Hydro One will discuss the project and take into account the feedback from these meetings. Key interest groups will also be provided with a copy of the draft EA and EA for review.
- **Presentations to Councils and municipal organizations** – Upon request, members of the Hydro One project team will appear before local Councils and municipal organizations to share project information, seek feedback on what tangible benefits mean to each community, and continue in a meaningful dialogue with each municipality.
- **Public Notice of Submission of EA to MOECC** – Hydro One will notify affected property owners and others on the mailing list by mail that the EA document has been submitted to the Minister of the Environment and Climate Change for approval. The Notice will be published in local newspapers along the route. The Notice will also indicate that a government and public review has been initiated, the length of the minimum review period, and the date that comments are to be submitted to the MOECC Environmental Assessment and Permissions Branch (EAPB) contact.

### 5.5.2 Indigenous Communities and Groups Consultation

The Consultation Plan is intended to enable Hydro One to carry out its responsibility as described under section 4.1(a) of a Memorandum of Understanding (MOU) signed with the Provincial Crown (Ministry of Energy) on the legal duty to consult. In addition, the Consultation Plan is also intended to satisfy any consultation requirements which may be imposed on a proponent through the operation of legislation or policy, including those contained in the provincial *Environmental Assessment Act*, the applicable Policies and Codes of Practice issued by the Ministry of the Environment and Hydro One's Indigenous Relations Policy. Hydro One will advise the relevant Crown representatives/agencies of the results of the ongoing engagement with the Indigenous communities and groups and will work cooperatively with all involved to reach appropriate solutions.

The Consultation Plan will also provide a process to facilitate constructive Project-related consultation dialogue between Hydro One and potentially affected Indigenous communities. Such a process will assist in the identification of potential adverse effects of the Project upon the asserted and established



Indigenous and treaty rights (hereinafter ‘section 35 rights’) of Indigenous communities as identified from the Crown and enable Hydro One to work together with those communities to develop avoidance and mitigation measures to address the potential adverse effects. The Consultation Plan will be aligned with the environmental assessment process in order to ensure meaningful opportunities for review and comment by the Indigenous communities throughout the development and construction of the Project.

Hydro One acknowledges the importance of conducting consultation through a process that is in alignment with community values, culture and protocols and is prepared to work with Indigenous communities and organizations to make necessary revisions to this Plan to ensure that it is respectful of community consultation protocols. Hydro One commits to ensuring that all regional and community protocols will be respected.

Consultation undertaken by Hydro One pursuant to this Plan will be guided by the following principles:

- Ensuring that the consultation process is culturally appropriate and developed and implemented in collaboration with the Indigenous communities;
- Ensuring that potentially affected Indigenous communities are provided with relevant, understandable and accessible Project-related information in a timely and culturally appropriate manner;
- Ensuring that potentially affected Indigenous communities have sufficient opportunity to identify and formulate and express their views on the potential adverse impacts of the Project upon their section 35 rights; and
- Ensuring that Hydro One takes every reasonable step to avoid or mitigate/accommodate, as appropriate, the adverse effects of the Project upon section 35 rights.

Hydro One’s process for Indigenous communities and groups is designed to provide information on the project to the Indigenous communities and groups in a timely manner. Hydro One will respond to and address issues, concerns or questions raised by the Indigenous communities and groups in a clear and transparent manner throughout the completion of the regulatory approval processes (e.g., the EA process). The process with Indigenous communities and groups will address the following objectives:

- to provide opportunities for information sharing between Hydro One and potentially affected Indigenous communities as identified by the Crown, including information about the Project and associated review and regulatory processes;
- to identify the potential adverse impacts of the Project (including social, environmental, economic, health and culture) upon section 35 rights;
- to work with potentially affected Indigenous communities as identified by the Crown to identify measures to mitigate or avoid those potential adverse effects;
- provide project-related information which is comprehensive and accessible to assist Indigenous communities and groups to effectively identify their concerns, and any possible effects of the project on their existing or asserted treaty or Aboriginal rights;
- advise of the various provincial approvals that may be required;

- seek information from the Indigenous communities and groups that may be applicable to the study area, including information on Aboriginal interests and treaty rights including archaeological sites, and sacred sites and burial grounds;
- seek input from Indigenous communities and groups on environmental studies to be conducted by Hydro One in the course of the project;
- offer information centers or meetings with Indigenous communities and groups to provide project-related information and to address any concerns, issues or questions about the project;
- provide information, where requested, on the OEB regulatory process and the EA process regarding the project;
- address all issues and concerns raised by Indigenous communities and groups and to how the project may affect these interests;
- consider any potentially affected interests, and clearly communicate the results;
- address issues in relation to project land usage within First Nation Reserves;
- incorporate traditional knowledge and use;
- focus consultation on areas not already assessed and verifying publicly available information; and,
- Hydro One will also work with Indigenous communities along the route to explore benefits and opportunities including, but not limited to, capacity building to participate in the engagement process, procurement and sub-contracting opportunities, job training, employment and equity participation; and,
- record all forms of engagement with Indigenous communities and groups, including the creation of a list of concerns and issues raised regarding the project and Hydro One's responses.

In order to achieve the consultation objectives, Hydro One will:

- provide Indigenous communities with timely notice of the Project so that they can consider possible impacts on their section 35 rights;
- provide Indigenous communities with information about the Project and the applicable regulatory and approval processes on an ongoing basis;
- meet with and take into consideration any communications from Indigenous communities in order to identify any concerns that the communities may have regarding the potential adverse impacts of the Project upon section 35 rights;
- where appropriate, discuss with an Indigenous community measures to address potential adverse impacts of the Project upon its section 35 rights;
- maintain a timely, open and transparent dialogue with potentially affected Indigenous communities through phone calls, face to face meetings, e-mails, correspondence and other means as appropriate to ensure understanding at each step in the Project's progress;
- offer Indigenous communities assistance, including capacity assistance, where appropriate for the purpose of participating in consultation on the Project;
- provide support for community liaisons; and,

- document and respond to the issues and concerns which have been expressed by Indigenous communities to Hydro One during the EA and other regulatory processes.

### 5.5.3 Agency Consultation Plan

The purpose of the agency consultation is to:

- identify concerns and opportunities and collect information related to the project;
- identify issues related to the project, and where appropriate, proposed mitigation;
- identify provincial and federal agency jurisdiction;
- facilitate the development of a list of all required approvals, licenses or permits;
- identify relevant guidelines, policies and standards; and,
- list all the commitments/obligations and responsibilities of the proponent.

Following the Notice of Commencement of the EA, an agency consultation package will be sent to all agency stakeholders from the federal, provincial and municipal governments and conservation authorities soliciting their input and feedback on the Project. The consultation package will include a letter describing the project, a map of the project area and a feedback form for completion.

Follow-up communications will occur with those agencies that request further meetings/involvement to discuss their input. Hydro One will be available to meet with agencies regularly to discuss issues that arise and provide progress reports as requested. The feedback forms will capture general comments, while the meetings, if necessary, would allow probing of specific issues in greater detail. Agencies will also be notified when the draft EA is available for review.

Other consultation activities are as follows:

- **Newsletter** – Newsletters will be made available on the project web site and will be e-mailed to all agency stakeholders;
- **Issues Workshops** – Workshops may be held as appropriate with agencies, interest groups and municipal staff to confirm and develop design alternatives, apply evaluation criteria and establish the relative importance of criteria. If specific issues are identified during the EA process, workshops may be utilized to address the issues;
- **Review Draft EA and EA**- Agencies and the Government Review Team will be given copies of the Draft and EA for review; and,
- **Notice of Submission of EA to MOECC** – Hydro One will notify agencies by e-mail that it has submitted the EA to the Minister of Environment and Energy for approval.

Aside from the arranged meetings/interviews, agency consultations will also dovetail with CIC events as avenues for further input to the process. Engagement with the various stakeholders is expected to be ongoing throughout the EA and into the project implementation process. All agency submissions and meetings will be documented and included in the Record of Consultation.

#### 5.5.4 Consultation Record

Hydro One will maintain a comprehensive consultation record and track issues to document all stakeholder, public, agency and Indigenous engagement activities. The records will be used to:

- document concerns and follow-up actions and responses;
- document and track mitigation measures developed by the Proponent to prevent, mitigate or otherwise address potential effects of the Project upon s. 35 rights;
- maintain a current record of staff and community representatives; and,
- maintain a record of all communications (including phone calls and e-mails) and information provided to interested parties as well as consultation events/activities with each community.

The consultation log will be updated to reflect each communication and activity. A copy of the aggregate consultation record will be provided to regulators as required by the regulator and each Indigenous community will be provided with a copy of the consultation record pertaining to that community concurrent with the submission to regulators. The consultation database will include the following information relating to each engagement and consultation event or activity:

- date on which the communication, event or activity occurred;
- method of communication: e.g. letter, e-mail, phone call, face-to-face;
- identification of initiator and recipient of communication or in the case of a meeting, organizer and participants attending at the meeting;
- copy of or link to communication in the case of written communication as well as copy of/or link to any other relevant documentation provided or generated as part of the communication, including all regulatory information provided, notices for community meetings, draft versions of all materials prepared for EA, summary of any resources and/or funding offered, requested/provided to the Indigenous community by Hydro One;
- summary of communication or in the case of a meeting, meeting notes; and,
- identification of issues raised or discussed and any follow-up action or undertaking.

The Record of Consultation for the ToR will be submitted under separate cover.

### 5.6 Documentation and Issues Resolution Strategy

Consultation/engagement with the various stakeholders and Indigenous communities and groups is expected to be on-going throughout the EA and into the project implementation phase. All comments and input received throughout the EA from the public and review agencies will be documented in a summary table and included in the EA document as part of the Record of Consultation. The summary table will provide a response to each issue. Where resolution of issues has not been possible, this will be noted along with a record of all attempts to resolve the issue. Hydro One will develop an issues

resolution strategy for the EA. The EA will also include a consultation summary and a detailed record of comments received, and their resolutions, as well as materials and documentation distributed to stakeholders.

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## 6. Existing Environmental Conditions in the Study Area

It should be noted that another proponent has completed studies along the reference route alternative and much of the reference route. Where there is an overlap of the study areas, Hydro One is generally not duplicating these studies, but using the information available publicly through an EA document already funded by the ratepayers of Ontario.

The biophysical and socio-economic baseline of the reference route and the alternative route have been assessed and described in other Environmental Studies performed by others. Environmental information has been gathered for all the aspects of the existing environment during the preparation of those studies that have been reviewed by the government agencies.

Hydro One performed a gap analysis of the existing environmental study information to identify the need of verification or collection of data to complete the environmental description and include the area of the reference route through Pukaskwa National Park and the Park approaches as well as the corridor section near Dorion, west of Nipigon through Lakehead TS.

Hydro One is conducting field surveys to characterize the biophysical environment in the areas identified in the gap analysis as mentioned in the above paragraph, in compliance with the requirements of the MOECC, Parks Canada, MNRF and other government agencies to complete the Individual EA Study.

This section describes the existing natural and socio-economic environments existing in the project study area. A list of preliminary assessment criteria and indicators can be found in Appendix 2.

### 6.1 Natural Environment

The following sections document the natural environment present in the proposed project study area. The specific study area sizes will be determined through the EA process.

#### 6.1.1 Geology, Soils and Physical Environment

The Ontario Shield is part of the broader Boreal Shield and is the largest ecozone of the province at 61% of the landmass. This is named after the intersection of the boreal forest and the Canadian Shield and is typified by the exposed Precambrian granite bedrock which is routinely exposed. Glaciers have regularly shaped the landscape over the eons and have created the rolling hills, wetlands and lakes of the region. These processes and physical geography influence the formation of soils, and subsequently, vegetation and animal assemblages (Ontario Biodiversity Council 2010).

The EA will provide a description of the geological characteristics including tectonics, structural features and stratigraphic units and the effects of glaciation on Northern Ontario physiography based on Ontario

Geological Survey information, as well as mapping and descriptions of the Lake Superior Link project. Regional soils and physical geology of the project study area will be assessed using existing knowledge bases and mapping resources.

The description will not include field work for visual identification or characterization of geological formations or structures, terrain or soil characteristics.

### **6.1.2 Groundwater and Surface Water**

The Lake Superior Link project is situated solely in the Lake Superior Watershed and all surface water which includes several hundred streams and rivers and groundwater resources in the project study area flow toward Lake Superior (Environment and Climate Change Canada 2017). The EA document will assess and identify the watershed classifications of these water resources.

The description will not include field work for flows or water quality characterization of streams or water bodies. Should fisheries surveys of watercourses designated as potential temporary crossings be required, hydrologic, surficial sediment type, and surface water parameters will be measured and recorded on-site. The hydrologic data will be provided in the post-EA applications for watercourse crossing permits.

The EA will also provide a description of groundwater resources including groundwater levels, yields and quality based on MOECC water well records and Permit to Take Water published information. A questionnaire will be provided which requests information on the location of any wells near the construction areas. Consultation will include information on construction activities which will take place on each individual property. This site-specific information will be used to augment the information provided by MOECC in their wells database.

Wellhead protection areas, intake protection zones, highly vulnerable aquifers and significant groundwater recharge areas, source water protection documentation and relevant policies will be reviewed.

The description will not include field work for characterization of groundwater quality, or measurements of water levels or drawdown of water wells.

### **6.1.3 Environmentally Significant Areas**

Provincially Significant Wetlands (PSWs), Areas of Natural and Scientific Interest (ANSIs), Regional Environmentally Sensitive Areas (ESAs) may be crossed by the proposed transmission corridor. As the names suggest, these areas provide sensitive and significant ecological functions for both wildlife and humans alike.

The reference route currently runs through an existing transmission corridor within Pukaskwa National Park. The Lake Superior Link project also crosses several other Provincial Parks and ANSIs. Figure 6 and



Figure 7 outline the route and its interaction with ESAs. The reference route intersects through or near the following Provincial Parks, Nature Reserves, regulated waterways, and recreational areas:

- Black Sturgeon River
- Ruby Lake Provincial Park
- Pukaskwa River Provincial Park
- Kama Hills Provincial Park
- Gravel River Provincial Park
- Nimoosh Provincial Park
- White Lake Provincial Park
- Neys Provincial Park
- Prairie River Mouth Provincial Park
- Craig's Pit Nature Reserve
- Rainbow Falls Provincial Park
- Ouimet Canyon Provincial Park
- Red Sucker Point Provincial Park
- Cavern Lake Provincial Park
- White Lake Provincial Park

The study area also intersects or is situated nearby the following ANSIs

- Jimmy Kash River Candidate ANSI
- Kama Hill ANSI
- Makwa River Candidate ANSI

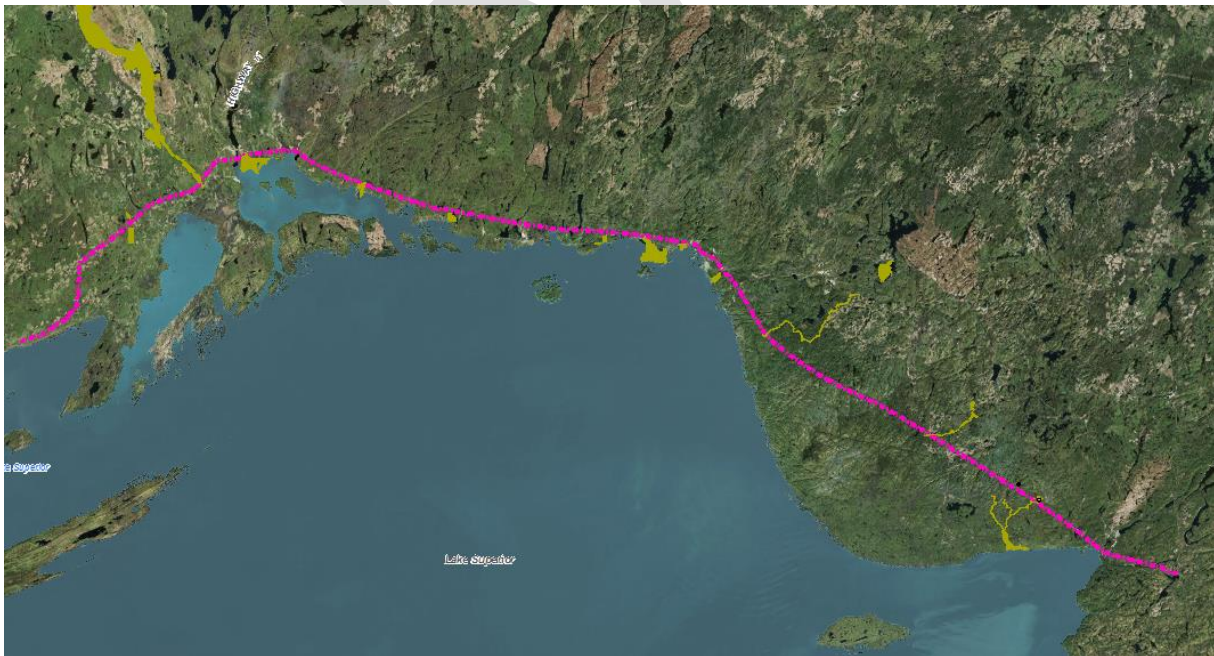


Figure 6 – Dotted Reference Route line intersecting Provincial Parks and ANSIs (light green)

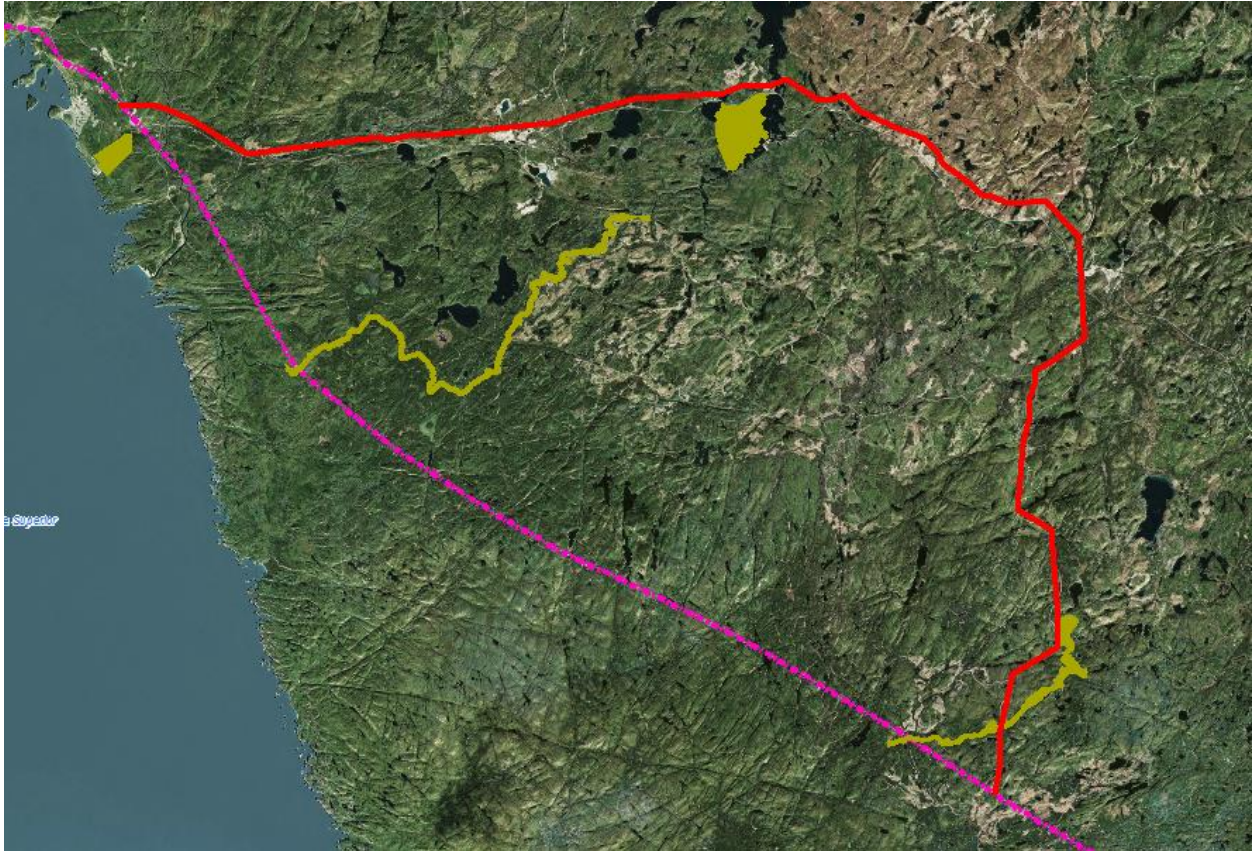


Figure 7 – Reference Route (dotted pink line) and Reference Route Alternative (solid red line) traversing provincial parks (light green polygons).

#### 6.1.4 Wildlife and Habitat

Lands within the study area provide agricultural, woodland, wetland and riparian habitat for wildlife. Birds, mammals, insects, reptiles and amphibians inhabit these ecosystems along the Lake Superior coastline within the Ontario Shield Ecozone. Preliminary desktop studies to assess current levels of knowledge will be conducted for wildlife and wildlife habitat to better understand species incidences.

A terrestrial wildlife field program will be undertaken with the purpose of characterizing species diversity and composition throughout the Study Area as well as identifying and quantifying terrestrial wildlife habitat therein. The baseline data resulting from this field program will be used to support baseline studies for this Project, conduct an environmental impact assessment as part of the EA process for the Project and will inform potential permitting.

Wildlife surveys to be undertaken as part of the wildlife field program will include a winter aerial survey, breeding bird point count surveys, crepuscular bird surveys, marsh bird surveys, amphibian call counts, bat habitat assessment, and bat acoustic surveys. These surveys are designed with the purpose of sampling wildlife diversity and composition within the PSA as well as informing the presence of the significant wildlife habitats. Data collected during each survey is likely to contribute to the assessment of

multiple significant wildlife habitats types, as well as the presence/absence of SAR and species of Special Concern that use those specialized habitat types.

#### **6.1.5 Vegetation, Forest Resources, and Wetlands**

The study area includes forested areas, woodlots, open fields, wetlands, and other vegetated habitats. For the study area, the EA will describe and map vegetation communities and delineate plant species in all natural areas, such as ESA's, ANSI's, wetlands, and municipally-designated significant woodlands, valleylands and wildlife habitat, based on the NHIC database, published information, and field studies. Should it be necessary, field surveys will also be undertaken in semi-natural communities within the study area.

Ecological Land Classification (ELC) will be used by qualified biologists during field studies to characterize the vegetation communities within portions of the study area. This information will be used to confirm aerial photography and published data and boundaries of natural features. During the vegetation surveys, any significant or specialized wildlife habitat including odonates and butterflies will be identified and any casual observations of wildlife species recorded

In order to characterize and assess impacts to vegetation communities along the proposed sections of the PSA, vegetation classification field surveys will be carried out in order to characterize the vegetative communities within 1 kilometer of the proposed works. The objectives of the field program will be to:

- Survey vegetation community types (forest, wetland, riparian) within the Study Area;
- Conduct a detailed inventory of the communities sampled;
- Define vegetation community function (e.g. wildlife habitat);
- Identification of sensitive vegetation communities; and,
- Identification of any listed SAR plant species.

#### **6.1.6 Water Bodies, Fish Habitat and Aquatic Ecosystems**

The primary purpose of the aquatic study program will be to characterize the aquatic habitat that could potentially be affected by the construction of the transmission line and to provide baseline information to support the EA process. Most of the larger watercourses within the study area provide fish habitat. The EA will map known coldwater and warm water watercourses, as well list fish species present in the watercourses in the study area based on previous regional EA studies, MNR Field Collection Records, Conservation Authority databases, published information, and supplemental field surveys, where required. Any significant fish habitat (e.g., Sanctuary Areas) will be identified and described. Representative watercourse locations will be field inspected prior to construction to confirm presence/absence of fish habitat and fish species present in areas where gaps within existing knowledge bases are found. Detailed assessments will also be conducted on those watercourses that will be crossed by construction access roads where required.

Existing aerial/satellite imagery, along with other background information will be used to establish survey locations prior to execution of the field program. Their selection will also be informed by previous studies. Sample locations will be determined as design progresses and specific focus will also be on



areas where clearing is required. Consideration of any new temporary or permanent access roads will also be included in the survey plans in order to characterize impacts associated with construction staging requirements, or ancillary infrastructure required for long term maintenance of the line. Sampling may also be conducted at selected points along the Project to identify potential sensitivities.

Key considerations in establishing aquatic habitat sampling locations will include:

- Targeting of a representative cross section of aquatic habitat community types based on their distribution within the Project area;
- Aquatic Species at Risk; and,
- Accessibility.

All information collected as part of the natural environment field programs will be used in the EA, to identify potential effects and practicable mitigation measures, and to fine tune the locations of towers, access roads and water crossings (where appropriate). Information will also be used for any DFO and other approvals that may be required prior to construction.

#### **6.1.7 Species at Risk**

The EA document will map the general locations of known incidences of species at risk, endangered and threatened species, and species of special concern in the study area. This information will be based on the MNRF's "Species at Risk in Ontario List", the Committee on the Status of Endangered Wildlife in Canada list, Environment Canada species at risk search tool (<http://www.registrelep-sararegistry.gc.ca/>), and Environment Canada, CWS and NHIC databases, as well as known locations based on published and unpublished information and personal communications. All general locations within the study area that would be directly affected by construction activities will be screened to confirm presence/absence of any species at risk (if practicable) and evaluate habitat potential to support species at risk. Regionally and locally rare species will be considered as an indicator for the EA, based on information obtained from NHIC, MNR, local conservation authorities and field observation.

#### **6.1.8 Air Quality**

Air Quality metrics are published in annual Air Quality in Ontario Reports published by Ministry of Environment and Climate Change. The closest two air quality monitoring stations operated by the province of Ontario are in Sault Ste. Marie and Thunder Bay. In general, these two stations report lower than average concentrations of air pollutants as compared to other parts of Ontario and are generally lower than Canadian Ambient Air Quality Standards (MOECC 2015). The project will evaluate existing studies of air quality, potential project emission sources and identification of receptors.

#### **6.1.9 Acoustic Environment**

The acoustic environment (sound/noise) is an important component of atmospherics. The major sources of noise in the rural environment are road traffic and the resource industry such as forestry, mining and

associated support industries. The EA will characterize baseline or background noise conditions, based on published information or noise surveys, as required. It will also identify sensitive receptors to noise emissions such as recreational areas and communities.

## 6.2 Socio-economic and Cultural Environment

The following sections outline the socio-economic and cultural environments within the project study area. The sections will establish the baseline conditions and the information required to characterize socio-economic components.

### 6.2.1 Cultural Heritage Environment

To describe and assess potential effects on heritage resources and archaeology in the study area, the EA will draw upon the results of archaeological assessments and cultural heritage studies. Indigenous communities will be engaged in the archaeological studies. The Project will utilize existing Stage I and Stage II archaeological studies completed in the region. Additional Stage I and Stage II studies are planned for additional areas as a result of a gap analysis performed to identify missing datasets for the proposed transmission corridor. Results from these studies will be incorporated into impact assessment, EA decision-making and construction planning.

A background historical study will be undertaken of the municipalities along the transmission route to describe their development history and the transmission route development history. Existing cultural heritage resources conditions will be documented. Built heritage resources and cultural landscape resources that could potentially be affected by the proposed corridor will be identified. If human remains are identified during the EA study or during the construction phase of the project, Hydro One will cease work in the immediate area, notify the MTCS as required under the *Cemeteries Act* and simultaneously notify Indigenous communities with an interest in the area.

### 6.2.2 Regional Planning

Northern Ontario is subject to a number of planning initiatives both provincially and regionally. The majority of the project is located on Crown Land and will be subject to provincial regulation and land use policy. Other portions of the project are privately owned. Under the *Planning Act*, the 2014 Provincial Policy Statement (PPS) outlines the framework for development, land use and approved developments. The goals of the PPS are as follows:

“The Provincial Policy Statement, 2014 applies province-wide. Its policies set out the government’s land use vision for how we settle our landscape, create our built environment, and manage our land and resources over the long term to achieve livable and resilient communities” (MMAH 2014). In addition, the Ministry of Municipal Affairs has published two ‘Places to Grow, Growth Plan for Northern Ontario’

which documents the plan for the region for the next 25 years. Of note, the plan has a goal of strengthening the economy of Northern Ontario through the following (MMA 2011):

- Diversifying the region's traditional resource-based industries
- Stimulating new investment and entrepreneurship
- Nurturing new and emerging sectors with high growth potential.

The region has varying levels of development with the highest density near Thunder Bay and less development further east. Owing to the length of the transmission corridor, the project will pass through many current land uses such as mining, forestry, trapping, hunting, fishing, residential, commercial, industrial, and agriculture, among others. In addition to these previously mentioned official plans, crown land use policies, district land use guidelines, forestry management, land claims and rights, and other land uses will be assessed in the EA document.

### **6.2.3 Economy, Resource, Commercial and Industrial Activities**

Northern Ontario communities rely on a resource extraction economy with a focus on forestry and mining. These sectors are dominated by large industrial employers in the region. These industrial complexes rely on a consistent supply of electricity. The project may cross mining claims and forestry management units which will be identified during the EA process and the potential effects the project may have.

In addition to resource extraction, Northern Ontario communities provide a gateway for recreation and tourism, and outdoors guiding and outfitting activities. The communities cater to visitors to local parks and activities such as hunting, fishing and camping are all important aspects of the Northern Ontario experience.

The EA document will assess existing commercial and industrial activities in the region and address potential effects on these sectors. Leaseholders, claim owners and other stakeholders will be consulted as part of the EA process. Indicators used to describe the economy and employment will be detailed (employment, income, etc.). The EA will also address economic development and economic sectors, businesses, governmental finances, and housing characteristics.

### **6.2.4 Population, Demographics and Community Profile**

Northern Ontario's population has generally been on a decline since at least 2001, with the age bracket of 15 to 34 having the largest out-migration of the region. This exodus of young people in the region has, in turn, increased the average age of communities. Industries such as pulp and paper mills shutting down or relocating, a general slowdown in forestry and depressed mineral prices since 2011 have impacted employment prospects in the region and, relatedly, the demographics that tend to serve in these sectors. Projects such as Lake Superior Link may provide skilled and unskilled workers in the area employment opportunities (Northern Policy Institute 2014).

The EA document will detail the existing state of communities and potential effects on the population and demographics in relation to the project. This information will be documented through government statistics, plans, stakeholder engagement, and other sources.

### 6.2.5 Traditional/Indigenous Land Use

First Nations and Métis communities in the area have expressed interest in participation in the project and assisting in the identification of effects it is projected to have on traditional land usage. The 18 communities identified by the Ministry of Energy have a history of traditional land usage in the region since time immemorial, many aspects of which continue today. Mapping indicates that the study area overlaps with many traditional use territories. Information sharing will also be an important aspect of EA studies between Hydro One and Indigenous communities.

Based on consultation with the Indigenous communities, the EA will document concerns and identify potential employment and opportunities raised with regards to land and resource use, or other relevant socio-economic aspects. The EA will also describe how Hydro One proposes to address these concerns and opportunities. The EA document will describe Indigenous communities and groups, their traditional uses of the land and their established and asserted claims. Section 5 details the consultation process with Indigenous communities in greater detail and lists the 18 identified communities.

### 6.2.6 Human Health

Electric and magnetic fields (EMF) are invisible lines of force produced by the flow of electricity in a wire or electrical device. The strength of these fields rapidly weakens away from their source. Everyone is exposed daily to EMF from many sources, including household wiring, power lines and appliances.

Hydro One recognizes the public concerns over potential health effects from exposure to EMF and takes seriously its responsibility to understand, appropriately address and communicate the scientific data/developments on this issue. Therefore, Hydro One will:

- continue to communicate accurate and timely information to its employees and customers;
- continue to provide, upon request, EMF measurement services at no cost to direct customers of Hydro One and individuals and/or organizations whose property is adjacent to Hydro One distribution and/or transmission facilities;
- monitor worldwide scientific research, judicial decisions and regulatory requirements relating to EMF, and make necessary adjustments to its policies, programs and practices;
- support collaborative research; and,
- consider EMF research when sitting, designing, and communicating about new and upgraded facilities and when operating its facilities.

EMF will be addressed in the EA document. In addressing potential health issues, Hydro One looks to the scientific expertise of Health Canada to assess the scientific studies and provide advice and



guidance. As part of its mission to set public health policy, Health Canada continues to monitor the scientific research on EMF and human health.

### **6.2.7 Visual**

During the EA, the Project team will prepare a description of the landscape character within the study areas (the area located West of Nipigon, and the Pukaskwa River Provincial Park), identifying landscape settings and features of importance. This assessment will focus on valued viewpoints by the public and those identified by the project team as contributing to the aesthetic character of an area (e.g., ESA's and river valleys). The team will review available models for this assessment.

### **6.2.8 Infrastructure and Services**

The proposed transmission corridor crosses varying levels of infrastructure and services, from remote fly-in only access to sophisticated large towns and cities. Some of the communities along the route can provide, waste management, municipal and community services, emergency services, police, and many other ancillary services.

The EA document will describe infrastructure and services which have a potential to interact with the proposed project. Other infrastructure in the area may include pipelines, transmission and distribution lines, roads and highways (including traffic counts), rails, air transportation, and utilities, etc. In addition to this, the project may also have the potential to interact with communities and services such as police and fire stations, hospitals, schools, churches and other religious buildings, local businesses, and residential areas.

### **6.2.9 Property Value**

During the consultation process, landowners have raised the issue of potential effects on property values. Contacts have been initiated with all landowners who may be directly affected by the project crossing their property (i.e. those affected by the reference route and the route refinement options identified to date). Compensation will be available to those whose property will be crossed by the approved undertaking. For all other properties which are directly affected by the proposed ROW widening, independent appraisals will be conducted and offers based on market value for an easement in the area of the proposed widened corridor will be made to the landowners. If it is determined to be appropriate to relocate a structure on a farm property, the Minimum Distance Separation (MDS) formulae. The Hydro One Land Acquisition Compensation Principles (LACP) will be sent out to property owners detailing the method of land acquisition and compensation Hydro One employs.

Hydro One is committed to fair, open and consistent treatment of all affected landowners. Hydro One will consult with municipal stakeholders as part of our efforts to minimize any inconveniences caused by the project and will consult with municipalities to understand and address their concerns.

## 7. Effects Evaluation and Mitigation Measures

The following section identifies the potential effects evaluation and associated mitigation measures to address them. Table 2 identifies the preliminary environmental and technical considerations that will be applied in the evaluation of potential environmental effects. Preliminary criteria and indicators have been developed for the effects evaluation utilizing the general principles detailed in Section 7. Hydro One will collect relevant raw data from the indicators and use them in the assessment of the effects evaluation.

Table 2 – Preliminary environmental and technical considerations during Project planning

COMPONENT	FEATURES/CONSIDERATIONS
Natural Environment	<ul style="list-style-type: none"> <li>• Wetlands, ANSIs</li> <li>• Environmentally Significant Areas (ESAs)</li> <li>• Species at Risk (SAR)</li> <li>• Water bodies, fisheries and aquatic ecosystems</li> <li>• Forests, woodlots, vegetation</li> <li>• Significant wildlife habitat, woodlands, and valleylands</li> <li>• regulated areas</li> </ul>
Socio-economic Environment	<ul style="list-style-type: none"> <li>• Existing and approved land uses (reference to Official Plans)</li> <li>• Approved developments</li> <li>• Commercial activities</li> <li>• Mineral and aggregate resources</li> <li>• Community profile (including effects to landowners)</li> <li>• Community services</li> <li>• Community infrastructure</li> <li>• Landscape and visual assessment</li> <li>• Parks</li> <li>• Conservation areas</li> <li>• Recreational facilities</li> <li>• Traditional Knowledge Studies</li> <li>• Historical</li> <li>• Built heritage resources</li> <li>• Cultural heritage sites and landscapes</li> <li>• Archaeological</li> <li>• Churches and cemeteries (including other human burial sites)</li> </ul>
Technical and cost considerations	<ul style="list-style-type: none"> <li>• Indicators/measures will be developed during the EA process</li> <li>• Safety, compliance with codes</li> <li>• Compatibility with the transmission network</li> <li>• Utilization of existing infrastructure corridors (e.g., roads and ROWs)</li> <li>• Minimize changes in transmission line directional heading (angles)</li> <li>• Shortest length of line</li> </ul>

COMPONENT	FEATURES/CONSIDERATIONS
	<ul style="list-style-type: none"> <li>• Soil stability for transmission towers, including depth of water table</li> <li>• Suitable terrain</li> <li>• Positive effects on the local and provincial economy</li> <li>• Minimizing other transmission circuit crossings</li> <li>• Minimizing effects on other utilities (e.g., pipelines, railways)</li> </ul>

Mitigation measures will be developed to minimize negative effects due to construction and operation of the project with due consideration of cost, safety, feasibility and technical standards. The EA will recommend pre- and post-operational monitoring programs designed to verify effects prediction, the effectiveness of mitigation measures and the need for any remedial measures, should they be necessary.

## 7.1 Evaluation of Potential Effects on the Natural Environment

Aligning a new ROW adjacent to an existing ROW will reduce potential negative effects on environmental features by reducing ROW widening requirements relative to a greenfield ROW. The reference route will also use existing ROWs in areas where widening is not possible in Pukaskwa National Park.

Construction activities associated with the Lake Superior Link project that may have an effect on the natural environment include:

- brushing, clearing and grading;
- staging and stockpiling areas;
- construction of access roads including stream crossings;
- delivery of equipment and materials;
- delivery, assembly and installation of new towers;
- stringing of conductors; and,
- rehabilitation/restoration.

Potential negative effects of the proposed undertaking on the natural environment, e.g., soils, surface water and groundwater resources, vegetation, wildlife, fisheries resources and environmentally significant areas, will be assessed and appropriate redesign, mitigation/remedial measures will be recommended to reduce or eliminate those effects will be outlined in the EA.

Transmission towers will not be constructed in streams, rivers, etc. Similarly, no dewatering, filling in, and/or relocating of watercourses are anticipated. Efforts will be made to prevent any short term stream flow interference (i.e. culvert crossing installations) which could cause adverse effects. The

construction plan will minimize or avoid any direct works in water bodies and most construction will occur at appropriate setbacks from water bodies. The potential for these effects will be addressed in the EA and on a site specific basis, through the permitting processes.

Hydro One will consider opportunities for habitat improvements including streamside buffers within the proposed reference route including any selected route refinements. This will be done in consultation with affected property owners, interested Indigenous communities and groups, conservation authorities, provincial ministries and affected municipalities.

The issue of soil compaction and measures to mitigate effects on soil permeability, drainage and hydraulic balance will be addressed in the EA.

Dust and noise from construction are controlled with appropriate mitigation measures and environmental best management practices.

Sediment and erosion control measures will be identified and addressed in the EA document. This includes identification of areas where soil or other factors could affect the effectiveness of those measures.

Potential effects due to construction are as follows: soil compaction and erosion; loss of vegetation from clearing and associated loss of wildlife habitat; displacement of wildlife or effects to nesting birds and species at risk; habitat fragmentation; incidental spills of oil, gasoline and other chemicals; water quality and fish habitat degradation due to temporary stream crossings; and degradation of environmentally significant areas. Agricultural infrastructure can be affected by changes to site drainage.

Potential effects due to operation are related to maintenance access and vegetation management (approximately 3-year cycles).

To reduce or eliminate potential negative environmental effects associated with the construction and operation of the proposed facilities, proven environmentally sound guidelines and best management practices (BMPs) will be implemented using:

- “Environmental Guidelines for the Construction and Maintenance of Transmission Facilities” (Hydro One 2009);
- “Best Management Practices for Wetland Crossings” (Morissette 2014);
- “Overhead Line Construction” (DFO 2007);
- “Riparian Zone Protocol” (Fitzsimmons 2010);
- “Debris Removal for Culvert Maintenance” (TRCA 2014);
- “Environmental Guidelines for Access Roads and Water Crossings” (MNR 1990);
- “Guidelines for Evaluating Construction Activities Impacting on Water Resources” (MOECC 1995);
- “Utility Vegetation Management” (Cieslewicz 2004); and
- “Management Approaches for Industrial Fugitive Dust Sources” (MOECC 2017).

In addition, all other relevant environmental requirements and policies will be identified and taken into account in the EA.

## 7.2 Evaluation of Potential Effects on the Socio-economic Environment

Socio-economic impacts can be positive or negative; and can occur at various units of social order: individuals, businesses, communities, economic sectors; however, the objective of the Lake Superior Link project is to provide an overall benefit to the Province of Ontario.

The socio-economic impact assessment will identify positive and negative effects of the project locally and to the Province. The key indicators for this study are:

- displacements of business, property and residents;
- displacements of social features (e.g. institutional, recreational, etc.);
- disruption to business, property and residents;
- disruption of social features;
- community and neighbourhood effects (e.g. community character, cohesion, function);
- changes to land use patterns, including existing and planned development;
- displacement or disruption to farm infrastructure and type;
- displacement or disruption to mineral and aggregates resources;
- displacement or disruption to parks, conservation and recreational areas;
- displacement or disruption to community services and infrastructure;
- disruption to traditional/ Indigenous land use;
- changes to the existing landscape, visual character (i.e. visual attractiveness and scenic values);
- economic benefits to the local communities (e.g., commercial activity); and,
- economic benefits to the Province (e.g., industrial production, manufacturing, commercial activity and technical services).

Socio-economic information will be collected from the following sources:

- Secondary published sources;
- Windshield surveys;
- CIC comments and input;
- Stakeholder consultation (to be defined as project planning progresses but may include municipalities, ratepayer groups, business community, Indigenous communities, agricultural community); and
- Consultation with potentially affected community residents.

The socio-economic impact assessment will include:

- An assessment of the socio-economic character and profile of the area potentially affected by the project;

- An evaluation of the alternatives including identification of issues and concerns;
- The identification and assessment of effects on the socio-economic environment by indicator; and,
- The identification of protective or mitigation measures.

Potential effects of the proposed undertaking on the socio-economic features identified will be assessed and appropriate mitigation/remedial measures will be recommended to reduce or eliminate the significant negative effects.

The assessment of effects will be based on data collected from primary and secondary sources. A broad assessment of potential socio-economic considerations of the alternative methods both during and after construction on existing land use, potential development, businesses and community features shall be prepared and will identify proposed mitigation measures. The data collected as part of the baseline environmental description will be provided in the EA document and will form the basis for measuring effects of the project. This includes data from supporting technical studies, surveys and environmental inventories collected from within the study area.

### **7.2.1 Effects on Traditional/ Indigenous Land Use**

Indigenous communities and groups may have an interest in a project in addition to or apart from any potential effects on Indigenous interests and treaty rights. Through discussions with Indigenous communities and groups, Hydro One will attempt to determine the extent and nature of any interests in the project as well as any potential effects on Indigenous interests and treaty rights.

Hydro One is currently undertaking consultation activities with the 18 First Nation and Métis communities identified by the Ministry of Energy to gain information on traditional values as they relate to the project. As part of the EA process, Hydro One will provide to Indigenous communities and groups who wish to receive it, species information which is gathered from the field studies. Hydro One will also consider any information Indigenous communities and groups provide on protection of plant and animal species which have traditional value. This information will be used in developing indicators and measures for effect on traditional/ Indigenous land use where relevant.

### **7.2.2 Effects on the Cultural Environment**

The Project may have potential effects on the cultural environment, including, but not limited to, the following:

- areas of archaeological potential;
- built heritage;
- cultural heritage landscape; and,
- churches and cemeteries.

To assess the potential effects of project on heritage, archaeology and cultural resources, the EA will draw upon the results of a Stage 1 archaeological study (and future archaeological work, as required) and cultural and heritage assessments. Information and data will also be obtained from Municipal Heritage Groups, heritage planners, Indigenous communities and groups, secondary source information, and discussions during the engagement/consultation process.

### **7.3 Technical, Administrative and Cost Considerations**

The technical, administrative and cost considerations will be used to evaluate the alternatives, including the considerations in the bullet points below.

- system safety and reliability;
- constructability and feasibility analysis;
- duration and impacts of line outages to enable connections for the new line;
- availability of tower and other infrastructure materials;
- timely regulatory and agency approvals;
- material differences or design changes arising from the EA or other approvals;
- design changes to accommodate requirements from Alternative Methods analysis;
- poor or contaminated soil conditions;
- unexpected site drainage requirements;
- adverse weather conditions;
- conflicts with other utility ROW's that intersect or parallel the proposed facilities.
- land costs;
- construction capital costs; and
- operations and maintenance costs

Indicators and measures will be developed during the EA process. Issues that could potentially affect project construction and implementation costs will also be addressed as part of the EA.

## 8. Commitments and Monitoring

Hydro One is committed to environmental protection and responsible environmental management. This project will be carried out in compliance with environmental legislation, Hydro One corporate policies, BMPs, and corporate environmental procedures. The EA document will provide information so that facilities will be designed, constructed and operated in a manner that makes efficient use of resources, prevents pollution and reduces environmental effects to the extent that is reasonably achievable. Hydro One strives for the continual improvement in its management system, processes, activities and services. The EA document will provide information to address commitments and monitor the Project in the following ways:

- identify, assess, and manage potentially significant environmental risks and integrate environmental considerations into decisions;
- inform employees and contractors so that they understand their roles, responsibilities and Hydro One's environmental requirements and have the skills, knowledge and resources necessary to perform their duties;
- promote continual improvement by setting environmental objectives and targets, monitoring performance and taking corrective and preventive actions when required;
- work cooperatively with governments, customers, suppliers and other stakeholders to develop programs that contribute to the achievement of Hydro One's environmental objectives and targets; and,
- support the investigation and use of new methods of environmental protection that will help achieve Hydro One's business objectives.

The Hydro One Environmental Policy and Environmental Commitment form the overarching foundations for commitments made in the EA. An Environmental Specification will be prepared to guide project construction. An environmental specialist will be assigned to support and monitor construction activities. As noted, pre- and post-operational studies will be carried out to confirm project compliance, the accuracy of environmental effects predictions, the effectiveness of mitigation measures and the need for any remedial action.

### 8.1 Project Effects Monitoring

During the later stages of the EA process, a monitoring program will be developed. The program (to be included in the EA) will describe the project environmental management system that will ensure compliance with the commitments set out in this assessment plus other environmental requirements (e.g., terms and conditions of EA approval and other legislation).



Pre- and post-operational monitoring will identify actual effects, assess the effectiveness of the mitigation/restoration/enhancement measures to reduce or eliminate these effects, and evaluate the need for any additional action to ensure commitment realization.

Appropriate commitments to compliance monitoring will be reflected in study documentation. The duration of the monitoring and follow-up programs will vary and will depend on the conditions of permits and approvals granted by regulatory agencies.

## **8.2 EA Process Monitoring**

During the planning and design processes, compliance with EA process commitments outlined in the ToR will be regularly reviewed prior to project implementation. External notification and engagement/consultation will be consistent with EA commitments.

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## **Appendix 1 – Notice of Commencement**

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## NOTICE OF COMMENCEMENT OF TERMS OF REFERENCE AND INVITATION TO COMMUNITY INFORMATION CENTRE Lake Superior Link Project – Hydro One Networks Inc.

Hydro One Networks Inc. (Hydro One) is initiating an Environmental Assessment (EA) under the *Environmental Assessment Act* for the proposed Lake Superior project. The Independent Electricity System Operator's (IESO) *Updated Assessment of the Need for the East-West Tie Expansion, 2017* states that a new transmission line "...continues to be the recommended alternative to maintaining a reliable and cost-effective supply of electricity in Northwestern Ontario for the long term." The EA will consider two route alternatives for a new 400 km, double-circuit 230 kilovolt transmission line between Lakehead Transformer Station (TS) near Thunder Bay and Wawa TS near Wawa, as shown on the map. The reference route generally parallels Hydro One's existing East-West Tie transmission corridor with the exception of a new section of corridor near Dorion and a section through Pukaskwa National Park where existing infrastructure would be modified. The reference route alternative generally parallels Hydro One's existing East-West Tie transmission corridor with the exception of a new corridor section near Dorion and a section that traverses around Pukaskwa National Park.

In March 2018, Hydro One hosted public information drop-ins along the project route to provide initial opportunities for stakeholders to learn more about the Lake Superior Link project, meet the project team and provide feedback. Hydro One is aware of the extensive consultation already completed on the reference route alternative and will make best efforts to streamline consultation and studies whenever possible.

### The Planning Process

This EA will be carried out in accordance with the requirements of the Ontario *Environmental Assessment Act*. The first step is the preparation of a Terms of Reference (ToR) which will set out the framework and work plan for addressing *Environmental Assessment Act* requirements when preparing the EA, including an outline of the studies and consultation activities that will be undertaken. Important elements of this work will be to evaluate the reference route and reference route alternative, assess potential effects and determine measures to reduce or mitigate these effects.

A draft ToR will be made available for review and comment during early summer 2018. Hydro One anticipates that the ToR will be completed mid-summer 2018, at which point it will be submitted to the Minister of the Environment and Climate Change (Minister) for review and decision. If approved by the Minister, the EA will proceed as outlined in the ToR.

### Consultation

Indigenous communities, government agencies, municipal officials, members of the public and other interested persons are encouraged to actively participate in the planning process. Consultation and engagement opportunities will be organized throughout the planning process and communicated via community newspaper advertisements, mailings and on the project website. Members of Hydro One's project team are always available to discuss the project with interested parties.

We will be hosting another round of Community Information Centres as outlined below to provide a project update and continue discussions about delivering tangible benefits to communities in the project area.

### Please join us:

#### Monday, June 11, 2018

**Thunder Bay**  
5 p.m. – 7:30 p.m.  
Valhalla Inn – Viking Room  
1 Valhalla Inn Road

**Nipigon**  
5 p.m. – 7:30 p.m.  
Royal Canadian Legion  
Branch 32  
102 5th Street

#### Tuesday, June 12, 2018

**Red Rock**  
12 p.m. – 2 p.m.  
Royal Canadian Legion Branch 226  
43 Salls Street

**Dorion**  
5 p.m. – 7:30 p.m.  
Dorion Community Centre  
175 Dorion Loop Road

**Terrace Bay**  
5 p.m. – 7:30 p.m.  
Terrace Bay Cultural Centre, 13 Selkirk Avenue

#### Wednesday, June 13, 2018

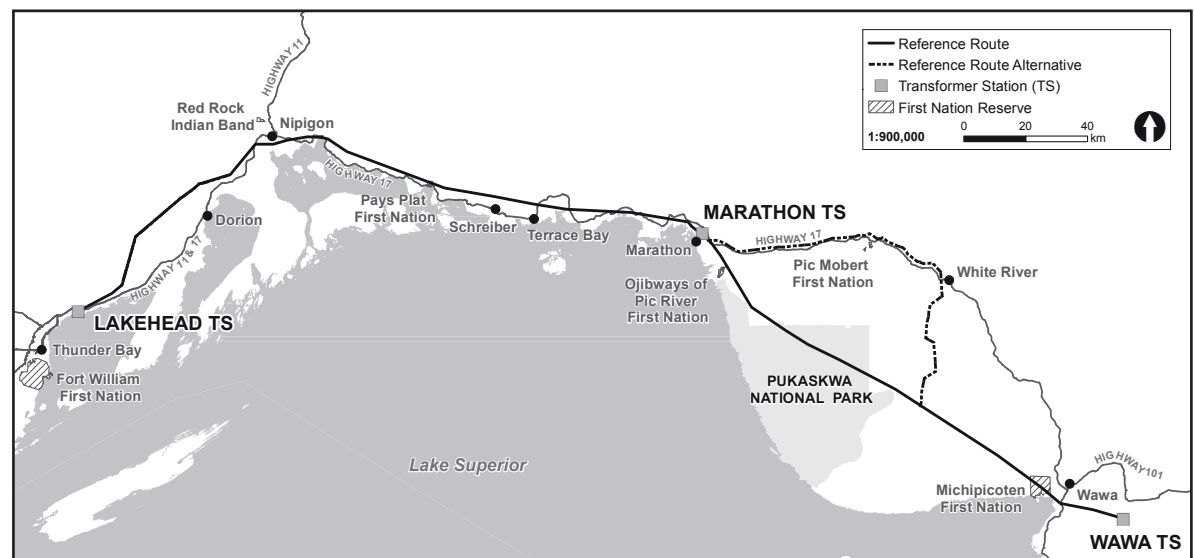
**Schreiber**  
5 p.m. – 7:30 p.m.  
Schreiber Municipal Gym  
204 Alberta Street

**Marathon**  
2 p.m. – 7 p.m.  
Marathon Centre Mall  
2 Hemlo Drive

#### Thursday, June 14, 2018

**White River**  
5 p.m. – 7:30 p.m.  
White River Community Centre  
6 Winnipeg Street

**Wawa**  
5 p.m. – 7:30 p.m.  
Royal Canadian Legion  
Branch 429  
51 Broadway Avenue



Information gathered at these Community Information Centres will be used both to complete the ToR and to gather information toward completion of the EA.

### For further information about this project, please contact:

Bruce Hopper, Environmental Planner  
Hydro One Networks Inc.  
T: 1-877-345-6799 / F: 416-345-6984  
E: [Community.Relations@HydroOne.com](mailto:Community.Relations@HydroOne.com)  
Website: [www.HydroOne.com/LakeSuperiorLink](http://www.HydroOne.com/LakeSuperiorLink)

All personal information in a submission – such as name, address, telephone number and property location – is collected, maintained, and disclosed by the Ministry of the Environment and Climate Change for the purpose of transparency and consultation. The information is collected under the authority of the *Environmental Assessment Act*, or is collected and maintained for the purpose of creating a record that is available to the general public, as described in s. 37 of the *Freedom of Information and Protection of Privacy Act*. Personal information you submit will become part of a public record that is available to the general public unless you request that your personal information remain confidential. For more information, please contact the Ministry of the Environment and Climate Change's Freedom of Information and Privacy Coordinator at 416-327-1434.

## **Appendix 2 – List of Preliminary Criteria and Indicators**

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<b>Environment</b>	<b>Features Considered</b>	<b>Indicators</b>	<b>Rationale for Selection of Indicator</b>	<b>Data Source</b>
Natural Environment	Environmentally significant areas	Area of Provincially Significant Wetlands Crossed	Provincial designation  Potential for short and long-term effects on wetland habitats	MNRF, NHIC, existing EA studies, field studies if required.
		Area of Provincially Significant ANSIs Crossed	Provincial designation  Potential for short and long-term effects on natural features	MNRF, NHIC, existing EA studies, field studies if required.
		Number of species at risk including regionally and locally rare species	Provincial designation  Potential for short and long-term effects on species at risk or their habitat	MNRF, NHIC, existing EA studies, field studies if required.  Environment Canada where appropriate
		Area of Non-provincially Significant and/or Unevaluated Wetlands Crossed	Potential for short and long-term effects on wetland habitats	MNRF, NHIC, existing EA studies, field studies if required.
		Area of significant wildlife habitat crossed	Potential for short- and long-term effects on significant wildlife habitat	MNRF, NHIC, existing EA studies, field studies if required.
		Area of significant valleylands crossed	Potential for short- and long-term effects on significant valleylands	Municipalities, existing EA studies

Environment	Features Considered	Indicators	Rationale for Selection of Indicator	Data Source
Natural Environment		Area of Hazard Lands crossed	Potential for project effects on natural heritage features	Lakehead Region Conservation Authority, MNRF, existing EA studies, field studies if required.
		Migratory bird flyways, feeding and resting areas	Potential for short- and long-term effects on migratory birds and their habitat	NHIC, MNRF, Bird Studies Canada, existing EA studies, field studies if required.
	Water bodies, fish habitat and aquatic ecosystems	Number of coldwater streams crossed	Provincial designation Potential for short and long-term effects on fisheries resources and habitat	MNRF, NHIC, existing EA studies, field studies if required.
		Total number of streams crossed	Potential for short and long-term effects on fisheries resources and habitat	MNRF, NHIC, existing EA studies, field studies if required.
Socio-economic Environment	Existing land use	Existing uses and types	Potential for conflict with existing land uses	Municipal planning and zoning information
	Approved development	Sub-division and development plans	Potential for conflict with sub-division and development plans	
	Commercial activities	Types of business activities	Potential to disrupt or displace businesses	Local Departments of Economic Development
		Tourism related activities	Potential to disrupt or displace tourist attractions	



Environment	Features Considered	Indicators	Rationale for Selection of Indicator	Data Source
Socio-economic Environment	Potential effect on Mineral and aggregate resources	Area of significant aggregate deposits	Potential effects may occur on existing aggregate deposits	Ministry of Northern Development and Mines (MNDM), MNRF Ontario's Land Information Directory (OLID) database. Owners
		Area of mines within the study area (Ha)	Potential effects may occur on mining operations	
		Number of mining claims within the study area	Potential effects may occur on future mining operations	
		Area of pits/quarries within the study area (Ha)	Potential effects may occur on pits/quarries operation	
	Potential effect on Remote Tourism	Number of remote tourism businesses effected	Potential for effects on remote tourism businesses	MNRF, MTCS, Business Operators
	Community profile	Number of potential property removals (buyouts)	Hydro One Policy prohibits homes or family residences from being located within the proposed WIDENED ROW	GIS shape files, Site Visits if required.
		Number of potential diagonal severances of properties	Diagonal crossings are considered more disruptive because they limit other uses of land	
Number of potentially affected properties		Crossings of properties are disruptive to family residences and businesses		

<b>Environment</b>	<b>Features Considered</b>	<b>Indicators</b>	<b>Rationale for Selection of Indicator</b>	<b>Data Source</b>
Socio-economic Environment	Community services	Number of health care facilities	Potential for project to disrupt or displace facilities	Local health department
		Number of educational facilities	Potential for project to disrupt or displace educational facilities	School boards and local road maps
		Number of other important community facilities	Potential for project to disrupt or displace facilities.	Local road mapping, site visits if required.
	Community infrastructure	Number of natural gas pipelines	Potential effects on utility pipelines operations and maintenance	Utility companies
		Number of roads crossed	Potential effects on the driving public, aesthetic and visual	GIS shape files
		Number of railways crossed (segments)	Potential effects can occur on railway lands and crossings due to the widened ROW towers, span and overhead clearance	
		Number of airports within EA prescribed distance of the ROW centerline	Transport Canada requirements for distance separation between transmission routes and runways	Local municipalities, private airport operators

<b>Environment</b>	<b>Features Considered</b>	<b>Indicators</b>	<b>Rationale for Selection of Indicator</b>	<b>Data Source</b>
Socio-economic Environment	Landscape and visual assessment	Number of residences, farm residences within EA prescribed distance from the ROW or as required for viewscape analysis.  Number of trails, waterways, and roads crossed	Proximity of the widened ROW to residents and recreational users (of scenic landscapes/features) could potentially affect viewer expectations in the vicinity of the lines.	MNRF, Lakehead Region Conservation Authority, Municipalities, Heritage Advisory Committees, and Site visits if required.
	Parks	Area of Federal, Provincial Parks and reserves	Identify and protect natural and recreational features	MNRF, Parks Canada, Municipalities, counties and Lakehead Region Conservation Authority
		Area of local parks		
	Conservation areas	Number and area of conservation areas	Identify natural areas and ecosystems within the study area to measure potential effects on use of these facilities	MNRF, and Lakehead Region Conservation Authority
	Recreational facilities (camp ground, park, sport field, golf course)	Number of trails (segments)	Identify and protect natural recreational features	MNRF, and Lakehead Region Conservation Authority
Number of recreational facilities				