

Welcome to our

NORTHWEST TRANSMISSION EXPANSION PROJECT

Public Information Centre

Welcome

- Thank you for attending the Northwest Transmission Expansion Project Public Information Centre
- Please sign in and complete a comment form. Comments received will become part of the public record for the Environmental Assessment
- Take your time, review all displays and maps, and enjoy some refreshments
- Project staff are here to listen to your comments and answer your questions
- All panels presented here are posted on the Project website at

www.HydroOne.com/Northwest

Purpose of the Public Information Centre

- Provide you with information on the project, processes to be followed, and let you know how you can get involved
- Review reference corridor and maps
- Solicit input on the Terms of Reference and gather your feedback on the project
- Outline the next steps in the consultation process

The Transmission Expansion Project

Hydro One has initiated a Project under Ontario's Environmental Assessment Act to build an approximately 430 km, single-circuit 230 kV transmission line on a new corridor from the Township of Nipigon area to the Township of Pickle Lake in northwestern Ontario. The project would also include building new stations near Nipigon, Pickle Lake and at a mid-point on the line. The estimated in-service date is late 2013.

Need and Benefits of Expanding the Northwest Transmission System

RELIABILITY

The existing 115 kV transmission line between Ear Falls and Pickle Lake (E1C) is aging and has a poor performance record. The new line would provide an alternate source of supply resulting in improved reliability.



CAPACITY

Electricity growth is expected to increase beyond the capacity of E1C, and the new line would provide the opportunity for existing customers to grow and for future customers to be connected to the provincial electricity system.

Need and Benefits of Expanding the Northwest Transmission System

(continued)

RENEWABLES

The northwest has renewable generation potential including approximately 100 MW at OPG's proposed Little Jackfish Hydroelectric Development as well as up to 280 MW of wind potential on the eastern side of Lake Nipigon.

This line would provide the transmission capacity to develop this renewable generation.



Cameron Falls GS

Need and Benefits of Expanding the Northwest Transmission System

(continued)

REMOTE COMMUNITIES

The proposed line offers the opportunity for First Nations and other communities to connect to the grid in the future, reducing their dependency on diesel generation.



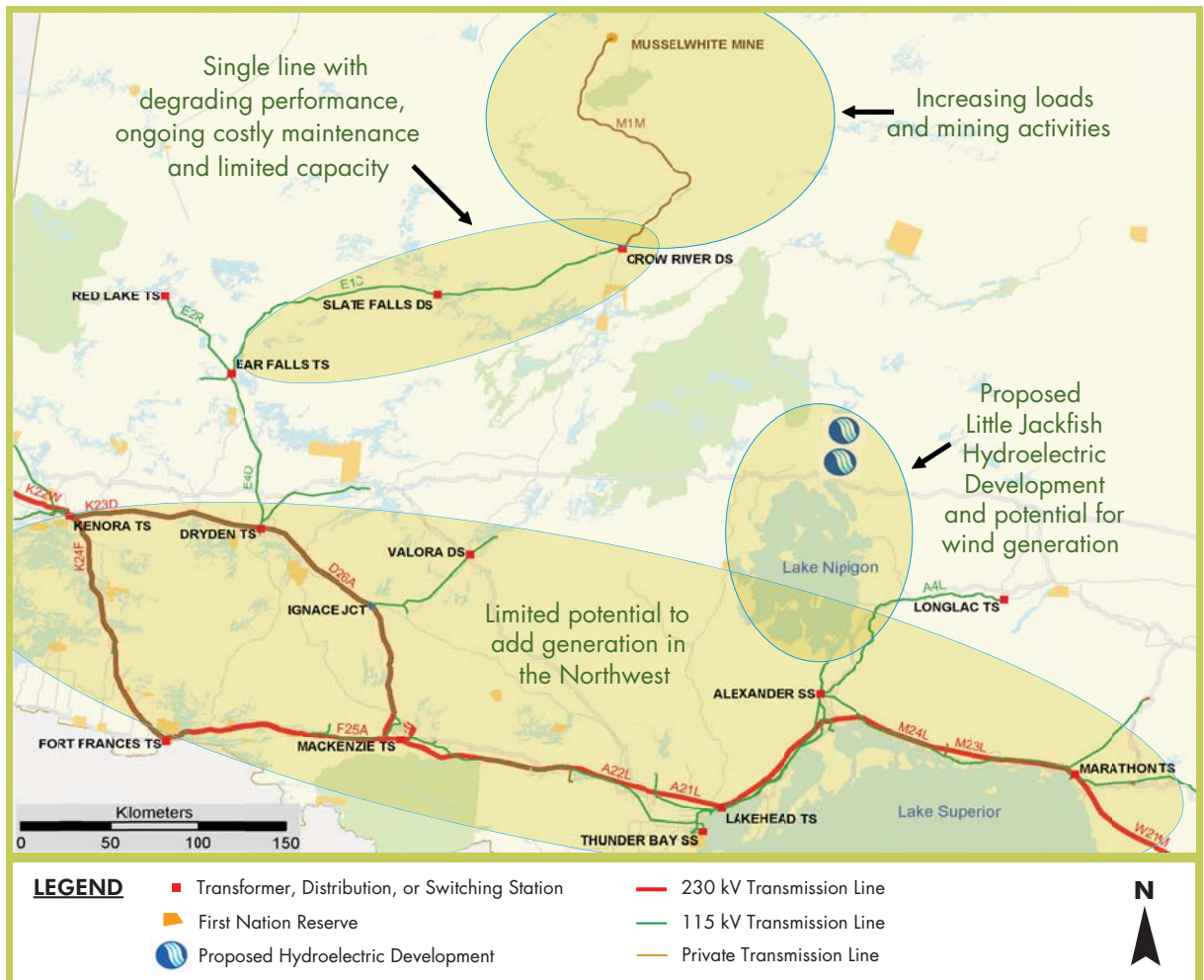
GRID REINFORCEMENT

Building the line would lay the groundwork for a future 230 kV connection between Dryden Transformer Station and the new station in the Pickle Lake area, creating a 230 kV ring and strengthening the grid's capacity in the northwest.

ECONOMIC DEVELOPMENT

The project has the potential to create direct and indirect construction jobs, green jobs and related economic benefits for northwestern Ontario communities and businesses.

Transmission System in Northwestern Ontario



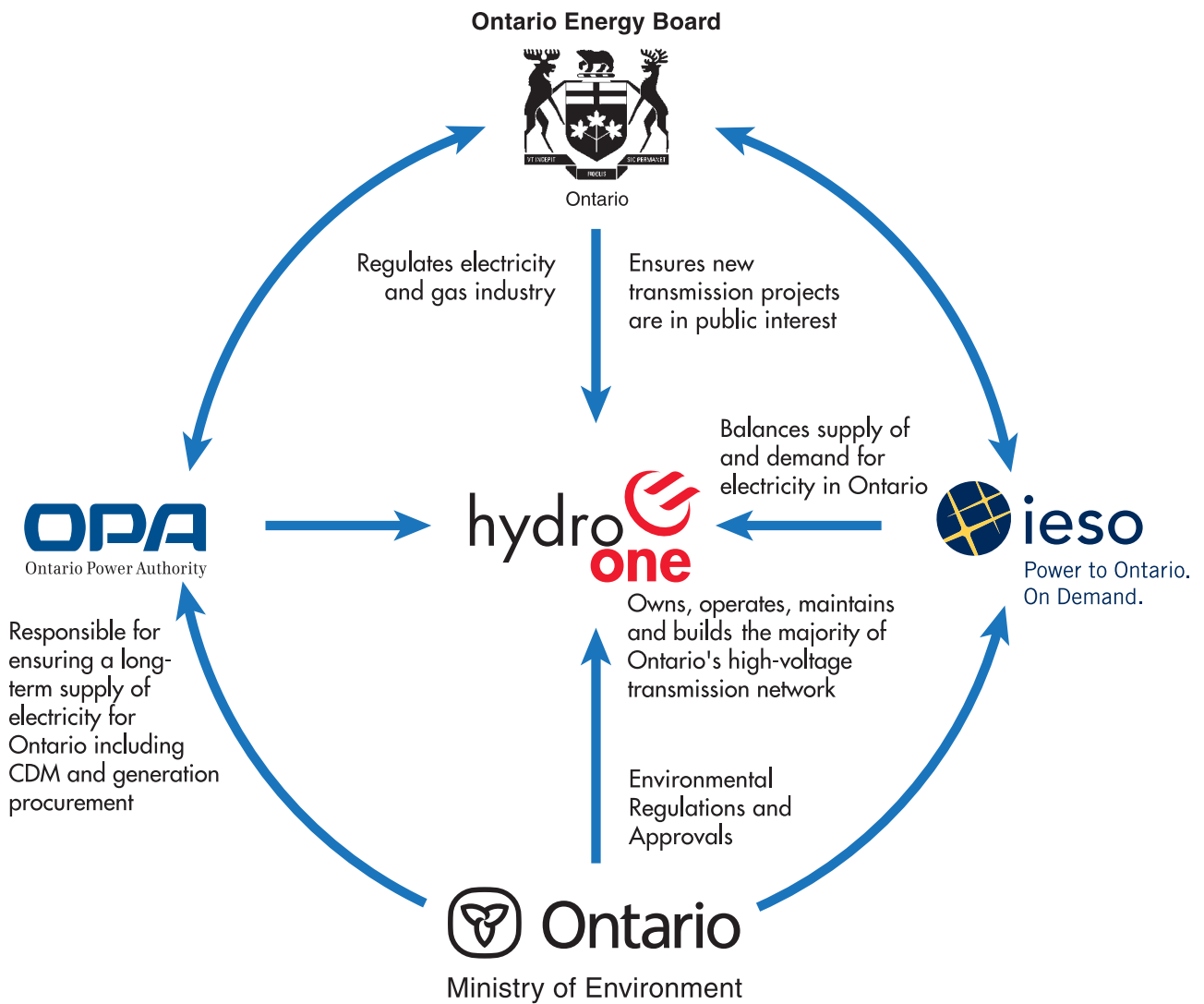
Green Energy and Green Economy Act

Ontario's landmark *Green Energy and Green Economy Act* was passed in the Legislature on May 14, 2009. The Act is aimed at a cleaner, greener Ontario by accelerating the push for renewable power, creating a conservation culture and developing Ontario's green economy.

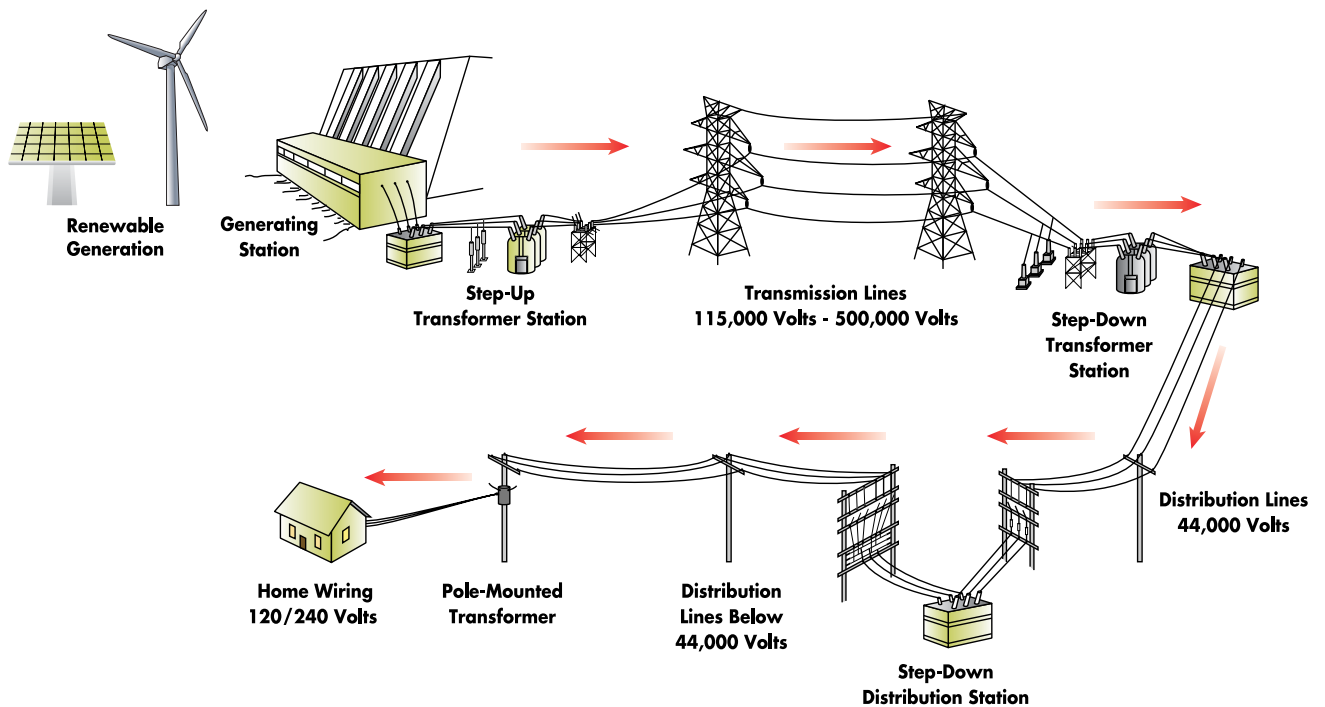


On September 21, Hydro One was asked by the provincial government to immediately proceed with planning, seeking approvals and implementing major transmission projects across Ontario. The Northwest Transmission Expansion Project is the first transmission project launched to support the government's green energy plans.

Ontario's Electricity Industry Structure



Electricity System



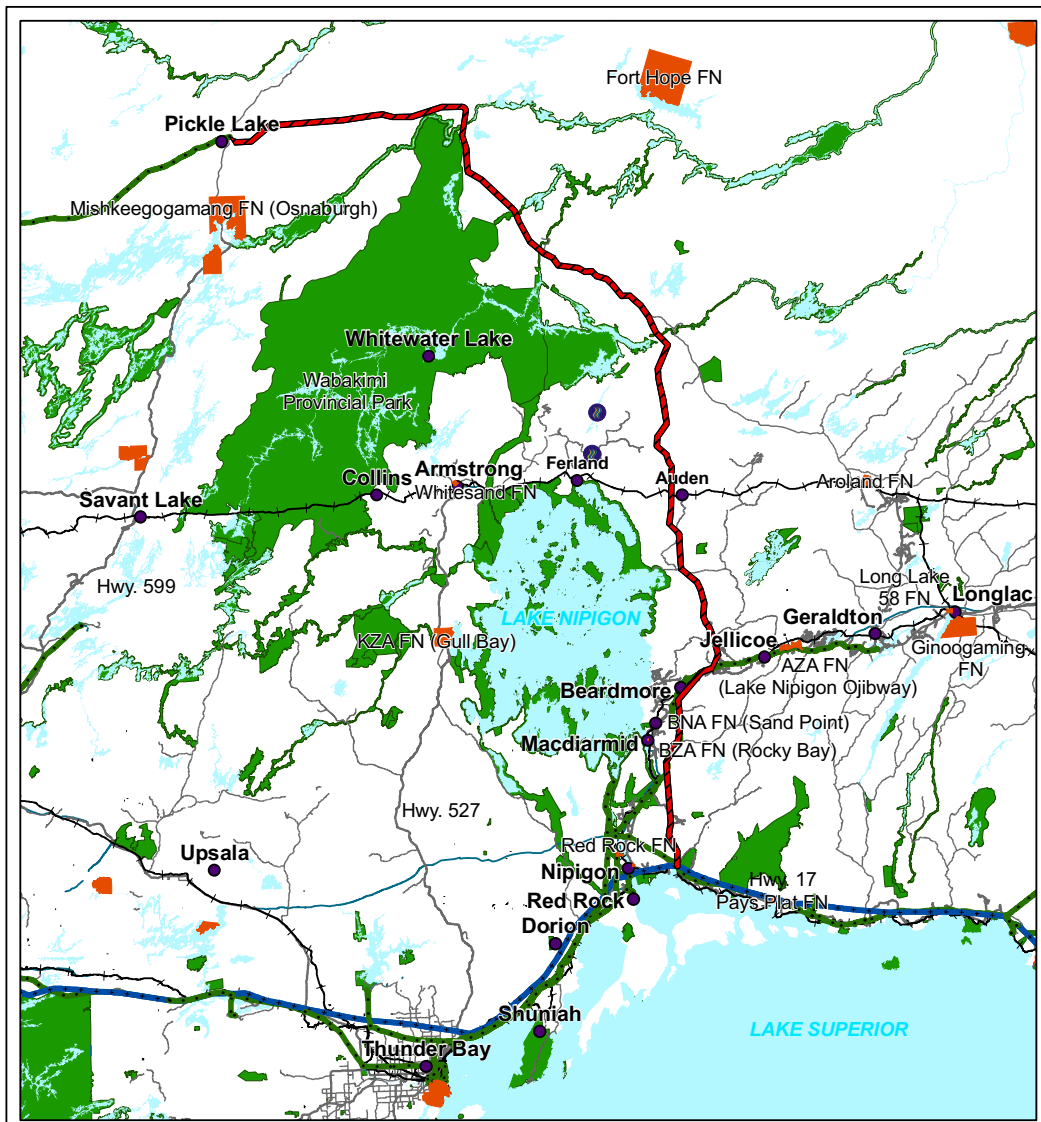
Natural, Socio-Economic and Technical Data

- Regional natural, socio-economic and technical data were collected and analyzed at a macro level in order to develop the reference corridor.
- Further detailed data collection and field studies will be conducted during the EA process to allow for the identification of routing alternatives within the reference corridor, and determine potential effects on existing features.

Reference Corridor

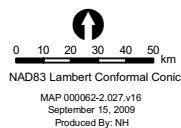
- As a starting point to the EA, a reference corridor approximately 2 kilometres wide, between Pickle Lake and Nipigon was developed based on known environmental, technical and economic information.
- The reference corridor will serve as the basis to identify potential route alternatives and assess their potential environmental effects.
- The reference corridor:
 - Avoids settlement areas
 - Avoids Wabakimi Provincial Park, conservation lands and protected areas
 - Avoids water crossings and wetland > 200 m in width
 - Avoids organic deposits
 - Optimizes use of existing linear severances (i.e roads)
 - Takes advantage of areas that have been cut and gentle topography
- First Nations and Métis communities, government ministries, agencies, the public and stakeholders are being consulted regarding the reference corridor

Reference Corridor



Legend

- Reference Corridor
- 115 kV Circuit
- 230 kV Circuit
- Communities
- Railways
- Highways
- Primary Roads
- Proposed Structure Little Jackfish River
- First Nation Reserve
- Waterbodies
- Park or Conservation Reserve
- Transport Line
- Utility Line



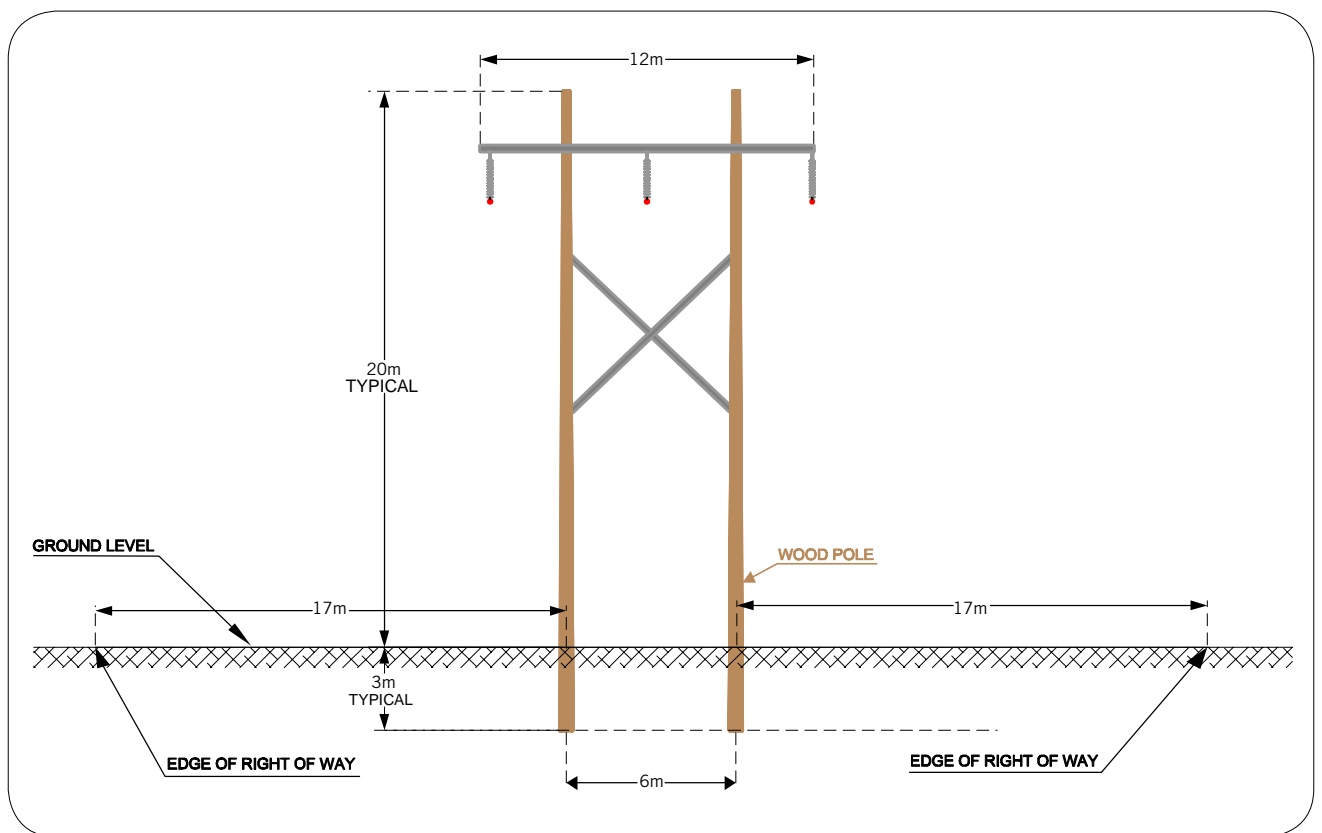
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This map is to be used for reference purposes only.



Typical Structure Design



Key Facts and Figures

(approximate or estimated)

LENGTH OF PROPOSED ROUTE	➤	Approximately 430 km
RIGHT OF WAY WIDTH	➤	40 m (131 ft)
STRUCTURE TYPE	➤	mainly H-frame wood pole
STRUCTURE HEIGHT	➤	23 m (75 ft) average
NUMBER OF WOOD STRUCTURES	➤	2,500 - 3,000
AVERAGE SPAN (SPACE BETWEEN) OF STRUCTURES	➤	175 m (574 ft)
CONSTRUCTION TIME	➤	2 to 3 years
CAPACITY	➤	400 MW

What Approvals are Required?

- Prior to constructing new transmission facilities, Hydro One must obtain Ontario Energy Board (OEB) and Environmental Assessment (EA) approvals. The following panels illustrate these processes
- Hydro One is proceeding concurrently through the OEB and EA processes, to ensure that facilities will be in-service and ready to support the development of renewable resources in support of the *Green Energy and Green Economy Act*
- Both OEB and EA approval processes include opportunities for you to participate and provide your input to the decision-making process

OEB Process

- Hydro One is filing an application for Leave to Construct (under section 92 of the OEB Act)
 - The OEB determines whether the Project is in the public interest, with a focus on the impact of the Project on the price and reliability of power supply and whether the Project promotes the use of renewable energy
 - The OEB review of Hydro One's application for leave to construct approval includes provision for First Nation and Métis, public and stakeholder consultation
 - Hydro One will begin construction once OEB and EA approval is obtained

Environmental Assessment

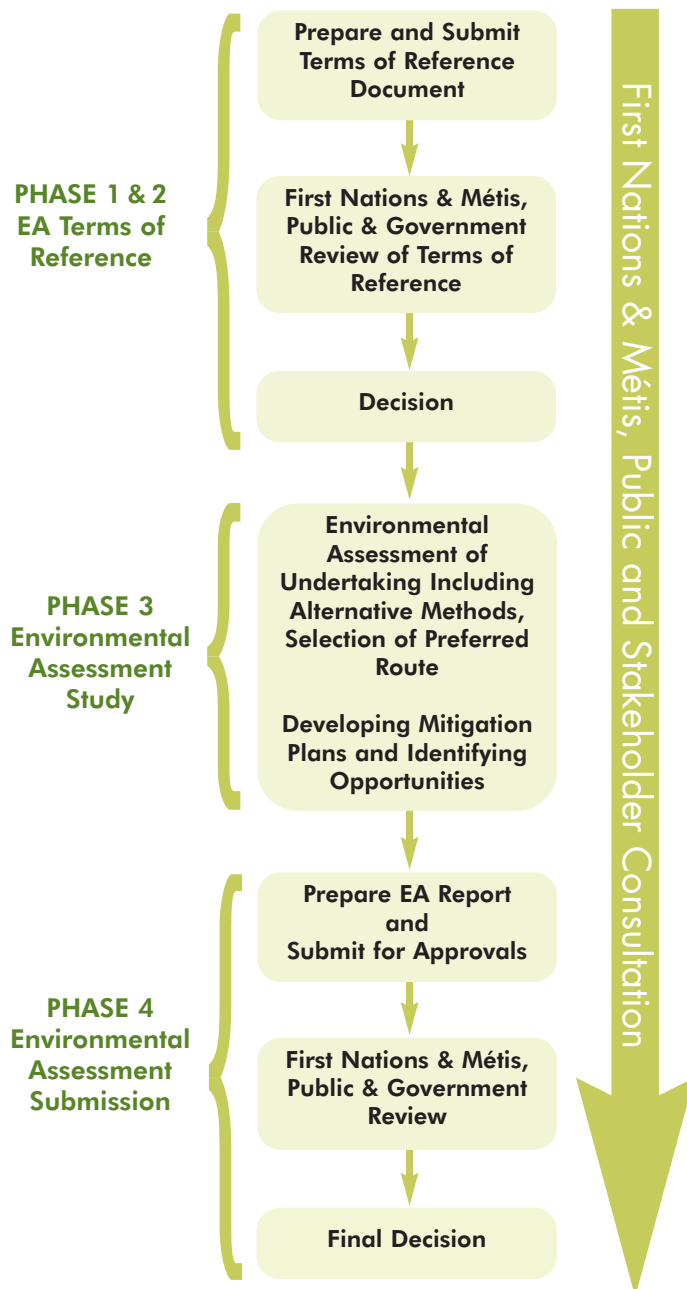
TERMS OF REFERENCE

- A Terms of Reference establishes the process for the preparation and review of the EA. It outlines how the EA will be conducted and helps ensure that the public, First Nations and Métis and government agencies know what will be considered
- The Terms of Reference is subject to approval by the Minister of the Environment. Public, stakeholder, ministry, agency and First Nation and Métis input will be collected during the development of the Terms of Reference. The Ministry of the Environment will also initiate a formal review and comment period on the Terms of Reference for stakeholders, First Nations and Métis once it is submitted

EA REPORT

- If the Terms of Reference is approved, the EA will focus on the reference corridor. It will consider alternative transmission routes within the reference corridor, tower locations, access routes, measures to avoid and minimize potential effects, and identify advantages, disadvantages, and net effects of the project

Overview of the Environmental Assessment Process



First Nations and Métis Consultation

Hydro One is committed to developing and maintaining relationships with First Nations & Métis peoples that demonstrate mutual respect for one another. Hydro One is committed to working with First Nations and Métis peoples in a spirit of cooperation and shared responsibility.



Hydro One has met with the communities who may be potentially affected by the project and will continue to consult with and engage these communities throughout the Terms of Reference and Environmental Assessment process.

Land Matters

- Most of the reference corridor is located on provincially owned (“Crown”) land. Where additional property rights are necessary, Hydro One will work with affected property owners in a fair, open and consistent manner.
- Compensation will be based on fair market value determined by independent accredited appraisers
- Hydro One real estate staff are available to respond to questions from affected property owners

Protecting the Environment

- Hydro One is committed to protecting the environment for current and future generations
- Examples of measures incorporated during design and construction to prevent or mitigate effects include the following:
 - Minimize disruption to resource operations
 - Construct temporary gravel access roads
 - Survey archaeological resources
 - Schedule activities to minimize effects
 - Erosion and Sediment Control Plans
 - Implement a Biodiversity Initiative

Draft Contents of the Terms of Reference

- Introduction
 - Purpose of the Undertaking
 - Outline of the Terms of Reference
- EA Framework
 - EA Act
 - Other Approvals
- Overview of the EA Requirements for the Proposed Project
- Description of the Undertaking
- Existing Environmental Conditions in the Study Area
 - Natural Environment
 - Physical Characteristics of the Study Area
 - Environmentally Significant Areas
 - Wildlife and Terrestrial Habitat
 - Vegetation
 - Water Bodies, Fish Habitat and Aquatic Ecosystems
 - Socio-Economic, Cultural and Agricultural Environment
 - Existing and Future Land Use
 - Commercial Activities
 - Community Profile
 - Existing Infrastructure
 - Hunting, Angling and Recreation Areas
 - Landscape and Visual Assessment
 - First Nations and Métis Communities
 - Cultural Environment
 - Forestry, Agricultural, Mineral and Aggregate Resources
- Alternative Methods
 - Route Selection
 - Design Considerations
- Effects Evaluation and Mitigation Measures
- Commitments and Monitoring
- Public, Agency, First Nations and Métis Engagement and Consultation

Electric and Magnetic Fields (EMF)

- EMFs are invisible forces that surround electrical equipment, power cords, and power lines. You cannot see or feel EMFs.
- Every time you use electricity and electrical appliances, you are exposed to EMFs at extremely low frequencies.
- EMFs produced by both power lines and use of electrical appliances, belong to this category.
- EMFs are strongest when close to the source. As you move away from the source, the strength of the fields fades rapidly.

Health Canada's Position on EMFs

- There is no compelling scientific evidence that EMF in living and school environments, regardless of locations from power transmission lines, cause ill health such as cancer. This position is consistent with the overall opinions from most national and international scientific bodies.
- Health Canada does not consider guidelines for EMF exposure necessary, because scientific evidence is not strong enough to conclude that typical exposures cause problems.

Trades and Training

Typical trades required when building transmission lines and stations include:

- Power line technicians
- Construction and maintenance electricians
- Labourers
- Operating Engineers



Hydro One is working to identify jobs, training, and business opportunities and is committed to working with local economic development organizations and labour adjustment centres.

Power Line Technicians Job Description and Pre-Requisites

A **POWER LINE TECHNICIAN** climbs, inspects, supports and frames poles and towers in a live or dead line environment; installs and removes travelers and transformers; tests equipment on power lines; and various other tasks while working aloft and on the ground.

The **APPRENTICESHIP PROGRAM** is a four-year program with four levels of trade school held at a power line technician training facility. In order to qualify, the Canadian Union of Skilled Workers (CUSW) requires each applicant to the apprenticeship program to possess a secondary school diploma including credits in the following subjects:

1. *Grade 12 English or French*
2. *Grade 12 Mathematics*

All applicants must be willing to travel to various work sites within the Province.

Construction and Maintenance Electricians Job Description and Pre-Requisites

A **CONSTRUCTION AND MAINTENANCE ELECTRICIAN** assembles, installs, repairs, connects and tests electrical fixtures, control equipment and wiring; plans installations from blueprints; installs conduit, panel boards, switchboxes and other related electrical devices; and tests electrical and electronic equipment for proper function.

The **APPRENTICESHIP PROGRAM** generally consists of five terms of 1700 hours each. Included in these terms are three periods of trade school sessions held at community colleges throughout the province. In order to qualify, the Canadian Union of Skilled Workers (CUSW) requires each applicant to the apprenticeship program to possess a secondary school diploma including credits in the following subjects:

1. *Grade 12 English or French*
2. *Grade 12 Mathematics*
3. *Grade 11 Physics (or higher)*
4. *One of the following senior sciences: Grade 11 Chemistry, Grade 11 Biology or Grade 12 Electrical Shop*

All applicants must be willing to travel to various work sites within the Province.

Project Schedule



How to Participate in the EA Process

Fill out a comment form

- Your comments will be included in our reports and become part of the public record

During the review periods

- Submit written comments to Hydro One or the Ministry of the Environment. Hydro One will attempt to resolve your issues before submitting the final reports

How to Participate in the OEB Process

Intervenor

- Actively participates in application, including submission of evidence, interrogatories, cross examination and arguments

Observer

- Monitors application and receives all documents but without active participation

Written Comments

- Write a letter of comment for the public record to the OEB secretary

Thank You

On behalf of the project team, thank you for attending this Public Information Centre

Please fill out a comment form

If you have any questions,
please call the Project Hotline at

1-877-345-6799

or email:

Community.Relations@HydroOne.com

Be sure to visit the project website for updates at

www.HydroOne.com/Northwest

Please drive safely