

Henvey Inlet Wind LP

## **Transmission Line Description Report**

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# Report

Henvey Inlet Wind LP

## Transmission Line Description Report

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# 1. Introduction and Overview

## 1.1 Transmission Line Overview

Nigig Power Corporation (“Nigig”) received a Feed-in-Tariff (“FIT”) Contract from the Ontario Power Authority (“OPA”) in 2011 for a 300 megawatt wind energy generation centre. Henvey Inlet Wind LP (“HIW”), a limited partnership between Pattern Renewable Holdings Canada ULC and Nigig Power Corporation, is proposing to develop the Henvey Inlet Wind Energy Centre (HIWEC), a 300 MW facility on Henvey Inlet First Nation Reserve No. 2 (“HIFN I.R. #2”).

Henvey Inlet First Nation (HIFN) has broad authority to manage and protect its Reserve lands. This authority comes from the *First Nations Land Management Act* (“FNLMA”), related instruments, and the HIFN Land Code. This authority includes responsibility for environmental protection and the environmental assessment of projects and physical activities on Reserve lands.

Off-Reserve, there will be a new Transmission Line to deliver the electricity generated by the HIWEC to the Ontario electricity grid. Two potential routes are currently being considered. One route (Route A) extends east connecting to the existing 500 kV Hydro One Networks Inc. (“HONI”) transmission line. The second (Route B) follows Highway 69 south to the Parry Sound Transformer Station (“TS”) extending approximately 90 kilometres (“km”). Both routes may require a new TS or SS to connect to the HONI 500 kV line. The Transmission Line corridors are predominantly located on Crown-owned or managed lands.

The Transmission Line proposed off-Reserve is subject to an Environmental Screening Process under Ontario Regulation (O.Reg.) 116/01. Specifically, HIW is completing an Environmental Review under the Environmental Screening Process for the Transmission Line.

This document describes the proposed off-Reserve Transmission Line. The purpose of this document is to describe the characteristics of the study area, the overall design of the Transmission Line, and present a review of potential environmental effects associated with the construction, operation and decommissioning of the Transmission Line.

## 1.2 Rationale and Background

The province of Ontario’s Long Term Energy Plan (Government of Ontario, 2013), which is predated by the Integrated Power System Plan (Government of Ontario, 2008), establishes a goal of bringing 20,000 MW of renewable energy online by 2025. As part of the effort to achieve this goal, Nigig Power Corporation was awarded a FIT contract to develop a 300 MW wind energy generation facility on HIFN I.R. #2. It will be a large-scale renewable energy project capable of providing substantial economic benefits to the HIFN local economy. It will also provide economic spin-off benefits accruing to communities outside of HIFN related to procurement, construction and operation. Renewable energy contributes to a reduced reliance on fossil fuel based power generation resulting in additional environmental benefits such as reduced greenhouse gas emissions. The Transmission Line described in this report is required to connect the generation facility to the provincial transmission grid.

## 1.3 Transmission Line Routes

Two routes have been identified which generally follow existing linear infrastructure. Generally, a two kilometre (km) wide corridor has been mapped to show the proposed transmission routes. The corridor will be used to identify potentially affected stakeholders for consultation purposes. The actual right-of-way (“ROW”) for the Transmission

Line will be approximately 30 m wide and EA field surveys will assess lands within and adjacent to the ROW to capture potential environmental effects.

The first route (Route A) travels east from HIFN I.R. #2 and connects to the existing HONI 500 kV line. This may require construction of a new TS or SS at the connection point with the HONI 500 kV line. Existing linear infrastructure in the area includes Highway 522 in the north and a smaller resource access road further south. These roads present potential routing opportunities for the Transmission Line. An analysis of opportunities and constraints is being undertaken to determine the selected location for this route and input from the public and stakeholders will be considered prior to finalizing the selected route. At this time, a general study area which includes the existing linear infrastructure is shown on Figure 1. The approximate length of this route is between 16 and 20 km. The capacity of the Transmission Line will be determined during the EA process and will be up to 500 kV.

The second route (Route B) travels south from HIFN I.R. #2 generally paralleling Highway 69 (as much as possible) to a point south of Shawanaga First Nation. At this point the route diverts southeast from Highway 69 for approximately 10 km where it meets the existing 500 kV HONI corridor. From there the route follows the HONI corridor south to where it would connect with the Parry Sound TS (see Figure 1). The approximate length of this route is 86 km. This route may require the construction of a new TS or SS at the connection point with the Parry Sound TS. The capacity of the Transmission Line will be determined during the EA process and will be up to 500 kV.

## 1.4 Regulatory Framework

Multiple permits, licenses, and authorizations may be required to facilitate the development of the Transmission Line. The ultimate applicability of all permits, licenses, and authorizations will be determined by and based upon the final design. However, this section provides a preliminary listing of key, potentially applicable regulatory approvals.

### 1.4.1 Federal

The Transmission Line is not a Designated Project under the *Canadian Environmental Assessment Act (CEAA)* (2012). However, given that portions of Route B may be carried out on federal lands (i.e., Magnetawan, Shawanaga and Naiscoutaing First Nations lands), federal permits may be required. Any applicable federal permits and approvals required for the Transmission Line will be determined during the development process. Should any federal permits be required for the Transmission Line, and the permit applies to federal lands, the issuing agency may be required to address Section 67 of *CEAA, 2012*.

### 1.4.2 Provincial

The Transmission Line is subject to O. Reg. 116/01 (Electricity Projects Regulation). The Transmission Line will undergo a "Category B" Environmental Review as described in the Ministry of the Environment and Climate Change's "Guide to Environmental Assessment Requirements for Electricity Projects" (January 2011). At the end of the Environmental Review, an Environmental Review Report (ERR) will be made available for a 30-day review and comment period.

Additional provincial permits may apply and will be confirmed as the EA process progresses. Some of the potential permits and authorizations are listed in Table 1.

**Table 1. Key Provincial Permits and Authorizations**

Permit / Authorization	Administering Agency	Rationale
License of Occupation/Easement and/or Lease Option Agreement with the Crown under the <i>Public Lands Act</i>	Ministry of Natural Resources and Forestry ("MNRF")	The Minister may issue a License of Occupation, Easement and/or Lease Option Agreement for the use of provincially owned crown lands from MNRF.
Work Permits under the <i>Public Lands Act</i>	MNRF	Work permits are required to authorize works on public lands including geotechnical investigations, construction/upgrade of access roads and trails, culverts/bridges and transmission lines.
Section 17 – impact to provincially listed species under the <i>Endangered Species Act</i>	MNRF	A permit is required if a listed species is to be killed, harmed or harassed or if their habitat is affected.
Clearance Regarding Completion of Archaeological and Heritage Investigations	Ministry of Tourism, Sport and Culture ("MTCS")	Under the <i>Environmental Assessment Act</i> , effects on the environment is required to be determined. The definition of "environment" includes "cultural conditions" Clearance that any resources have been identified and mitigated is required from MTCS.
System Impact Assessment	Independent Electrical System Operator ("IESO")	Required for new transmission connections to the IESO-controlled grid.
Customer Impact Assessment	IESO	CIA determines the impact of the Project on other users of the IESO-controlled grid.
Connection Cost Recovery Agreement	HONI	An agreement between HIW and HONI which includes the recovery of costs to grid operator of changes to allow connection, scope of work, costs, payment schedule etc.
Leave to Construct – <i>Ontario Energy Board Act</i>	Ontario Energy Board ("OEB")	Authorization to construct power transmission lines is required by OEB.
Generator's License – <i>Ontario Energy Board Act</i>	OEB	No person is permitted to generate electricity or provide ancillary services for sale through the IESO – administered markets or directly to another person without a license.
Notice of Project under the <i>Occupational Health and Safety Act</i>	Ministry of Labour	The Regulation for Construction Projects (O. Reg. 213/91) states that the constructor must provide a Notice of Project to the Ministry of Labour before construction begins.

### 1.4.3 Municipal

Municipal permits and approvals may be required if the Transmission Line passes through municipal lands or if access from a municipal road is needed. The municipal permit requirements will be confirmed as the EA process progresses.

## 1.5 Proponent Contact and Key Information

The following table provides key information about the Transmission Line development.

**Table 2. Key Information**

<b>Proponent:</b>	The Transmission Line is being developed by Henvey Inlet Wind LP (the "Proponent"). The Proponent is a partnership between Nigig Power Corporation, a company wholly owned by the HIFN, and Pattern Renewable Holdings Canada ULC.	
<b>Location:</b>	The Transmission Line study area falls within the Townships of The Archipelago, Carling, Seguin; the Town of Parry Sound; the Municipality of Killarney within the unorganized Townships of Henvey and Mowat; the Municipality of McDougall; and the Municipality of Whitestone, in the District of Parry Sound, Ontario.	
<b>Transmission Capacity:</b>	Up to 500 kV	
<b>Website:</b>	www.henveyinletwind.com/	
<b>Email:</b>	info@henveyinletwind.com	
<b>Telephone:</b>	(705) 857-5265	
<b>Proponent Contact Information:</b>	<b>Ken Noble</b> President Nigig Power Corporation ("Nigig") a company wholly owned by the Henvey Inlet First Nation. 295 Pickereel River Road, Pickereel, ON P0G 1J0	<b>Kim Sachtleben</b> Director Pattern Renewable Holdings Canada ULC 100 Simcoe Street, Ste. 105 Toronto, ON M5H 3G2
<b>Consultant Contact Information:</b>	<b>Kyle Hunt</b> Project Manager AECOM 105 Commerce Valley Dr. W, Markham, ON L3T 7W3	<b>Marc Rose</b> Project Director AECOM 105 Commerce Valley Dr. W, Markham, ON L3T 7W3

## 2. Transmission Line Components

The following provides a general description of the permanent and temporary Transmission Line components.

### 2.1 Access Roads

Construction vehicles will utilize existing roads and access routes as much as possible during construction to gain access to the transmission ROW, deliver materials and equipment, install tower foundations, assemble towers and string conductors. During construction, vehicles may also utilize the cleared ROW for construction access. Temporary access roads will also be necessary and are described in Section 2.3.2.

### 2.2 Transmission Line Towers and Foundations

From the TS a transmission line with a voltage capacity of up to a 500 kV, consisting of 2 x 3 phase circuits, will be constructed on HIFN I.R #2. The transmission line will consist of Aluminum Steel Reinforced Conductor (ACSR). The conductors are attached to insulators and tower structures that will be approximately 30 to 40 m in height. An Optical Ground Wire (OPGW) will be installed on the transmission line to facilitate communications with the TS.

The towers will be steel monopole, steel lattice, fiberglass, concrete or wood structures erected on concrete foundations or bolted to bedrock as appropriate for the tower location. On average, the structures will be spaced approximately 200 to 400 m apart except where site specific conditions require shorter or longer tower spans (e.g. significant changes in line direction, large waterbody crossings, or in compliance with design codes and laws).

### 2.3 Transformer Station or Switching Station

A new TS or SS may be required for the preferred route to tie into the HONI 500 kV transmission line. The TS or SS will be located adjacent to the HONI 500 kV transmission line (Route A), or connected into the Parry Sound TS (Route B) consisting primarily of power transformers, grounding transformers, circuit breakers and disconnect switches, surge arrestors, instrument transformers, meters, ancillary equipment, along with associated concrete foundations to mount the afore mentioned equipment.

The TS or SS will be located on a graded area, the size of which will be determined during the detailed design phase. The TS or SS will be fenced and secured to prevent unauthorized entry and maintain public safety. All non-current carrying and conducting metal components within the fenced area of the TS or SS will be connected to a grounding grid installed below finished grade.

### 2.4 Temporary Transmission Line Components

#### 2.4.1 Construction Compounds

Temporary construction compounds will be established for the temporary storage of construction materials and equipment. Temporary storage of materials will conform to applicable standards, codes and best management practices, and any fuel storage will be stored with secondary containment.

### **2.4.2 Access Roads**

Temporary access roads will be required during construction to gain access to the transmission ROW, deliver materials and equipment, install tower foundations, assemble towers and string conductors. These roads will connect from existing local, municipal and provincial roads, where possible. Temporary access roads will be designed to minimize the effects on the natural environment. Following construction, temporary access roads will be decommissioned and the areas restored.

The cleared area used for construction of temporary access roads (approximately 5-8 m) will be minimized as much as possible and will be reduced where natural constraints exist such as wetlands or waterbodies. In all cases, the construction area will be confined to the area required to support safe construction activities.



### 3. Transmission Line Development Activities and Schedule

The following subsections outline the activities associated with pre-construction, construction, operation and decommissioning of the Transmission Line.

#### 3.1 Pre-Construction

Activities that will occur during the pre-construction phase include: planning and resource management, pre-construction surveys, geotechnical investigations, permitting and detailed design.

#### 3.2 Construction

The construction phase will consist of the following key activities:

- Delineation of work area and important natural features, and installation of erosion and runoff controls;
- Vegetation clearing and site grading;
- Delineation of temporary work areas and installation of temporary facilities, including concrete batch plants (if required);
- Construction of temporary access roads and upgrading of existing access roads (if required);
- Installation of tower foundations;
- Tower erection;
- Installation of transmission lines;
- Installation of the TS or SS; and
- Restoration of the site and removal of temporary construction areas.

#### 3.3 Operations and Maintenance

The operations and maintenance phase will consist of the following key activities:

- Preventative and routine maintenance on the transmission line and TS or SS;
- Unplanned maintenance; and
- ROW maintenance (e.g., vegetation control).

#### 3.4 Decommissioning

The decommissioning phase will include the following key activities should there be no other use for the transmission line and towers:

- Removal of lines, towers and TS or SS infrastructure; and
- Site restoration.

### 3.5 Waste Generation

The amount of waste generated by the installation, operation and decommissioning of the Transmission Line is expected to be minimal, and will include nominal amounts of hazardous residues such as motor oils. Waste materials generated during the construction phase are anticipated to include excess fill, soil, brush, scrap wood, metal, steel, plastic, packaging, grease, oil and domestic waste. Operation and maintenance of the Transmission Line will result in minimal waste material. Any waste generated will be disposed of at appropriate waste facilities with an emphasis on recycling materials, whenever possible.

### 3.6 Toxic/Hazardous Materials

Typically, there is little material that could be classified as toxic or hazardous that is used in constructing and operating a Transmission Line. Toxic or hazardous materials used during the construction and operations phases include oils, fuel and lubricants that will be used in vehicles and construction/maintenance equipment. Only minor amounts of these materials will be generated and the small quantities will be disposed of at appropriate waste facilities.

### 3.7 Sewage

During the construction phase, portable toilets will be used and a licensed contractor will be responsible for waste removal. There will be no sewage requirements during the operations/maintenance phase for the Transmission Line.

### 3.8 Stormwater

All site grading that has the potential to impact stormwater runoff (i.e. installation of the TS or SS) will be done in accordance with applicable regulations and guidelines. Effective stormwater controls will be employed during construction and decommissioning.

### 3.9 Water-taking Activities

Installation of transmission tower foundations may require dewatering in some locations which has the potential to interrupt the quantity or flow of groundwater to a natural feature (watercourses, wetlands, other features with seasonal inundation). In addition, pumping of groundwater from foundation excavations and subsequent release to a watercourse has the potential to introduce sediment to the watercourse, change watercourse hydrology and water temperature.

To identify potential effects from construction or operation of the Transmission Line on groundwater quality, quantity or movement, a hydrogeological assessment will be conducted to:

- assess potential water-taking requirements during the construction phase; and,
- a desktop study will be completed and included in the ERR that will examine MOECC well records, geological mapping and the distribution of local wells. The analysis of potential water-taking and effects on local wells or any ecological features will be included in the ERR.

### 3.10 Transmission Line Development Schedule

The schedule below outlines the anticipated timelines for Transmission Line development:

**Table 3. Key Milestones**

Milestone	Anticipated Date
Notice of Commencement	January, 2015
Host Public Information Centre #1	February, 2015
Complete Draft Environmental Review Report (ERR)	June, 2015
Host Public Information Centre #2	July, 2015
Notice of Completion	September, 2015
Obtain Pre-Construction Permits	March, 2016
Start Construction	May, 2016
Commence Operations and Maintenance	November, 2017

The specific schedule for decommissioning will be determined at the time it is undertaken. The wind turbines used for the HIWEC can be expected to be in service for the term of the 20 year FIT contract, and as such the Transmission Line is expected to be in service for at least this duration.

## 4. Ontario Regulation 116/01 Environmental Screening

The potential effects of transmission facilities and associated mitigation measures are well understood. Table 4 has been developed to identify potential effects associated with the two route options for the Transmission Line. These effects will then be addressed in the ERR to ensure that sufficient mitigations measures are proposed.

**Table 4. Transmission Line Screening Checklist (Ontario Regulation 116/01)**

Category	Criteria	Route A (Short Route)		Route B (Long Route)		Additional Information
		Yes	No	Yes	No	
<b>1.0 Surface and Ground Water</b>	1.1 Potential effects on surface water quality, quantity or flow	√		√		<ul style="list-style-type: none"> <li>Construction is proposed away from surface waterbodies but has the potential to affect adjacent waterbodies</li> <li>Surface water quality has the potential to be impacted by sedimentation during construction</li> </ul>
	1.2 Potential effects on groundwater quality, quantity or movement	√		√		<ul style="list-style-type: none"> <li>Potential impacts to groundwater quality impacts could occur where excavation is required for tower foundations</li> </ul>
	1.3 Potential to cause significant sedimentation, soil erosion or shoreline or riverbank erosion on or off site	√		√		<ul style="list-style-type: none"> <li>Best management practices for vegetation removal near waterbodies will be applied during construction; however there is the potential for some sedimentation to occur.</li> </ul>
	1.4 Potential negative effects on surface or groundwater from accidental spills or releases to the environment	√		√		<ul style="list-style-type: none"> <li>Spills of fuels, lubricating oils and other fluids have the potential to occur during construction and operation of the facility</li> </ul>
<b>2.0 Land Use</b>	2.1 Potential negative effects on residential, commercial or institutional land uses within 500 metres of the site		√	√		<ul style="list-style-type: none"> <li>No negative residential, commercial or institutional land use impacts are anticipated for Route A.</li> <li>Route B requires some private land crossings and could result in negative impacts</li> </ul>
	Inconsistent with the Provincial Policy Statement, provincial land use or resource management plans		√		√	<ul style="list-style-type: none"> <li>The transmission routes are predominantly on Crown land and are anticipated to be consistent with PPS and provincial plans</li> <li>Provincial Policy Statement does not apply to any sections of the transmission corridor within First Nation Reserve lands</li> </ul>
	2.2 Inconsistency with municipal land use policies, plans and zoning bylaws		√		√	<ul style="list-style-type: none"> <li>The transmission routes are anticipated to be consistent with municipal land use policies and zoning bylaws</li> <li>Municipal policies, plans and zoning bylaws are not applicable to any sections of the transmission corridor within First Nation Reserve lands</li> </ul>
	2.3 Use of hazard lands or unstable lands that are subject to erosion		√		√	<ul style="list-style-type: none"> <li>It is not anticipated that any transmission components will be located within hazard lands</li> </ul>
	2.4 Potential negative effects related to the remediation of contaminated land		√		√	<ul style="list-style-type: none"> <li>Known contaminated sites will be avoided</li> </ul>
<b>3.0 Air and Noise</b>	3.1 Potential negative effects on air quality due to emissions of nitrogen dioxide, sulphur dioxide, suspended particulates, or other pollutants	√		√		<ul style="list-style-type: none"> <li>Diesel and gasoline-powered equipment will be used during construction phase of the Transmission Line</li> <li>Limited use of diesel and gasoline-powered service vehicles will occur during the maintenance phase</li> </ul>
	3.2 Potential negative effects on air quality due to the emission of greenhouse gases (CO <sub>2</sub> , methane)	√		√		<ul style="list-style-type: none"> <li>Greenhouse gas emissions will be limited to construction equipment during the construction phase of the Transmission Line and service vehicles during the maintenance phase</li> </ul>
	3.3 Potential negative effects on air quality due to emission of dust or odour	√		√		<ul style="list-style-type: none"> <li>Dust will be created during construction of the Transmission Line, but will be limited to areas in the vicinity of the work and is not anticipated to impact other activities</li> </ul>
	3.4 Potential negative effects due to the emission of noise	√		√		<ul style="list-style-type: none"> <li>Noise emissions will be temporary in nature and limited to construction equipment during construction phase</li> <li>Any noise generated during maintenance is expected to be very limited</li> </ul>

**Table 4. Transmission Line Screening Checklist (Ontario Regulation 116/01)**

Category	Criteria	Route A (Short Route)		Route B (Long Route)		Additional Information
		Yes	No	Yes	No	
<b>4.0 Natural Environment</b>	4.1 Potential negative effects on rare, threatened or endangered species of flora or fauna or their habitat	√		√		<ul style="list-style-type: none"> <li>Rare, threatened and endangered species have been recorded and confirmed within the study area and the species and their habitat have the potential to be disrupted</li> </ul>
	4.2 Potential negative effects on protected natural areas such as ANSIs, ESAs or other significant natural areas		√		√	<ul style="list-style-type: none"> <li>Grundy Lake Provincial Park is north of Highway 522 adjacent to the Transmission Line study area. It is anticipated that final routing will avoid any impact to this park.</li> <li>No other ANSIs, ESAs or other protected natural areas are known to occur within either transmission corridor</li> </ul>
	4.3 Potential negative effects on wetlands	√		√		<ul style="list-style-type: none"> <li>Wetland complexes are found throughout the study area and have the potential to be disrupted during construction activities</li> </ul>
	4.4 Potential negative effects on wildlife habitat, populations, corridors or movement	√		√		<ul style="list-style-type: none"> <li>Wildlife habitat, populations and movement corridors may be temporarily disrupted during construction activities</li> </ul>
	4.5 Potential negative effects on fish or their habitat, spawning, movement or environmental conditions (e.g., water temperature, turbidity, etc.)	√		√		<ul style="list-style-type: none"> <li>Some vegetation removal may be required in shoreline areas and the potential for associated erosion and sedimentation has the potential for negative effects</li> </ul>
	4.6 Potential negative effects on migratory birds, including effects on their habitat or staging areas		√		√	<ul style="list-style-type: none"> <li>No effects on migratory birds and their habitat is anticipated</li> </ul>
	4.7 Potential negative effects on locally important or valued ecosystems or vegetation	√		√		<ul style="list-style-type: none"> <li>Infrastructure has the potential to be sited in areas that could impact valued ecosystems and vegetation communities</li> </ul>
<b>5.0 Resources</b>	5.1 Result in inefficient (below 40%) use of a non-renewable resource (efficiency is defined as the ratio of output energy to input energy, where output energy includes electricity produced plus useful heat captured)		√		√	<ul style="list-style-type: none"> <li>The Transmission Line is not expected to result in inefficient use of non-renewable resources</li> </ul>
	5.2 Potential negative effects on the use of Canada Land Inventory Class 1-3, specialty crop or locally significant agricultural lands		√		√	<ul style="list-style-type: none"> <li>The Transmission Line is not located on significant agricultural lands</li> </ul>
	5.3 Potential negative effects on existing agricultural production		√		√	<ul style="list-style-type: none"> <li>The Transmission Line is not expected to affect agricultural production</li> </ul>
	5.4 Potential negative effects on the availability of mineral, aggregate or petroleum resources		√		√	<ul style="list-style-type: none"> <li>Neither construction activities nor the location of the Transmission Line infrastructure are anticipated to impact the availability of mineral, aggregate or petroleum resources</li> </ul>
	5.5 Potential negative effects on the availability of forest resources	√		√		<ul style="list-style-type: none"> <li>The study area is within the French-Severn Forest Management Unit and will result in some tree clearing for the transmission right-of-way</li> </ul>
	5.6 Potential negative effects on game and fishery resources, including negative effects caused by creating access to previously inaccessible areas	√		√		<ul style="list-style-type: none"> <li>Some previously inaccessible areas may become accessible through the creation of the transmission corridor</li> </ul>

**Table 4. Transmission Line Screening Checklist (Ontario Regulation 116/01)**

Category	Criteria	Route A (Short Route)		Route B (Long Route)		Additional Information
		Yes	No	Yes	No	
<b>6.0 Socio-Economic</b>	6.1 Potential negative effects on neighbourhood or community character		√	√		<ul style="list-style-type: none"> <li>Transmission Line towers and conductors may alter the community character along Route B where the line is in proximity to populated areas</li> <li>Route A is not located in close proximity to any communities and is unlikely to have negative effects on community character</li> </ul>
	6.2 Potential negative effects on local businesses, institutions or public facilities		√		√	<ul style="list-style-type: none"> <li>Local businesses are expected to benefit from an influx in demand for services during the construction phase</li> <li>No long-term effects are anticipated</li> </ul>
	6.3 Potential negative effects on recreation, cottaging or tourism		√		√	<ul style="list-style-type: none"> <li>The alterations to the visual landscape resulting from the Transmission Line which could impact tourism are expected to be minimal</li> </ul>
	6.4 Potential negative effects related to increases in the demands on community services and infrastructure		√		√	<ul style="list-style-type: none"> <li>The Transmission Line does not require water or wastewater services so no additional demands on community infrastructure will occur</li> </ul>
	6.5 Potential negative effects on the economic base of a municipality or community		√		√	<ul style="list-style-type: none"> <li>During construction of the Transmission Line, local suppliers will be used to the extent possible which will generate additional local revenues</li> </ul>
	6.6 Potential negative effects on local employment and labour supply		√		√	<ul style="list-style-type: none"> <li>Local labour will be used to the extent possible during construction activities</li> </ul>
	6.7 Potential negative effects related to traffic		√		√	<ul style="list-style-type: none"> <li>MTO permits will be obtained for access and egress from Highway 69 and Highway 522</li> <li>The majority of all other road traffic will occur within the transmission right-of-way or construction/maintenance access roads</li> </ul>
	6.8 Potential to cause public concerns related to public health and safety		√		√	<ul style="list-style-type: none"> <li>Public concerns related to safety may include aspects related to electric and magnetic fields (EMFs) associated with transmission station and Transmission Lines</li> <li>Current scientific research does not demonstrate that EMFs cause or contribute to adverse health effects</li> </ul>
<b>7.0 Heritage and Culture</b>	7.1 Potential negative effects on heritage buildings, structures or sites, archaeological resources, or cultural heritage landscapes	√		√		<ul style="list-style-type: none"> <li>The Transmission Line will be designed to avoid or minimize impacts to areas of cultural importance that were identified through the Traditional Knowledge Study and archaeological assessments</li> </ul>
	7.2 Potential negative effects on scenic or aesthetically pleasing landscapes or views	√		√		<ul style="list-style-type: none"> <li>Transmission line towers and conductors will alter the visual landscapes in some sections of both routes</li> <li>Most sections follow the existing infrastructure ROW (i.e. Hwy 69 or Hwy 522) and are less likely to have negative effects on the visual landscape</li> </ul>
<b>8.0 Aboriginal</b>	8.1 Cause negative effects on First Nations or other Aboriginal communities		√		√	<ul style="list-style-type: none"> <li>First Nation community members will be consulted as part of the EA process</li> </ul>
<b>9.0 Other</b>	9.1 Result in the creation of waste materials requiring disposal	√		√		<ul style="list-style-type: none"> <li>Waste materials will be created during the construction and maintenance of the Transmission Line</li> <li>Waste materials will be disposed of at an approved facility</li> </ul>
	9.2 Potential negative environmental effects not covered by the criteria outlined above		√		√	N/A

# Figure



