Customer Application
For
New or Modified Connections

Please submit this form by mail or courier to the following address:

Five Nations Energy Inc.
70-C Mountjoy St. North, Suite 421
Timmins, Ontario
P4N 4V7
Attn: Mr. Vladimir Govorov, Operations Manager

Subject: *Customer Application For New or Modified Connections*

All information submitted in this process will be used by Five Nations Energy Inc. solely in support of its obligations under the Transmission System Code, *Electricity Act, 1998*, the *Ontario Energy Board Act, 1998,* the IESO *Market Rules, OEB approved Connection P*rocedures and its transmission license. All information submitted will be assigned the appropriate confidentiality level upon receipt.

New Connection: ☐ **Modification to an Existing Connection Facility:** ☐

Project Name:_____.

PART 1 – GENERAL INFORMATION

Organization Name: _____

Organization Short Name: (Maximum 12 keystrokes) _____

Mailing Address: _____

City/Town: Province/State: _____

Postal/Zip Code: _____ Country: _____

Fax No.: _____

Email Address: _____

Main Contact

Name: _____

Position/Title: _____

Telephone No.: _____ Fax No.: _____

E-mail Address _____

PART 2 – REQUIRED DOCUMENTATION ATTACHED BY CUSTOMER APPLICANT

LOAD CUSTOMERS

- ☐ In-service date.
- ☐ Indicate whether new or existing connection requiring expansion, describe project.
- ☐ Connection location / address.
- ☐ Forecasted new load that will be guaranteed by the Customer (initial, intermediate & ultimate) including size and date. Identify seasonal/monthly variations in load (summer or winter peak). Provide the 5 most recent years or historical load pertaining to existing facilities as identified by Five Nations Energy Inc. , if connected less than 5 years the most year or years.
- ☐ Identify nature of business (specify industry) and any specific reliability requirements.
- ☐ Provide the technical information identified in Appendix A of this application entitled “New or Modified Customer Facility Technical Information for Load Customers”.
- ☐ Scada requirements for New or Modified Facility to be identified by Customer and Five Nations Energy Inc. during project review meetings and incorporated into CCRA as required.
- ☐ Identify the name, address and contact information of the New or Modified Facility Meter Service Provider and Market Participant name.

GENERATORS

- ☐ In-service date.
- ☐ Indicate whether new or existing connection requiring expansion, describe project.
- ☐ Connection location / address, total generation including number of units, size of units and power factor
- ☐ Forecasted new seasonal/monthly operating schedule including output.by generating unit.
- ☐ Identify nature of business (specify industry) and any specific reliability requirements.
- ☐ Provide the technical information identified in Appendix B of this application entitled Transmission System Connection Application for Generator Customers.
- ☐ Scada requirements for New or Modified Facility to be identified by Customer and Five Nations Energy Inc. during project review meetings and incorporated into CCRA as required.
- ☐ Identify the name, address and contact information of the New or Modified Facility Meter Service Provider and Market Participant name.

PART 3 – CERTIFICATION

The undersigned hereby declares that the information contained in and submitted in support of this document is, to the best of the connection applicant's knowledge, complete and accurate.

Name	Title
Signature	Date

Part 4 – PERMISSION

The undersigned Customer hereby allows if required by Five Nations Energy Inc., the IESO to release a copy of any connection assessment and or facility registration documents associated with the Customer Application related to any new, modified or replacement Customer Facilities that the Customer has submitted to the IESO.

Name	Title
Signature	Date

PART 4 – FOR FIVE NATIONS ENERGY INC. USE ONLY

Received by:		Date Received:	
Date of Request(s) for Additional Information:			
Date Requested:		Date Received:	
Date Requested:		Date Received:	
Application Completion Date:			

Appendix A

"New or Modified Customer Facility Technical Information for Load Customers".

In accordance with section 6.1.11 of the Transmission System Code, Five Nations Energy Inc. requires customers connecting any new, modified or replacement customer facilities to provide the following completed IESO connection assessment and facility registration documentation:

- ❑ System Impact Assessment Application for Load Customers
  - ❑ Attached
  - ❑ To be provided by _____ .

- ❑ Final System Impact Assessment Report for Load Customers
  - ❑ Attached
  - ❑ To be provided by _____ .

- ❑ Feasibility Study Application for Load Customers
  - ❑ Attached
  - ❑ To be provided by _____ .

- ❑ Final Feasibility Study Report
  - ❑ Attached
  - ❑ To be provided by _____ .

In addition, to the above Five Nations Energy Inc. may require the following documents in order to access the impact on the reliability of the customers new, modified or replacement facility on the transmission system if they are not included in the IESO documentation:

- ❑ Single line diagram illustrating all protection schemes, 3 wire and/or DC elementary wiring drawings maybe required.
  - ❑ Attached
  - ❑ To be provided by _____ .

- ❑ Power transformer nameplate data.
  - ❑ Attached
  - ❑ To be provided by _____ .

- ❑ Relay settings & verification tests
  - ❑ Attached
  - ❑ To be provided by _____ .

- ❑ High voltage equipment operating & protection philosophy that are impactive on the transmission system
  - ❑ Attached
  - ❑ To be provided by _____ .

- ❑ Tripping Matrix as per required by the code.

- ❑ Attached
- ❑ To be provided by _____ .

Appendix B

"Transmission System Connection Application for Generator Customers"

GENERATOR CONNECTION REVIEW FORM

Given below is typical information required from Generators for the Initial Meeting with Five Nations Energy Inc. .

Date: _____
(dd / mm / yyyy)

1. **Project Name:** _____

2. **Project Dates:** Proposed Start of Construction: _____ (dd/mm/yyyy)
   Proposed In-Service: _____ (dd/mm/yyyy)

3. **Project Size:** Number of Units _____
   Rating of Each Unit _____ kW
   Number of Phases (one or three)_____
   Proposed Total Capacity _____ kW
   Proposed Total Capacity, Future_____ kW

4. **Project Location** _____
   _____
   _____
   _____

5. **Project Developer:**
   Company / Person: _____
   Contact: _____
   Mailing Address: _____
   _____
   _____
   Telephone: _____
   Fax: _____
   E-mail: _____

6. **Project Owner (if not same as Project Developer):**
   Company / Person: _____
   Contact: _____
   Mailing Address: _____
   _____
   _____
   Telephone: _____
   Fax: _____
   E-mail: _____

7. Engineering Consultant (Electrical)

Company / Person: _____

Contact: _____

Mailing Address: _____

_____

_____

Telephone: _____

Fax: _____

E-mail: _____

8. Project Type:

∀ Wind Turbine ∀ Hydraulic Turbine ∀ Steam Turbine ∀ Gas Turbine
∀ Diesel Engine ∀ Solar ∀ Fuel Cell ∀ Biomass
∀ Co-generation / CHP (Combined Heat and Power)
∀ Other, please specify _____

9. Generator Voltage and Type:

a. Generation Voltage _____ Volts
∀ AC ∀ DC

b. Type: Rotating Generators
∀ Synchronous ∀ Induction
∀ Other, please specify _____

c. Non-rotating DC Generation
∀ DC Source- Photovoltaic Arrays ∀ DC Source- Fuel Cells ∀ DC Source- Batteries
∀ Other, please specify _____

10. Proposed Step-up Interface Transformer Connection
(delta, wye - solid grounded, wye - impedance grounded etc.)

- High Voltage* _____
- Low Voltage** _____

The connection of the windings should also be indicated in the Single Line Diagram (SLD).

In this document:
* 'High Voltage' refers to the connection voltage to Five Nations Energy Inc.'s transmission system.
** 'Low Voltage' refers to the generation or any other intermediate voltage.

11. Location Map and Connection Voltage to FNEI System

- Provide Site Location Map with suitable details of generation facility, line routing and proposed connections to Five Nations Energy Inc. facilities.

  Drawing / Sketch No. _____, Rev.____

12. Single Line Diagram (SLD)

- Provide SLD of Generator facility showing the interface point to Five Nations Energy Inc. system.

The SLD should include the required disconnecting device and show various equipment viz. generators, high and low voltage switchgear, transformers, motors, protective relays / devices, instrument transformers (CTs and VTs), metering, synchronizing etc.

Provide as much information as possible on the SLD.

13. Operation, Generation and Load Information:

- Mode of Operation:

  ∀ 24 hour or Base Load ∀ Peak Period Only ∀ Load Displacement
  ∀ Other, please specify _____

- Annual Capacity Factor _____ %
- Prospective number of annual scheduled starts / stops, and timing thereof _____
  _____
  _____

- Estimated maximum load of the generator facility _____ kVA _____ kW
- Estimated maximum power export from the facility (to FNEI system) _____ kVA _____ kW