

Transmission Customer Application For New or Modified Connection



CANADIAN NIAGARA POWER INC.

A FORTIS ONTARIO
Company

Submit this form electronically to customer.service@cnpower.com or in hard copy by drop-off, mail or courier to the following address:

Canadian Niagara Power Inc.
1130 Bertie Street,
Fort Erie, ON L2A 5Y2
Attn: Vice President of Operations

Subject: *Customer Application for New or Modified Connection*

All information submitted in this application form and as part of the resulting connection process may be used by Canadian Niagara Power Inc. (CNP), and the Independent Electricity System Operator (IESO), to fulfill its obligations in relation to the requested connection under the *Electricity Act, 1998*, the *Ontario Energy Board Act, 1998*, the *IESO Market Rules*, the Transmission System Code, its transmission license and Canadian Niagara Power Inc.'s OEB-approved *Connection Procedures*. The applicant consents to the sharing of all such information between Canadian Niagara Power Inc. and the IESO.

Applicants are required to apply to the IESO as part of the connection requirements. The IESO contact information is:

Independent Electricity System Operator
2635 Lakeshore Rd. West
Mississauga, ON
L5J 4R9
Attn: Connection Assessments
Connection.assessments@ieso.ca

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

- Requested in-service date.
- Indicate whether new connection or existing connection requiring modification.
- Project description.
- Connection location/address.
- Forecasted new load that will be guaranteed by the Customer (initial, intermediate and ultimate) including size and date. Identify seasonal/monthly variation in load (summer or winter peak). Provide the five most recent years of historical load pertaining to existing facilities as indentified by Canadian Niagara Power Inc., if connected less then five years the most recent year or years.
- Identify nature of business (specify industry) and any specific 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 Canadian Niagara Power 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

- Requested in-service date.
- Indicate whether new connection or existing connection requiring modification.
- Project description.
- 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 Canadian Niagara Power 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 hereby authorizes Canadian Niagara Power Inc. to receive from the IESO, if required, copies of any connection assessments and/or facility registration or related documents associated with the request in this application for new, modified or replacement connection facilities.

Name

Title

Signature

Date

Part 5 – For Canadian Niagara Power 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"

Canadian Niagara Power Inc. requires 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 extent not included in the IESO-related documentation listed above, Canadian Niagara Power Inc. requires the following information:

- Single line diagram illustrating all protection schemes, 3 wire and/or DC elementary wiring drawings may be 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 is impactful on the transmission system.
 - Attached
 - To be provided by: _____

- Tripping Matrix as per required 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 Canadian Niagara Power 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 the 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. Generator 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 Canadian Niagara Power Inc.'s transmission system.

** 'Low Voltage' refers to the generation or any other intermediate voltage.

11. Location Map and Connection Voltage to CNP System

- Provide Site Location Map with suitable details of generation facility, line routing and proposed connections to Canadian Niagara Power facilities.

Drawing / Sketch No. _____, Rev. _____

12. Single Line Diagram (SLD)

- Provide SLD of Generator facility showing the interface point to Canadian Niagara Power 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 form the facility (to CNP system)

_____ kVA _____ kW