

- **Select the existing DER Type:** CHOOSE ONE. Synchronous, Induction, Inverter-based or Other and provide applicable power levels, ratings and reactance values.

7. SECTION F – PROJECT INFORMATION

- **Station Name:** provide the name of the **Halton Hills Hydro Inc** station that your facility will connect to (e.g. “CONESTOGA DS”).
- **Feeder and Feeder Voltage:** Provide the name of the feeder that your facility will connect to (e.g. “F1” or “M1”) and feeder voltage if available.
- **Project Size:** Provide the total amount of generation your facility will produce, i.e. the facility’s maximum kW output. **Important note:** The project size on this application must match the project size you provided on your IESO contract (if applicable).
- **Equipment Capacity:** Provide the total amount of capacity in (kVA) of your facility’s equipment. **Important note:** For more information on the technical requirements of distribution generation facilities, see Halton Hills Hydro Inc.’s Technical Interconnection Requirements (TIR). Note: Typically, the generator’s Nameplate Capacity or Gen-Set Name Plate Capacity shall be considered as project size.
- **Fuel / Energy Type:** CHOOSE ONE. Provide the type of energy your generation facility will produce. If it is “Other”, ensure to provide the type of generation you are proposing.
- **Type of connection:** CHOOSE ONE. Single phase **OR** Three phase.
 - If this is a solar project, please select the Mounting Type.
 - If this is a water project, please answer the indicated questions.

8. SECTION G – STATION SERVICE LOAD INFORMATION

- In the Load Information section, if required, provide *Maximum Demand of Station Service Load of the DER in KW and the Average Monthly Consumption in kWh*

9. SECTION H – CONNECTION INFORMATION

- DOM means “Distribution Operating Map”. From the original DOM that the **Halton Hills Hydro Inc** provided to you during your preliminary consultation meeting or in the preliminary consultation report, outline where your generation facility site will be located in reference to the existing feeder. Indicate the POE-PCC distances.² Please be sure to include the project location’s GPS co-ordinates. If you require a DOM, you can request one through our website.

² Refer to CIA Application Form Appendix A for the definition of POE and PCC.

- **Single Line Diagram (“SLD”):** Provide an SLD of the DER’s facilities including the PCC, transformer and connecting station, feeder and supply voltage. **SLD Drawing No. and Rev:** **Important note:** An SLD is a very important piece of your application and must accurately reflect the project information provided on the CIA Application. Submitting an accurate SLD that meets DOWRQ LOOVGUR □ □’s standards ensures your application is not delayed. Failure to submit an acceptable SLD will result in your application being deemed incomplete. Please refer to DOWRQ LOOVGUR □ □’s Technical Interconnection Requirements for more information on SLDs and other technical requirements for your generation facility. Please ensure that the SLD is no larger than 11x17 inches.
- **The “Point of Expansion” (POE)** indicates the origin of the new line expansion.
- **The “Point of DER Connection” or “PODC”** means the point where the DER connects with the DER’s connection assets as outlined in Appendix A of the CIA form.
- **GPS coordinates of the following:** All three GPS coordinates must be provided: POE, PCC and generation facility. GPS Format: Latitude, Longitude -Degree Decimal (e.g. 49.392, -75.570).
- **Length of line distance from the POE to the PCC:** Provide the exact distance in kilometers of the line from the POE to the PCC.
- **Length of line distance from the PCC to the DER Facility** (refer to Appendix A of CIA Application Form): Provide the exact distance in kilometers of the line from the PCC to your proposed generation facility. See Appendix A at the end of the application document for a diagram.
- **Conductor type/size:** Provide what type of conductor you will be using, including the size. E.g. ACSR/ CU/ AL and size in kcmil or AWG
- **Fault contribution from the DER’s Facilities, with the fault location at the PCC:**
 - *Three-phase generators: 3-phase short circuit*
 - *Single-phase generators: 1-phase short circuit*
- **Connection Figure:** See Appendix A at the end of the application document and choose ONE appropriate figure that is most applicable to how your proposed generator will connect.

Important Notes:

If this project requires line expansion work between the POE and PCC, DOWRQ □ □ LOOVGUR □ □ will provide a cost estimate to construct any line located on public road right-of-way. The cost estimate will include a breakdown of Uncontestable work (i.e. overbuild to existing line) that can only be performed by the [DOWRQ □ □ LOOVGUR □ □], as well as Contestable work (i.e. new construction/green-field) that can be performed by the Generator/their contractor or the DOWRQ □ □ LOOVGUR □ □ □ □. Both Uncontestable work and Contestable work requires design to DOWRQ □ □ LOOVGUR □ □ specifications). Halton Hills Hydro Inc will become the owner of the line expansion.

For a Generator-owned line, the Generator may choose to apply for installation of the line on existing the **Halton Hills Hydro Inc** -owned poles. This is known as an application for Joint Use (JU) of poles. If the application is accepted, the **Halton Hills Hydro Inc** will provide the Generator with information on initial connection costs, annual pole-space rental and emergency service (ES) fees and required JU & ES Agreements.

10. SECTION I – ENERGY STORAGE

In the Energy Storage section, provide Number of Units, Inverter Size (enter zero if inverter is shared with generation unit(s)), Energy Storage Unit Size (kWh) and Total Energy Storage Size (kWh).

Select the Energy Storage Facility Control Strategy to be used and include with this application a detailed description of the control strategy according to the templates in Appendix B. **Halton Hills Hydro Inc** reserves the right to modify the control strategy as part of its Connection Impact Assessment.

11. SECTION J – LOAD DISPLACEMENT INFORMATION

In the Load Displacement Information section, provide the Operating Mode, Transition Type, and Time that Generator Remains Parallel to the Grid (closed transition only).

For non-parallel load displacement, SCADA monitoring and Gross Load Billing (GLB) may apply. For load displacement generation facilities, please attach a schedule of the forecasted maximum generation output (as a function of loading of the facility). At a minimum, include the forecasted generation output information (i.e. Watts and VARs) during the minimum and maximum of the load facility to which the load displacement generator is connecting (see Appendix C for template)

12. SECTION K –DER CHARACTERISTICS (1/1)

In the DER Characteristics section, complete all fields accordingly.

For facilities with multiple DERs: If your generators have different characteristics, please use the “Add Page” button and provide the characteristics for each generator on the additional pages.

Important note:

The **Halton Hills Hydro Inc requires** that all CIA Applicants have a P.Eng. review this section. Failure to complete this section correctly will result in delays to your application.

13. SECTION L – INTERFACE TRANSFORMER

14. SECTION M – INTERMEDIATE TRANSFORMER

15. SECTION N – HIGH-VOLTAGE GROUNDING TRANSFORMER

In the Interface Transformer section, complete all fields accordingly.

At the Generator's expense, and if requested, the Halton Hills Hydro Inc may provide transformation up to a maximum of 500KVA three-phase, as described in **Halton Hills Hydro Inc**. Conditions of Service available at <https://haltonhillshydro.com/for-business/conditions-of-service/>.

The term "High Voltage" refers to the connection voltage to **Halton Hills Hydro Inc's** distribution system and "Low Voltage" refers to the generation or any other intermediate voltage.

Providing a photo of transformer equipment along with this application may help expedite your application.

16. SECTION O – SUBMISSION CHECKLIST

Please ensure the following items are completed prior to submission. Your application will not be processed if any part is omitted or incomplete: **Payment**

Payment in full including applicable taxes (by cheque payable to "**Halton Hills Hydro Inc.**") Completed Form B stamped by a Professional Engineer

Signed Study Agreement

Attach a Signed Study Agreement

Single Line Diagram (SLD)

Attach a SLD of the Generator's facilities, must be stamped by a Professional Engineer

Protection Philosophy

Attach Protection Philosophy documents

Distribution Operating Map

Distribution Operating Map (DOM) and/or Site Plan (not required for existing load customers that are connecting a load displacement generation, net metering generation or energy storage system behind their existing metered connection point)

Load Schedules

Load Displacement Generation Facility's load and generation schedules (if applicable)

Load Displacement Generation Facility's mode of operation (if applicable)

Operating Strategy

Energy Storage Facility operating strategy description and parameters (if applicable)

Emergency Backup Generation Facility's mode of operation (if applicable)

17. SECTION P – CIA APPLICATION FEE CHECKLIST

Please ensure the following items are completed prior to submission. Your application will not be processed if any part is omitted or incomplete. Check all that apply.

Applicable CIA Fee

See the Connection Impact Assessment Fee Schedule on our website for costs. Please enter the amount from the fee schedule. Note HST will be applicable.

Transmission Customer Impact Assessment (TxCIA) Fee (if applicable)

A Tx CIA is also required if the total nameplate generation of the project is greater than 10MW. Note HST will be applicable.

IESO System Impact Assessment (SIA) Fee (if applicable)

An SIA deposit is required if the total nameplate generation of the project is greater than 10MW. The total cost of the SIA will be Trued Up/Down upon the receipt of the SIA from the IESO. See the IESO's SIA Application for costs.

18. SECTION Q – ATTACHMENTS

Please provide a description, document number and number of pages for each supporting document/drawing attachment.

19. SECTION R – NOTES

*Please include any additional details that you think **Halton Hills Hydro Inc** should be aware of in support of this application.*

20. SECTION S – HHHI SPECIFIC REQUIRED FIELDS

This section contains specific information that is required by **Halton Hills Hydro Inc**. Please read Section T notes regarding this section if you need further details.

21. SECTION T – HHHI SPECIFIC ADDITIONAL NOTES

DISCLAIMER

By submitting a CIA Application, the Proponent authorizes the collection by **Halton Hills Hydro Inc** Inc. (“HHHI”), of any agreements and any information pertaining to agreements made between the Proponent and the Independent Electricity System Operator from the Independent Electricity System Operator, the information set out in the CIA Application and otherwise collected in accordance with the terms hereof, the terms of **Halton Hills Hydro Inc**’s Conditions of Service, **Halton Hills Hydro Inc**’s Privacy Policy and the requirements of the Distribution System Code and the use of such information for the purposes of the connection of the generation facility to **Halton Hills Hydro Inc**’s distribution system.