Connection Impact Assessment (CIA) Application

Validate Form
Clear Form

GENERAL APPLICATION INFORMATION

This Connection Impact Assessment (**CIA**) application must be completed by (a) any proponent who is interested in connecting a Distributed Energy Resource (**DER**) facility with a nameplate capacity greater than10 kilowatts (kW) to Hydro One's distribution system or (b) any Hydro One distribution customer who is interested in connecting a DER facility with a nameplate capacity greater than10 kW to their load facilities. This application must also be completed by any DER applicant who received a CIA for their project and wants to make changes/revisions to their project.

TECHNICAL REQUIREMENTS

For Hydro One's technical requirements for DER projects, refer to the "DER Technical Interconnection Requirements Interconnections at Voltages 50kV and Below", available at:
https://www.hydroone.com/businessservices_/generators_/Pages/technicalrequirements.aspx

SUBMISSION INSTRUCTIONS

Please return the completed form, fees and other required documents by mail to:

Hydro One Networks Inc.
Attn: Dx Generation Connections
Generation Connection Application
185 Clegg Road
Markham, Ontario L6G 1B7

IMPORTANT INFORMATION REGARDING NEW TIMELINES

Effective October 1, 2022, the Ontario Energy Board (OEB) has introduced new rules for reviewing CIA applications which will impact processing timelines.

From the time that we receive your CIA application, Hydro One has 14 days to review your CIA application to determine if your application is both complete and includes correct information. Should we deem your CIA application either to be incomplete and/or containing incorrect information, you (the applicant) will have 14 days to resubmit a revised application. When you submit a revised application, Hydro One will have a further 7 days to review the application. Any applicant that does not meet the timelines, may lose their place in our processing queue and may be required to re-apply as a new applicant.

IMPORTANT INFORMATION REGARDING EMERGENCY BACKUP GENERATION

Load customers interested in installing an Emergency Backup Generator are **only** required to submit an Emergency Backup Generation Notification/Application, which can be found at: https://www.hydroone.com/business-services/generators/fit

Any customer interested in connecting **both** a DER facility and a new Emergency Backup Generator at the same time **must also** complete the Emergency Backup Generation Notification/Application and must include it in the CIA application submission.

If there is an existing Emergency Backup Generator associated with the customer's load facility and an Emergency Backup Generation Notification/Application was never submitted to Hydro One, you **must also** complete the Emergency Backup Generation Notification/Application (which can be found at the link directly above) and include the application along with the CIA application submission.

IMPORTANT NOTES

- When using the electronic version of this form: (a) Ensure all red box fields are filled in. (b) After completing the form, click the "Validate Form" button on the top right of this page to ensure all required information is filled in. If any of the required fields are not applicable to your project, type "N/A" in any required text field or "0" in any required numerical field.
- All technical submissions including this form (CIA Application, Single Line Diagrams, etc.) must be signed, dated and sealed by a licensed Ontario Professional Engineer (P.Eng.).
- Incomplete applications will be returned by Hydro One and will result in delays in processing your application.
- Hydro One specific requirements and notes are found in Sections S and T, respectively.

Hydro One's CIA Fee Schedule can be found at this link: https://www.hydroone.com/business-services/generators/connection-impact-assessment

For Load Displacement or Energy Storage facility connections, the assessment performed by Hydro One is a referred to as a Detailed Technical Connection Assessment (DTCA). For such facilities, the term "CIA" as it appears throughout this Connection Impact Assessment (CIA) Application shall be deemed to mean "DTCA".

For clarity, if this application is for:

- an energy storage, load displacement facility or net meter eligible generator (see Section O of this form for further clarification) it is important to note that all agreements related to the connection of the DER shall be executed by the load customer and Hydro One (including, without limitation, the applicable Connection Agreement).
- a net meter eligible customer (see Section O of this form for further clarification) it is important to note that Hydro One will only enter into a Connection Cost Agreement with the eligible third-party generator, and Hydro One requires that two Connection Agreements are executed, one with eligible third-party generator (the applicable version of the Connection Agreements attached to and forming part of the Distribution System Code) and a load version with the eligible customer.

Gross Load Billing may apply as per Hydro One's Conditions of Service and Ontario Energy Board-approved Rate Order (https://www.hydroone.com/CoS & www.hydroone.com/DxRateSchedules). Please ensure that you review the requirements and Frequently Asked Questions.

The siting restrictions in O. Reg. 274/18 which were previously administered by electricity distributors such as Hydro One have been replaced by amendments to the Planning Act (Ontario) that puts siting and planning requirements for renewable DER facilities under municipal oversight. It is recommended that you discuss municipal permitting and approvals requirements with the planning department in the municipality where your DER project is located before you proceed.

For micro-embedded projects (10 kW or less), please fill out Hydro One's "Micro-Generation Connection Application".

SECTION A: APPLICATION INFORMATION

Engineering Stamp

Application Type *choose one*

New CIA Application

Date *mm/dd/yyyy*

Program Type/Purpose *choose one*

Program Type (additional details)

Project Name

IESO Contract Number *F-XXXXXX-XXX-XXX-XXX*

IESO Reference Number *FIT-XXXXXXX*

Ontario Corporate Number or Business Identification Number

Proposed In Service Date *mm/dd/yyyy*

If this project is a subdivision project, please complete the following fields:

Subdivision Project Name

Number of Lots

For certain application type selections, please complete the required fields:

Original CIA / DTCA Project ID # *XX,XXX*

Revised Fields *list the fields that have changed from your previous application*

SECTION B: PROJECT LOCATION

Address

City / Town / Township

Postal Code

Lot Number(s)

Concession Number(s)

SECTION C: CONTACT INFORMATION

All CIAs will be issued in the name of the host customer (load facility owner), except for Net Metering situations where an eligible third-party generator is involved and the load customer is considered an eligible customer (see Section O of this form for further clarification). This section is strictly for the purpose of gathering the contact information of some of the key contacts that are involved with the DER project.

Who is the single point of contact for this project?

◯ Host Customer ◯ DER Owner (if different from host customer) ◯ Consultant

*Please enter the following information about the **host customer** (load facility owner)*

Contact Person

Company's Legal Name

Mailing Address *including postal code, P.O. Boxes and Rural Routes will not be accepted*

Work Telephone

Cell Phone

Fax Number

Email Address

*Please enter the following information about the **DER owner** (if different from host customer)*

Contact Person

Company's Legal Name

Mailing Address *including postal code, P.O. Boxes and Rural Routes will not be accepted*

Work Telephone

Cell Phone

Fax Number

Email Address

*Please enter the following information about the **consultant***

Contact Person

Company's Legal Name

Mailing Address *including postal code, P.O. Boxes and Rural Routes will not be accepted*

Work Telephone

Cell Phone

Fax Number

Email Address

SECTION D: CUSTOMER STATUS

Is there an existing Hydro One account at the DER project location?

○ Yes ○ No

Is the account holder aware of this application?

○ Yes ○ No

Does your account fall within a residential-rate classification?

○ Yes ○ No ○ Do not Know

Existing Account Number

Account Holder Name

Does the account holder have an HST registration number?

○ Yes ○ No

HST Number

SECTION E: EXISTING DER

Are there existing any DER facilities located at the point of common coupling (PCC)?

○ Yes ○ No

Existing Project Number

Existing Project Size (kW)

Program Type For Existing DER *choose one*

DER type: ○ Synchronous ○ Induction ○ Inverter based ○ Other

Are there any existing Emergency Backup Generators that were previously approved by Hydro One located at this proposed facility?

○ Yes ○ No (if your answer is yes, attach a copy of your approved Emergency Backup authorization)

Are you adding a new Emergency Backup Generator to this proposed facility?

○ Yes ○ No (if your answer is yes, you must complete the Emergency Backup Generation Notification/ Application and include in this application)

For synchronous units	**For induction units**	**For inverter based units**
Min. power limit for stable operation *kW*	Direct axis sub-transient reactance, X''d *pu*	Inverter rating *kVA*
Direct axis sub-transient reactance, X''d *pu*	Direct axis transient reactance, X'd *pu*	Maximum continuous power output *kW*
Direct axis transient reactance, X'd *pu*	Total PF correction installed *kVAR*	Fault Contribution *A*
Direct axis synchronous reactance, Xd *pu*		
Zero sequence reactance, X0 *pu*		
Negative sequence reactance, X2 *pu*		

SECTION F: PROJECT INFORMATION

Station Name *(optional to leave blank for behind the meter projects)*

Feeder *(optional to leave blank for behind the meter projects)*

Feeder Voltage (kV) *(optional to leave blank for behind the meter projects)*

Project Size (kW) *total maximum output capacity*

Equipment Capacity (kVA) *total equipment nameplate rating*

Fuel/Energy Type *select all that apply*

- ☐ Solar (PV)
- ☐ Wind
- ☐ Water
- ☐ Natural Gas
- ☐ Biogas
- ☐ Biomass
- ☐ Diesel
- ☐ Battery Energy Storage System
- ☐ UPS
- ☐ CHP/Co-gen
- ☐ Other (specify below)

Type of Connection

○ Single Phase ○ Three Phase

If this is a solar DER project, please answer the following questions:

Mounting Type *select one*

If this is a water project, please answer the following questions:

Is your generation facility located on provincial Crown or federally-regulated lands?

○ Yes ○ No

Is water your primary energy source?

○ Yes ○ No

SECTION G: STATION SERVICE LOAD INFORMATION

The host customer's station service load details

○ Required ○ Optional

Maximum Demand of Station Service Load of DER *kW*

Average Monthly Consumption *kWh*

SECTION H: CONNECTION INFORMATION

On a cut-out from the Hydro One DOM (Distribution Operating Map) provide the location of the DER facility with proposed line routings for connection to Hydro One's distribution system. It should identify the Point of Expansion (POE), the Point of Common Coupling (PCC), the location of the DER facility, and (if applicable) the route of the new line between the DER facility and the POE (i.e.. on private property or public road/right-of-way). This is not required for existing load customers that are connecting a load displacement generation facility, net metering generation facility or energy storage system behind their existing metered connection point. Please see "Appendix A" for a visual representation of POE and PCC.

DOM Drawing/Sketch Number

DOM Revision Number

Please provide an SLD of the Generator's facilities, including the PCC, transformer and connecting station, feeder, and supply voltage. If your project will be subject to Gross Load Billing, please ensure the SLD includes

he proposed location of your GLB Meter.

SLD Drawing/Sketch Number

SLD Revision Number

POE Latitude *degree decimal format*

POE Longitude *degree decimal format*

PCC Latitude *degree decimal format*

PCC Longitude *degree decimal format*

Generation Facility Latitude *degree decimal format*

Generation Facility Longitude *degree decimal format*

Length of Line from POE to PCC *km*

Length of Line from PCC to Generation Facility *km*

Important: The line between the PCC and the Generation Facility must NOT be shared with any other DER owner (refer to Appendix A).

Conductor Type/Size *for the line between the PCC and the Generation Facility*

Generator Fault Contribution *with fault location at the PCC*

IMPORTANT NOTES:

If this project requires line expansion work between the POE and PCC, Hydro One 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 Hydro One, as well as contestable work (i.e. new construction/green-field) that may be performed by the Generator, their contractor or Hydro One. The design of uncontestable and contestable work shall conform to Hydro One specifications).

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

SECTION I: ENERGY STORAGE OR UPS

Please complete the following section if your DER project includes energy storage.

Number of Units

Inverter Unit Size *enter zero if inverter is shared with generation unit(s)*

Energy Storage Unit Size *kWh*

Total Energy Storage Size *kWh*

Energy Storage Facility Control Strategy

- ○ Peak Shaving
- ○ Dynamic VAR Support
- ○ Frequency Support
- ○ Other

Please submit a detailed description of the control strategy according to the templates in Appendix B. Hydro One reserves the right to modify the control strategy as part of its Detailed Technical Connection Assessment.

SECTION J: LOAD DISPLACEMENT/PEAK SHAVING

Please complete the following section if this is a load displacement or peak shaving project

Operating Mode

○ Parallel ○ Non-Parallel

Transition Type

○ Closed *"make before break"* ○ Open *"break before make"*

Time that generator remains parallel to grid *closed transition only, ms*

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)

SECTION K: DER CHARACTERISTICS (1 / 1)

For facilities with multiple generation units: If your generation units have different characteristics, please use the "Add Page" button and provide the characteristics for each generation unit on the additional pages.

DER type: ◯ Synchronous ◯ Induction ◯ Inverter based ◯ Other

Number of Generating Units	Output	Rated Capacity of Each Unit	DER Output Voltage *in kV*
	kW	kVA	

Manufacturer

Type or Model Number

If Power Conversion Type is "Other", please provide values equivalent to a Synchronous or Induction type generator.

Maximum Starting In-rush Current *multiple of full load current, pu*

Generator Winding Connection

◯ Delta ◯ Star

Neutral Grounding Method *for star winding connection only*

◯ Solid ◯ Ungrounded ◯ Impedance

Impedance R *in ohms*

Impedance X *in ohms*

Limits of range of reactive power at the machine output:

Lagging *over-excited, kVAR*	Lagging Power Factor	Leading *under-excited, kVAR*	Leading Power Factor

Limits of range of reactive power at the PCC:

Lagging *over-excited, kVAR*	Lagging Power Factor	Leading *under-excited, kVAR*	Leading Power Factor

For synchronous units	**For induction units**
Nominal Machine Voltage *kV (LL)*	Nominal Machine Voltage *kV (LL)*
Unsaturated Reactance *kVA Base*	Unsaturated Reactance *kVA Base*
Unsaturated Reactance *kV Base*	Unsaturated Reactance *kV Base*
Direct Axis Subtransient Reactance, Xd'' *pu*	Direct Axis Subtransient Reactance, Xd'' *pu*
Direct Axis Transient Reactance, Xd' *pu*	
Direct Axis Synchronous Reactance, Xd *pu*	
Subtransient Time, Td'' *ms*	
Zero Sequence Reactance, X0 *pu*	
Negative sequence reactance, X2 *pu*	

Remove Page

Add Page

SECTION L: INTERFACE TRANSFORMER

The transformer connecting to the Hydro One distribution system

Transformer Ownership

◯ Customer ◯ Hydro One

Transformer Rating *KVA*

Transformer Type

◯ Single Phase ◯ Three Phase

Nominal Voltage of High Voltage Winding *kV*

Nominal Voltage of Low Voltage Winding *kV*

Impedance Base (if different than ratings above)

kVA Base kV Base

Impedance (R) *pu* Impedance (X) *pu* OR Impedance (Z%) *%*

High Voltage Winding Connection

◯ Delta ◯ Star

High Voltage Grounding Method *for star winding connection only*

◯ Solid ◯ Ungrounded ◯ Impedance

Star Impedance R *in ohms* Star Impedance X *in ohms*

Low Voltage Winding Connection

◯ Delta ◯ Star

Low Voltage Grounding Method *for star winding connection only*

◯ Solid ◯ Ungrounded ◯ Impedance

Star Impedance R *in ohms* Star Impedance X *in ohms*

Notes

The term "High Voltage" refers to the connection voltage to Hydro One'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.

SECTION M: INTERMEDIATE TRANSFORMER

Transformer between the interface transformer and DER

Please complete the following section if your DER project includes an intermediate transformer.

Do you intend to install an intermediate transformer?

○ Yes ○ No

Transformer Rating *KVA*

Transformer Type

○ Single Phase ○ Three Phase

Nominal Voltage of High Voltage Winding *kV*

Nominal Voltage of Low Voltage Winding *kV*

Impedance

kVA Base

kV Base

Impedance R *pu*

Impedance X *pu*

High Voltage Winding Connection

○ Delta ○ Star

High Voltage Grounding Method *for star winding connection only*

○ Solid ○ Ungrounded ○ Impedance

Star Impedance R *in ohms*

Star Impedance X *in ohms*

Low Voltage Winding Connection

○ Delta ○ Star

Low Voltage Grounding Method *for star winding connection only*

○ Solid ○ Ungrounded ○ Impedance

Star Impedance R *in ohms*

Star Impedance X *in ohms*

Notes:
The term "High Voltage" refers to the connection voltage to Hydro One's distribution system and "Low Voltage" refers to the generation or any other intermediate voltage.

SECTION N: HIGH-VOLTAGE GROUNDING TRANSFORMER

Please complete the following section if your DER project includes a high-voltage grounding transformer.

Do you have a high-voltage grounding transformer?

○ Yes ○ No

Transformer Type *select one*

○ Zig-Zag ○ Star-Delta

Zero Sequence Impedance (Z0) R *ohms*

Zero Sequence Impedance (Z0) X *ohms*

SECTION O: FOR NET METERED CUSTOMERS ONLY

If you want to participate in Hydro One's Net Metering Program, please confirm if you are an eligible generator or eligible customer by checking the applicable boxes and initialing in the appropriate sections below:

☐ **I AM AN ELIGIBLE GENERATOR IN THAT:**

i. I have an electricity account with Hydro One for the premises where the generation equipment is located;
ii. I will generate the electricity primarily for my own use;
iii. I will generate the electricity solely from a renewable energy source;
iv. I will convey the electricity that is generated (which may include any electricity stored by me in a storage device for any period of time) directly from the point of generation to another point for my own consumption, without reliance on Hydro One's distribution system;
v. I will convey any electricity (which may include any electricity that was stored by me in a storage device for any period of time, even if some or all of the stored electricity was not generated by me) that is in excess of what is consumed by me into Hydro One's distribution system; and
vi. I am not and will not be a party to any contract or agreement, other than this Agreement, that provides for the sale, in whole or in part, of the electricity that I will convey into Hydro One's distribution system.

Furthermore, I hereby confirm to Hydro One that where I am an eligible generator that:

I am not a party to an agreement related to the renewable energy generation facility that was entered into on or after July 1, 2022.

I acknowledge my confirmation that I am an eligible generator by initialing here:

Customer Initials: _____

Customer Initials: _____

OR

☐ **I CONFIRM THAT I AM AN ELIGIBLE CUSTOMER** and _____ (insert full legal name) (the "Generator") is an eligible third party generator in that:

1. I have an electricity account with Hydro One;
2. I have entered into an agreement with the Generator for my purchase of electricity that is generated solely from a renewable energy generation facility that is owned or operated by the Generator;
3. the Generator will generate the electricity primarily for my use;
4. the Generator will convey the electricity that is generated (which may include any electricity stored by the Generator in a storage device for any period of time) directly from the point of generation to another point for my consumption, without reliance on Hydro One's distribution system;
5. the Generator will convey any electricity (which may include any electricity stored by me or the Generator in a storage device for any period of time, even if some or all of the stored electricity was not generated by the Generator) that is generated that is in excess of what is consumed by me into Hydro One's distribution system on my behalf; and
6. neither the Generator nor me is a party to any contract or agreement other than this Agreement or the agreement mentioned in clause 2. above that provides for the sale, in whole or in part, of the electricity that the Generator will convey into Hydro One's distribution system.

I acknowledge my confirmation that I am an eligible customer and the Generator named above is an eligible third party generator by initialing here:

Customer Initials: _____

Customer Initials: _____

(after initialing above, please proceed to Net Metering Confirmation of Disclosure on next page)

Continued on next page

SECTION O: FOR NET METERED CUSTOMERS ONLY (CONTINUED)

NET METERING CONFIRMATION OF DISCLOSURE

(ONLY TO BE COMPLETED IF YOU HAVE DECLARED THAT YOU ARE AN ELIGIBLE CUSTOMER ON THE PREVIOUS PAGE)

Confirmation is required under sub-section 7.(1)(f) of O. Reg. 541/05, (Net Metering), made under the Ontario Energy Board Act, 1998.

☐ I am a party to an agreement related to the renewable energy generation facility that was entered into on or after July 1, 2022 and that the information set out below has been disclosed to me:

1. The name and contact information of any other parties to the agreement.
2. Whether the agreement is a lease, financing, hosting, licensing or other arrangement.
3. The term of the agreement.
4. The date on which the agreement begins to apply to me.
5. For the renewable energy generation facility, the rated maximum output capacity as stated on the nameplate of the machinery or equipment that is used to produce electricity.
6. Any insurance or warranty rights or obligations, including any obligation to pay a deductible, related to the renewable energy generation facility or related equipment, systems and technology and any limitations or exclusions in respect of coverage.
7. The terms of payment, including any terms related to deposits, interest or any other financial or legal obligations under the agreement that affect the terms of payment.
8. Any options or obligations to purchase the renewable energy generation facility or related equipment during or at the end of the term, including any relevant dates and costs associated with the options or obligations.
9. Any other costs for which I will be responsible, including costs related to administration and account billing, insurance or warranty rights, leasing, rental, installation, connection, ongoing operation, maintenance and removal of the renewable energy generation facility or related equipment, systems and technology.
10. Any right to terminate, suspend, amend, extend or renew the agreement.
11. Any penalties under the agreement and the circumstances in which I would be liable to pay the penalties.
12. Any right to transfer or assign the agreement.
13. Any authority to put a lien on your property and the circumstances that would give rise to such a right.
14. Any maintenance and operation obligations you has with respect to the renewable energy generation facility or related equipment, systems and technology.
15. An estimate of the annual energy production of the renewable energy generation facility measured in kilowatt hours.
16. An estimate of the annual electricity cost savings to me under the agreement.

I acknowledge my confirmation that that the information set out above in items 1 – 16 have been disclosed to me by initialing here:

Customer Initials: _____

Customer Initials: _____

SECTION P: SUBMISSION CHECKLIST

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

- ☐ Payment in full including applicable taxes
  (by cheque payable to "Hydro One Networks Inc.")
- ☐ Completed Form B
  (must be stamped by a Professional Engineer of Ontario)
- ☐ Signed Study Agreement
  (original signature is required)
- ☐ Single Line Diagram (SLD) of the Generator's facilities (any Emergency Backup Generation must be shown on the SLD)
  (must be stamped by a Professional Engineer of Ontario)
- ☐ Protection Philosophy
- ☐ Preliminary Consultation Report (PCR)
  (if a Preliminary Consultation Information Request (PCIR) was submitted)
- ☐ 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 Displacement Generation Facility's load and generation schedules (if applicable)
- ☐ Load Displacement Generation Facility's mode of operation (if applicable)
- ☐ Energy Storage Facility operating strategy description an parameters (if applicable)
- ☐ Emergency Backup Generation Facility's mode of operation (if applicable)
- ☐ Completed Emergency Backup Generation Notification/Application or attach a copy of your Hydro One previously approved Emergency Backup authorization

SECTION Q: 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 Assesment Fee Schedule on our website for costs. Please enter the amount from the fee schedule.
  $ _____ +HST
- ☐ Transmission Customer Impact Assessment (TxCIA) Fee (if applicable)
  A TxCIA is also required if the total nameplate generation of the project is greater than 10MW.
  $ _____ +HST
- ☐ 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.
  $ _____

SECTION R: ATTACHMENTS

Attached Documents / Drawings

Item #	Description	Document #	# of Pages
1			
2			
3			
4			
5			
6			

SECTION S: NOTES

SECTION T: Hydro One Specific Required Fields

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

What is the barcode of the nearest pole serving the project location?

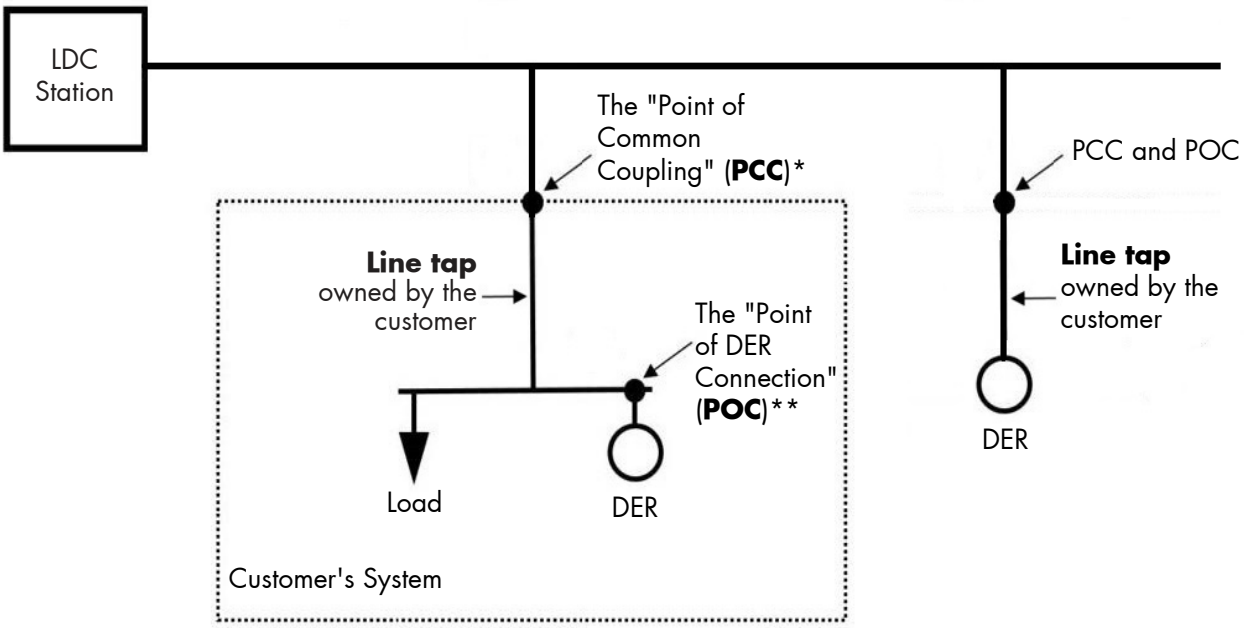
Hydro One Account Number *if transformer is owned by Hydro One*

SECTION U: Hydro One Specific Additional Notes

Section L: At the Generator's expense, and if requested, Hydro One may provide transformation up to a maximum of 500 kVA three-phase, as described in the Hydro One Conditions of Service (Section 3.5 item C.4).
Section L and M: Voltages shall be measured at the PCC in accordance with CSA 22.3 No. 9
Section O: for new DER site, Distribution Operating Map (DOM) is required by Hydro One in addition to Site Plan
Section P: When there is an upstream LDC, an additional $10,000+HST will be required for costs associated with this LDC's CIA.
Section S: - For question: "What is the barcode of the nearest pole serving the project location?", this is only applicable if you choose "No" to question: "Is there an existing Hydro One account at the project location?" in Section D
- For question: "Hydro One Account Number (if transformer is owned by Hydro One)", this is only applicable if you answer "Hydro One" to question: "Transformer Ownership" in Section L.

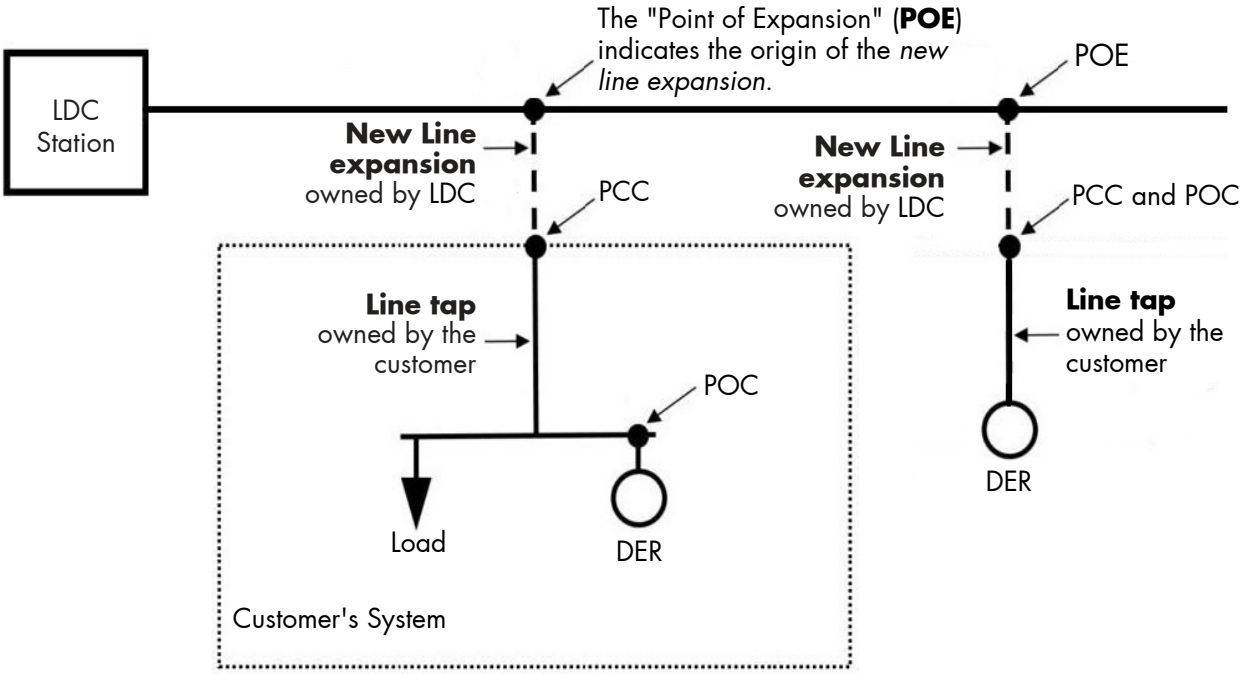
APPENDIX A - FIGURES & DIAGRAMS

Figure A1: Where There is No New Hydro One Owned Line Expansion



*PCC: the point where the customer facility connects to the LDC owned system
**POC: the point where the DER unit(s)'s interconnection system connects the DER unit(s) to the DER facility.

Figure A2: Where There is a New Hydro One Owned Line Expansion



APPENDIX B - MINIMUM CONTROL STRATEGY INFORMATION FOR ENERGY STORAGE FACILITIES OR OTHER TECHNOLOGIES

Figure B1: Peak Shaving

Peak Shaving			
Description of Control Strategy			
When Operating as a Load			
Switch In Time	Switch Out Time	Load kW (peak)	Load kVAR (peak, leading/lagging)
When Operating as a Generator			
Switch In Time	Switch Out Time	Generation kW (peak)	Generation kVAR (peak, leading/lagging)

Figure B2: Dynamic VAR Support

Dynamic VAR Support			
Description of Control Strategy			
Switch In Condition	Switch Out Condition	Generation kW (peak)	Generation kVAR (peak, leading/lagging)

Figure B3: Frequency Support

Frequency Support			
Description of Control Strategy			
Switch In Condition	Switch Out Condition	Generation kW (peak)	Generation kVAR (peak, leading/lagging)

Figure B4: Other Control Strategies

Other	
Description of Control Strategy and Relevant Operating Parameters	

APPENDIX C - LOAD DISPLACEMENT FIGURES

Figure C1: Example Schedule With Minimum Information Required for Load Displacement Projects

	Load of Facility (kW)	Load of Facility (kVAR, lead or lag)	Generation Output (kW)	Generation Output (kVAR, lead or lag)
Minimum Load				
Maximum Load				