

# Distributed Energy Resource (DER) application and connection guidelines



These guidelines help ensure that your DER or net metering project is efficiently processed and implemented. It's important that you read and understand these guidelines before completing the following documents:

- Micro-Embedded Generation Facility Application
- Connection Impact Assessment (CIA) Application
- Connection Agreement
- Connection Cost Agreement (CCA)/Offer to Connect (OTC)

If you have any questions or concerns, please email [der@torontohydro.com](mailto:der@torontohydro.com).

## Technical requirements

For technical requirements associated with the connection of your DER project, please refer to the following Conditions of Service and reference documents, located on our Conditions of Service web page: [torontohydro.com/conditionsofservice](http://torontohydro.com/conditionsofservice)

- **Toronto Hydro's Conditions of Service (main document)**
- **Distributed Generation Requirements (reference document 3):** This outlines the classifications and general terms and conditions for the connection of a distributed generation facility to the distribution system
- **Parallel Generation Requirements (Appendix 1(i) of reference document 3):** This provides technical requirements for interconnecting parallel generation greater than 10 kW
- **Requirements for the Design and Construction of Customer-Owned High Voltage Substations (reference document 4):** This provides guidance for the design and construction of 13.8 kV and 27.6 kV customer-owned substations, including substation switchgear and primary cables

## Applications and documents

### Micro-Embedded Generation Facility Application and Connection Impact Assessment (CIA) Application

#### How to submit

DER projects 10 kW or less require a Micro-Embedded Generation Facility DER Application.

DER projects greater than 10 kW require a CIA Application. A CIA is a detailed assessment of the proposed project's impact on the Toronto Hydro electricity grid.

Please submit the following to us:

- Micro-Embedded Generation Facility DER Application or CIA Application (depending on the size of your project)
- Single-line diagram
- Copy of your payment confirmation (e.g. a photo of a cheque or an Electronic Funds Transfer payment confirmation issued by a bank)
- Any other required documents outlined in your correspondence with our DER team

Please submit these materials using one of the following options:

#### **Email**

Submit your application and required documents to [der@torontohydro.com](mailto:der@torontohydro.com).

#### **Mail**

Submit your application and required documents to:

**Benson Lo, Distributed Energy Resource Connections, Capacity Planning and Grid Innovation**  
**500 Commissioners Street, 3<sup>rd</sup> Floor**  
**Toronto, ON M4M 3N7**

## **Connection Agreement (DER projects ≤ 10 kW)**

Once we approve your Micro-Embedded Generation Facility Application, we'll provide you with the costs associated with connecting to the Toronto Hydro grid in the Connection Agreement.

#### **How to submit**

Please sign the Connection Agreement and submit it using the same method you used to submit your Micro-Embedded Generation Facility Application. Also, please pay the final connection fee as per payment instructions in this guide.

## **Documents required for connection of DER projects ≤ 10 kW**

After the connection agreement is signed, an additional document is required in order to connect the DER facility to Toronto Hydro's distribution system:

- A scanned copy of the Electrical Safety Authority (ESA) notice of inspection must be emailed to [der@torontohydro.com](mailto:der@torontohydro.com) as soon as the final ESA inspection is completed. In the email subject line, please include: "ESA notice of inspection," the project address and the DER ID number

## **Documents required for processing Connection Cost Agreement/Offer to Connect (DER projects > 10 kW)**

For projects greater than 10 kW where a CIA is required, once we approve your CIA Application, we'll provide you with the costs associated with connecting to the Toronto Hydro grid in the CCA/OTC.

The following is required in order for us to process the CCA/OTC:

- In the case where the supplier name and the Toronto Hydro customer name for the existing service are different, a signed agreement that authorizes the supplier to have access to the property of the DER is required. Typically, this is referred to as an "Agreement"
- Construction schedule indicating relevant project milestone dates
- If you're completing a net metering project using a third party, you must complete Schedule G: Net Metering Confirmation of Disclosure, which you can find on the [Ontario Energy Board's retailer forms and templates for net metering web page](#)

**Note:** Revenue meters and instrument transformers can only be provided after there is an executed CCA/OTC between the parties.

#### **How to submit**

Please sign the CCA/OTC and submit it using the same method you used to submit your CIA Application. Also, please pay the final connection fee as per payment instructions in this guide.

## Documents required for connection of DER projects > 10 kW

Once there is an executed CCA/OTC, additional documents are required in order to connect the DER facility to Toronto Hydro's distribution system:

- A scanned copy of the ESA notice of inspection must be emailed to **der@torontohydro.com** as soon as the final ESA inspection is completed. In the email subject line, please include: "ESA notice of inspection," the project address and the DER ID number
- A Commissioning Report certified by an independent professional engineer as per the Toronto Hydro Distribution Generation Requirements (section 4.7.4 Commissioning and Testing). You can submit the report by email to the DER team or to the Toronto Hydro engineer you're working with for this project

## Cost and payment

Payment is required for the processing of the following:

- Micro-Embedded Generation Facility Application
- CIA Application
- Connection Agreement for projects  $\leq 10$  kW
- CCA/OTC for projects > 10 kW

### Estimates

The estimated cost for preparing the Micro-Embedded Generation Facility Application and CIA Application for the DER project is as follows:

Size of DER project	DER connection alternating current voltage phase type	Estimate for a Micro-Embedded Generation Facility Application or a CIA Application
$\leq 10$ kW	One or three	\$500 + HST
> 10 kW and $\leq 20$ kW	One or three	\$1,500 + HST
> 20 kW and $\leq 50$ kW	Three	\$1,500 + HST
> 20 kW and $\leq 50$ kW	One	\$2,000 + HST
> 50 kW and $\leq 250$ kW	One or three	\$2,000 + HST
> 250 kW and < 1 MW	One or three	\$2,500 + HST
$\geq 1$ MW and < 10 MW	One or three	\$12,000 + HST
$\geq 10$ MW	One or three	\$15,000 + HST

### Important notes

- DERs greater than 1 MW will also require a Transmitter CIA while those DERs greater than 10 MW also require a System Impact Assessment (SIA) to be completed
- The actual costs for a CIA may vary depending on the specific DER. You'll be advised of further costs associated with the processing and implementation of your DER project
- You must also file any material revisions to the design, planned equipment or plans for the DER facility with Toronto Hydro and a new CIA will be prepared as per Distribution System Code (DSC) section 6.2.15. The new CIA will be performed at the applicant's expense

### How to make a payment

Please make the payment fee payable to Toronto Hydro-Electric System Limited. Official invoice(s) stamped as paid will be sent for your records. You can pay by Electronic Funds Transfer (EFT) or by cheque via mail.

## EFT instructions

Please use the following banking information for making an EFT payment:

**Payee name:** Toronto Hydro-Electric System Limited

**Address:** 500 Commissioners Street, Toronto, ON M4M 3N7

**Bank name:** Royal Bank of Canada

**Bank address:** 200 Bay Street, Toronto, ON M5J 2J5

**Bank number:** 003

**Transit form:** 00002

**Bank account number:** 1550573

Please email the payment confirmation (an EFT payment confirmation that is issued by a bank) to Toronto Hydro at **der@torontohydro.com** and **projectpayments@torontohydro.com** within 24 hours of completing the EFT. This will help ensure accurate and timely processing of your payment.

## Mail instructions

Please send a cheque for the CIA payment fee and the first page of the CIA Application directly to:

Toronto Hydro-Electric System Limited

500 Commissioners Street

Toronto, ON M4M 3N7

Attn: Accounts Receivable

**Note:** Remember to attach a copy of your payment confirmation with your application (e.g. a photo of a cheque).

In relation to the processing and connection of the proposed DER, Toronto Hydro requires payment confirmation from customers in the form of a cheque image or Electronic Funds Transfer (EFT) payment confirmation. Payment confirmation and the information contained therein, as well as the personal information contained therein where applicable, are collected for purposes including, but not limited to application processing, preparation of agreements, site visits and the purchase of metering or other related connection infrastructure. By signing this form, you are agreeing to Toronto Hydro collecting your payment confirmation and any information and/or personal information therein, and are consenting to its usage by Toronto Hydro for the aforementioned purposes. By opting to submit your payment confirmation, you are acknowledging that you accept the risk of communications to and from Toronto Hydro not being encrypted or secure, and that any personal information contained in a payment confirmation, where applicable, including but not limited to name, service address, phone number, email address, and Toronto Hydro account number, could be intercepted and/or read by unintended parties. Toronto Hydro accepts no liability for any losses and/or damages caused by unintended parties intercepting and/or reading your payment confirmation and/or its contents. For more information on how Toronto Hydro collects, uses, and discloses personal information, please refer to Toronto Hydro's Privacy Policy at [torontohydro.com/privacypolicy](https://torontohydro.com/privacypolicy).