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**How to Connect Your Generation Facility (≤ 10
kW) To Kitchener-Wilmot Hydro Inc.'s
Distribution System**

See Kitchener-Wilmot Hydro Inc.'s
website for the latest revision

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Appendixes

Appendix A1: Form DG01 - Application to Connect 10kW or Less of Embedded Generation to Kitchener-Wilmot Hydro Inc.'s Distribution System

Appendix B1: Metering Connection Options for Micro-Generation Facility

Appendix C1: Micro-Generation Financial Settlement Options

Appendix D1: Form DG04 - Template of Connection Agreement

Appendix E1: Form DG05 – New Account Application

Appendix F1: Form DG07 – Application for Direct Deposit of Payments to Vendors

GENERAL

This guide applies to the customers with micro-generation facility (nameplate rating of 10kW and below) to be connected to Kitchener-Wilmot Hydro Inc.'s distribution system.

The customer shall contact Kitchener-Wilmot Hydro Inc. for more directions if the generation facility has a nameplate rating larger than 10kW. The complexity of the connection process varies depending on the generator size.

CONTACT INFORMATION

For customer inquiry and application submission, please contact Kitchener-Wilmot Hydro Inc. at:

For generation facility no more than 10kW

John Theriault
Service Design Supervisor
Kitchener-Wilmot Hydro Inc.
Phone: 519-745-4771 Ext 6240
Fax: 519-745-0643
Email: JTheriault@kwhydro.ca

For generation facility above 10kW

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RESPONSIBILITY OF KITCHENER-WILMOT HYDRO INC.

- The safety, reliability, and efficiency of its distribution system,
- Ensuring that the new generation connection does not adversely affect the distribution system or risk the hydro employees and the existing customers;
- Ensuring that the Distribution System Code and applicable standards are followed;
- Keep connection cost effective to promote renewable energy.

RESPONSIBILITY OF THE CUSTOMER

- The safety, design, construction, operation, metering, protection and control, and maintenance of the generating facility.
- Contacting Kitchener-Wilmot Hydro Inc. early in the process.
- Contacting the various agencies involved before finalizing plans.
- Ensuring all necessary submissions and agreements are completed and required payments are clear.

In addition to satisfy the requirements listed in this guideline, the customer is solely responsible to obtain regulatory approvals for installing and operating the micro-generation facility, which may include but not be limited to the following,

- Compliance with all municipal zoning and land use by-laws, Ontario Building Code, (renewable energy projects are exempt from municipal zoning and land use by-laws, but the building permit may be required, please contact City/Township's Planning Department).
- Renewable Energy Approval for renewable energy project or Certificate of Approval for non-renewable energy project (please consult Ministry of Environment and Ministry of Natural Resources)
- Connection Authorization by Electrical Safety Authority (ESA)

ESA approval will be required before the micro-generation facility is allowed to connect. The ESA can be contacted at 1-877-ESA-SAFE (1-877-372-7233). The ESA website is <http://www.esasafe.com/>. The ESA has published a booklet entitled 'Electrical Guidelines for Inverter-Based Micro-Generator Facility (10kW and Smaller)' which is helpful for the Customer.

COSTS TO BE CONSIDERED BY THE CUSTOMER

- Equipment and Installation.
- Inspection by ESA
- Permitting and other approvals
- Connection/Metering costs by Kitchener-Wilmot Hydro Inc.
- Monthly account charge by Kitchener-Wilmot Hydro Inc.
- Regular maintenance costs
- Legal and insurance costs
- Tax and accounting costs (municipal property tax may increase; income from generation is taxable.)

CONNECTION PROCESS

Subject to all applicable laws, by-laws, regulation and codes, Kitchener-Wilmot Hydro Inc. will make all reasonable efforts to promptly connect a generation facility to its distribution system.

1) Request Information

The Customer proposing the installation of a micro-generation facility ($\leq 10\text{kW}$) contacts Kitchener-Wilmot Hydro Inc. and ESA separately for information. The Customer may contact Independent Electricity System Operator (IESO) if the Customer is interested in the Feed-In Tariff (MicroFIT) Program.

2) Provide Information

Kitchener-Wilmot Hydro Inc. provides a copy of this guideline to the Customer within 5 business days to explain the connection process and requirements including the application form and Connection Agreement template. ESA provides information on electrical safety requirements.

3) Develop Plan and Register Project

The Customer reviews relevant information from Kitchener-Wilmot Hydro Inc. and ESA on the proposed project, and puts together an installation plan. If the Customer is eligible to the MicroFIT program and decides to participate in, the Customer should register the project on-line following the IESO MicroFIT link below and receive the Conditional Offer from IESO **before** submitting the Application (Step 4).

Link: www.microfit.powerauthority.on.ca.

4) Submit Hydro Application

The Customer submits Kitchener-Wilmot Hydro Inc. a completed application form (Appendix A1: Form DG01) with all required information.

5) Submit ESA Inspection Application

The Customer submits ESA plans and specific information for inspection. This application runs in parallel with the Step 6).

6) Review Hydro Application

Kitchener-Wilmot Hydro Inc. reviews the connection application.

6A) For Micro-Generation Facility at Existing Customer Connection

Within 15 calendar days from receipt of the completed application, Kitchener-Wilmot Hydro Inc. will issue the Customer an Offer to Connect or provide reasons for rejection. The Offer to Connect will outline the technical requirements (metering and/or service upgrade), costs and timing to implement.

Typical requirement for micro generator 10kW and smaller is a new bi-directional meter and disconnect switch for the micro generator.

Kitchener will not charge for the preparation of the Offer to Connect.

The Offer to Connect is valid for 30 calendar days from issuance. The Customer shall indicate his/her intent within this time frame.

6B) For Micro-Generation Facility Not at Existing Customer Connection

A new customer service connection shall be first established before the micro-generation facility can be connected. This may extend the time line in Step 8) since more connection work will be required.

7) Install DG

If the customer accepts the Offer to Connect and decides to proceed, the Customer will

- Make a payment to Kitchener-Wilmot Hydro Inc. for upgrades (metering) as indicated in the Offer to Connect;
- Start micro-generation facility installation;
- Work closely with Kitchener-Wilmot Hydro Inc., the ESA and any other organizations from which work, inspections, approvals or licenses are required to prevent delays;
- Sign a new generation account application with Kitchener-Wilmot Hydro Inc.
- Complete, sign and return two (2) copies of Connection Agreement (Appendix D1: Form DG04) to Kitchener-Wilmot Hydro Inc.;
- Complete, sign and return a New Account Application Form (Appendix E1) and a Direct Deposit Form (Appendix F1) to Kitchener-Wilmot Hydro Inc., a valid ID, like driver's license is required (not required for Net Metering Program); and
- Arrange electrical inspection with ESA.

8) Final Connection

8A) For all Customers

Before scheduling the final connection, the customer shall ensure all following commitments fulfilled:

- Generation facility fully installed
- Payment to Kitchener-Wilmot Hydro Inc. clears
- Connection Agreement Signed
- New Generation Account Application signed and submitted
- Direct Deposit Form signed and submitted
- The ESA inspection completed and Connection Authorization issued by the ESA

The customer shall contact Kitchener-Wilmot Hydro Inc.'s Service Coordinator at 519-745-4771 x6199 after the ESA completes the inspection and faxes Kitchener-Wilmot Hydro Inc. an Authorization to Connect. Kitchener-Wilmot Hydro Inc. requires **at least 5 business day notice** to schedule the final connection when all above Customer commitments have been satisfied. The customer's electrician must be on site for the final connection.

If additional disconnect/reconnect work is required for the generation facility tie-in, the customer shall schedule the disconnect/reconnect work on the same date as the final

connection. The customer's on-site electrician is responsible for scheduling the work with Kitchener-Wilmot Hydro Inc.'s Service Coordinator **at least 5 business days** before the proposed disconnect/reconnect work. The customer's on-site electrician shall ensure the ESA inspection to be done on the same day (before the generation facility can be connected).

8B) Additional requirements for MicroFIT Customer only

Within 5 business days from the final connection, Kitchener-Wilmot Hydro Inc. informs IESO of the connection details.

IESO prepares and offers the Customer the on-line MicroFIT contract.

The Customer signs the MicroFIT contract on-line within the required time frame, and informs Kitchener-Wilmot Hydro Inc.

Kitchener-Wilmot Hydro Inc. will start recording the generation once the final connection is made.

The payment for the generation will be issued in accordance with the current established billing period.

Kitchener-Wilmot Hydro Inc. cannot issue the MicroFIT payment until a signed MicroFIT contract is in place.

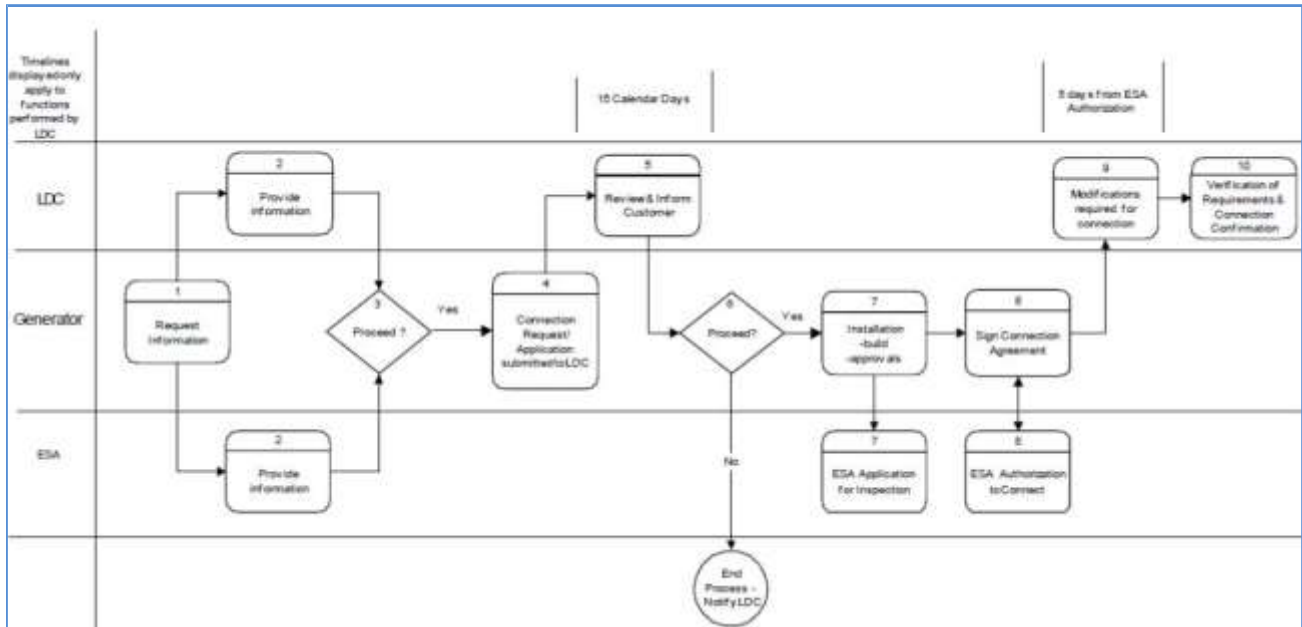


Figure 1: Connection Process for Micro-Generation Facility (≤ 10kW) (Courtesy of OEB)