

# Connecting Micro-generation

Alberta's *Micro-generation Regulation* under the *Alberta Electric Utilities Act* came into effect in January 2008, allowing individuals to generate electricity for personal use while dispatching excess electricity to the grid.

## What is Micro-generation?

Micro-generation refers to environmentally-friendly, small-scale generators that produce one megawatt (MW) or less and are connected to the electric distribution system that delivers power to homes, businesses and farms across the province. Under the *Micro-generation Regulation*, Albertans have the option of producing electricity to meet their own needs and receiving a credit on their electricity bill for any excess power they send to the electricity grid.

Micro-generators use different types of renewable or alternative energy technologies such as solar panels, small-scale hydro, wind, biomass, and geothermal. The *Micro-generation Regulation* classifies generators in two categories based on their capacity:

- Small micro-generators: less than 150 kilowatts (kW)
- Large micro-generators: greater than 150 kW, but less than 1 MW

## Eligibility Under the *Micro-generation Regulation*

To be eligible under the regulation, at a minimum, applicants must meet the definition of a micro-generation unit:

- Use of renewable or alternative energy technologies
- Electricity produced is primarily for the customer's own use
- Generating capacity is sized to meet all or a portion of the customer's usage (also referred to as load)
- Generator capacity is less than 1 MW

The requirements identified in the regulation differ depending on the capacity of the generator. For example, metering requirements and compensation are applied differently for a small micro-generator vs. a larger unit. If you are uncertain if your micro-generator can be classified as renewable or alternative energy, contact the Alberta Utilities Commission (AUC) to discuss the operational characteristics of your micro-generator.

## How do I Apply to Connect a Micro-generator?

The AUC oversees the implementation of the *Micro-generation Regulation* and has developed support materials to simplify the application process and interconnection agreements between micro-generation owners and owners of electric distribution systems.

Using the micro-generation application information available on the AUC website, micro-generator owners must apply to the distribution company, also known as the wire service provider (WSP), which owns the local distribution system in the applicant's area. Once the application is approved, the WSP is responsible for defining the metering and connection requirements for the owner's micro-generator.

Micro-generator owners must also notify their electricity retailer to discuss the information required by the retailer for compensation and billing. The AUC is responsible for settling any disputes that may arise between micro-generation owners and distribution companies.

## How Retailers Compensate Micro-Generation Owners

### ***Small micro-generators:***

Retailers with small micro-generators submit a file each month to the AESO containing the following information

1. Electric energy supplied out of the site during the relevant month
2. Retailer's retail energy rate for the month – This is to be the same price as the electrical energy micro-generators are purchasing from the retailer
3. The credit amount for the month calculated from the values in points 1 and 2.

The AESO then includes the amount provided in point 3 (above) on the retailer's monthly pool statement under the section 'Special Transactions and Adjustments'.

The [Alberta Utilities Commission Micro-Generator Application Guidelines](#) provides further clarification that micro-generators will be paid for their exported electrical energy based on the same price of the electrical energy that they are purchasing from their energy retailer.

### ***Large micro-generators:***

The AESO provides retailers a credit for the hourly generated amount of energy multiplied by the pool price for the given hour of generation. This amount is summed up under the 'Energy Payments' section of the pool statement.

All credit amounts for micro-generators are recovered through the [ISO tariff](#).

### **The AESO does not do the following:**

1. **The AESO does not have the authority to approve or deny the energy rate the retailer provides to their small micro-generation customer**
2. **The AESO does not blend the micro-generation amounts into the power pool price to recover the costs. The credit amounts are recovered through the [ISO tariff](#).**

## Distribution Connected Generation

Should your application for micro-generation not be accepted by the AUC, please review the [Guide for Distribution Connected Generation](#) for alternative options to setting up a distribution-connected generator and selling your excess power back to the grid.

For more information, visit [www.auc.ab.ca/rule-development/micro-generation](http://www.auc.ab.ca/rule-development/micro-generation).