



DISTRIBUTED GENERATION | OPTION M

CHARGES AND CREDITS

**FORTIS
ALBERTA**



WHAT IS DISTRIBUTED GENERATION (DG)?

DG is described as any generator connected and operating in parallel to a distribution system.

WHO IS ELIGIBLE?

Option M is available to DG customers that are interconnected to the distribution system downstream of a FortisAlberta transmission Point of Delivery (POD) and which are exporting into the Alberta Interconnected Electric System (AIES) subject to FortisAlberta's Customer Terms and Conditions Article 12 - Specific Provisions Relating to DG Customers.

INTERCONNECTION AGREEMENT

FortisAlberta requires a signed Interconnection Agreement before applying for Option M as stated in FortisAlberta's Customer Terms and Conditions Article 12 (see below).

12.1 General

All DG Customers are required to enter into an Interconnection Agreement with FortisAlberta to establish detailed terms, conditions and provisions with respect to safe and effective operation of the specific interconnection.

12.2 Interconnection

A DG Customer or any other person acting on the behalf of the DG Customer must apply in writing for interconnection to the Electric Distribution System. The application must include all relevant information concerning site location, facility requirements and requested export levels. Any requested changes to these requirements must be provided in writing to FortisAlberta.

EXCEPTIONS

Micro-Generation is not eligible for Option M. DG customers who have contracts under the provisions of the Small Power Research and Development (SPRD) Act are exempt.

WILL I ALWAYS RECEIVE A CREDIT?

No, it can be a charge or a credit (see calculations below).

FortisAlberta is working with the AESO to clarify the Independent System Operator (ISO) Tariff. This will affect the Option M calculations. FortisAlberta will continue to communicate with our customers on future developments.

OPTION M CALCULATIONS

The DG Option M Credits or Charges are calculated monthly for each DG customer.

FOR GENERATORS OPERATING GREATER THAN 1 MW:

Option M = Re-Calculated charges - actual charges +/- STS Charge/Credit

For generator(s) with an export capacity of 1 MW or greater, the Option M charge/credit is calculated as the sum of the difference between the Re-Calculated Charges and the Actual Charges paid to the AESO for each billing component +/- the STS charge/credit (if applicable).

FOR GENERATORS OPERATING LESS THAN 1 MW:

Option M = Re-Calculated (energy related components + coincident metered demand charges) – Actual (energy related components + coincident metered demand charges) + POD and Other System Services Charges (OSSS) (as calculated below) +/- STS Charge/Credit

The Option M charge/credit for generator(s) with an export capacity below 1 MW is calculated as the sum of the following:

- » For all energy related components including the Metered Energy Charge, Operating Reserve Charge, Rider C and Rider F, the Option M charge/credit is calculated as the difference between the Re-calculated Charge and Actual Charge paid to the AESO for these components.
- » Coincident Metered Demand Charges are calculated as the difference between the Re-calculated Charge and Actual Charge paid to the AESO regarding coincident metered demand.
- » The POD and OSSS charge components are calculated based on the following formula:
 - » [(Total Re-calculated POD and OSSS Charge for all generators 1 MW and greater – Total Actual POD and OSSS charges paid to the AESO for all generators 1 MW and greater) divided by Total MWh of generators 1 MW and greater] times the specific generator's MWh in the period; and +/- STS charges (if applicable).

FORTISALBERTA OPTION M CALCULATION STEPS

POINT OF DELIVERY (POD) DATA + GENERATOR DATA = TOTALIZED DATA

Step 1: For the billing period month, FortisAlberta adds the generator's 15-minute interval metering data to the 15-minute interval metering data

of the specific POD that the generator is connected to, which yields the total volumes that would have been measured through the POD had the generator(s) not been in operation.

Using the totalized data, FortisAlberta establishes the billing determinants that would have been used by AESO in the calculation of the AESO Rate Demand Transmission Service (DTS) charges had the generator(s) not been in operation.

The billing determinants include:

- » Coincident peak;
- » Billing capacity;
- » Metered energy; and
- » Highest metered demand.

Demand Transmission Service (DTS): The service provided to loads for interconnection access to the Alberta transmission system.

Coincident Metered Demand Charge: The monthly coincident system peak is the greatest sum in any 15-minute interval in the month. The 15-minute interval in which this peak occurs establishes the interval in which coincident metered demand is measured at each Rate DTS and Rate Fort Nelson Demand Transmission Service (FTS) point of delivery.

Billing Capacity: at the point of delivery, the highest of the following:

- i. the highest 15-minute metered demand in the settlement period;
- ii. 90% of the highest metered demand in the 24-month period including and ending with the settlement period, but excluding any months during which commissioning occurs; or
- iii. 90% of the contract capacity or, when the settlement period contains a transaction under Rate Demand Opportunity Service (DOS), 100% of the contract capacity.

Step 2: The AESO DTS rates in effect (including Rider C and Rider F rates) are applied during the period to each of these billing determinants to recalculate the DTS charges (Re-Calculated Charge).

The billing components include:

- » Coincident Metered Demand Charge;
- » Metered Energy Charge (including Bulk System, Regional System and Voltage Control Energy Charges);
- » Point of Delivery Charges (POD Charges);
- » Operating Reserve Charge;
- » Other System Support Services Charge (OSSS);
- » Rider C Charges/Credit; and
- » Rider F Charges/Credit.

Point of Delivery (POD): Point(s) for interconnection on the Transmission Facility Owner's (TFO) system where capacity and/or energy is made available to the end-use customer.

Operating Reserve: Generating capacity that is held in reserve for system operations and can be brought online within a short period of time to respond to a contingency. Operating reserve may be provided by generation that is already online (synchronized) and loaded to less than its maximum output and is available to serve customer demand almost immediately. Operating reserve may also be provided by interruptible load.

Other System Support Services (OSSS) Charge: Recovers miscellaneous fixed costs through a \$/MW demand charge.

Rider C Charge/Credit: The AESO calculates Rider C charges and credits in accordance with Rider C of the Independent System Operator (ISO) tariff, Deferral Account Adjustment Rider, as published on the AESO website: [aeso.ca](https://www.aeso.ca).

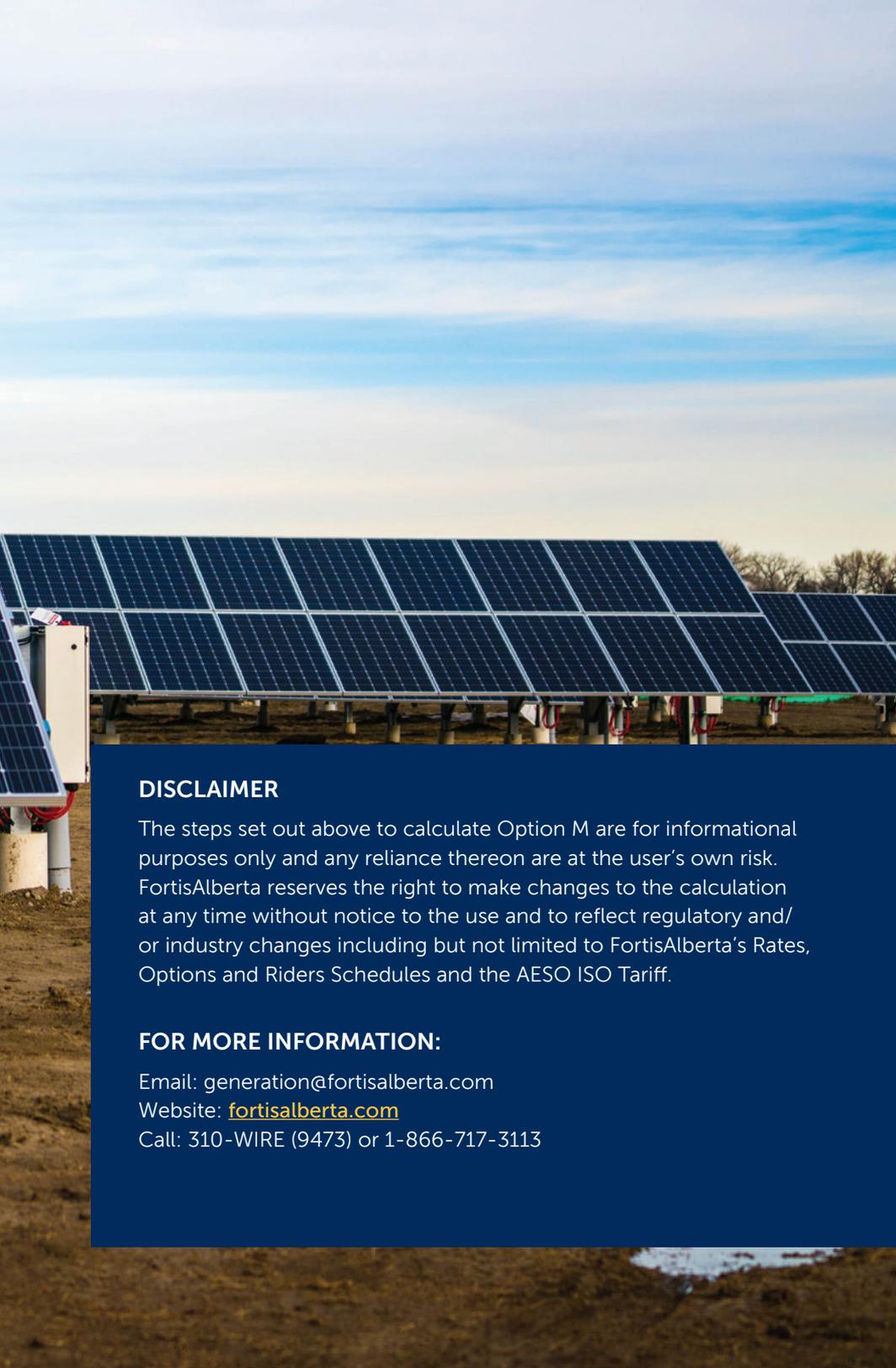
Note: This rate changes on a quarterly basis.

Rider F Charge/Credit: Balancing Pool Consumer Allocation Rider. Rider F applies to transmission system access provided under Rate DTS and Rate Demand Opportunity Service (DOS).

Step 3: The AESO tariff is also applied to the original POD billing determinants. It is derived from the POD metering data. This results in the charges or credits paid by FortisAlberta to the AESO for that specific POD DTS charges during the same period (Actual Charges).

- » Once the calculations are completed for all the generators, FortisAlberta applies any Rate Supply Transmission Service (STS) charges to the generator that is connected to a POD that has incurred STS charges.
- » If more than one generator is connected to the POD, the charge/credit would be allocated based on each generator's metered energy.

Supply Transmission Service (STS): The service provided to generators for interconnection access to the Alberta transmission system.



DISCLAIMER

The steps set out above to calculate Option M are for informational purposes only and any reliance thereon are at the user's own risk. FortisAlberta reserves the right to make changes to the calculation at any time without notice to the use and to reflect regulatory and/or industry changes including but not limited to FortisAlberta's Rates, Options and Riders Schedules and the AESO ISO Tariff.

FOR MORE INFORMATION:

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With support from Elemental Energy's Brooks Solar Farm