

# NET METER REQUEST FORM

In order to receive a Net Meter, please provide the information requested then sign and return only this coversheet by mail to the address below. NorthWestern Energy will install a net meter upon full completion and receipt of this form. Please allow two to four weeks for net meter installation. Do not return this form until your renewable energy system is fully installed and functional and has been inspected and approved by a state or local electrical inspector.

Mail To:	NorthWestern Energy Attn: Megan Kujawa 40 East Broadway Butte, MT 59701	Questions:	NorthWestern E Megan Kujawa 406-497-3516 megan.kujawa@	Energy ⊉northwestern.com
Customer	Information			
NorthWeste	ern Energy account num	ber:		
Name on N	orthWestern Energy acc	ount:		
Premise ad	dress:			_
Customer c	ontact:			_
Daytime ph	one:			_
Type of ren	ewable energy (check al	ll that apply):		
Solar ph	otovoltaic 🛛 🗆 Smal	I-scale hydro		
Name plate	generating capacity (kW	V):		
Date of sys	tem inspection by state of	or local govern	ment electrica	l inspector:
Start date o	f 12-month billing period	:		
January	1 🗆 April 1	July 1		October 1
1. Intercon Electric (Revisio	d the following attachmen nection Standards for Co Generating Facilities of 9 n 0, 4/22/08) Tariff Rule Number 16 E	ustomer-Owne 50 kW or Less	ed, Net Metere Peak Genera	d, Grid-Connected ting Capacity
By signing t	his document below, I $\_$	(Print Na	me)	, certify that the
information the requirer Interconnec Generating	provided above is correct nents of the attached do tion Standards for Custo Facilities of 50kW or Les	ct, that the ren cuments (Elec omer-Owned, l ss Peak Gene	ewable energy ctric Tariff Rule Net Metered, C rating Capacity	y system complies with Number 16 and Grid-Connected Electric y), and that the system
nas been in	spected and approved b	iy a state or lo	cai electrical ir	ispector.

Customer Signature: \_\_\_\_\_ Date: \_\_\_\_\_

**NorthWestern Energy** 

# **INTERCONNECTION STANDARDS**

# FOR CUSTOMER-OWNED, NET METERED, GRID-CONNECTED

# **ELECTRIC GENERATING FACILITIES**

OF

## 50 KILOWATTS OR LESS PEAK GENERATING CAPACITY

The following Interconnection Standards are applicable to any residential, commercial, industrial and irrigation customer who uses a solar, hydropower or wind turbine electric generation facility, or a hybrid consisting of any combination of these renewable energy sources, with a nameplate capacity of not more than 50 kilowatts (kW), that is located on the customer's premises, is connected and operates in parallel with the utility's distribution systems, and is intended primarily to offset part or all of the customer's requirements for electricity (hereinafter "eligible customer-generator" or "customer").

These Interconnection Standards were developed to ensure that the generating facility meets Northwestern Energy's (NWE) safety and power quality requirements.

### Technical Requirements:

- 1. The generating facility shall be metered with a NWE utility installed meter.
- 2. Any direct current (DC) generating facility shall be interconnected to the NWE utility system through a static inverter that complies with the following standards:
  - Institute of Electrical and Electronics Engineers (IEEE) standard 929,
    "Recommended Practice for Utility Interface of Photovoltaic (PV) Systems."
  - o Underwriters Laboratories (UL) Subject 1741, "Standard for Static Inverters and Charge Controllers for Use in Photovoltaic Power Systems"
- 3. Any alternating current (AC) generating facility interconnected to the NWE utility system shall employ a controller which will disconnect the generator if the power generated is over 60.03 Hz or under 59.97 Hz. Also, the controller shall disconnect the generator if the voltage of the power generated is over 128 volts, or under 112 volts.
- 4. The installation shall meet all applicable safety, power quality and interconnection requirements established by the National Electric Code, the National Electric Safety Code, IEEE, and accredited testing laboratories such as Underwriters Laboratories.
- 5. The owner of the generating facility and/or the owner's agents or representatives shall not alter the factory set points for the owner's inverter without first notifying NWE in writing of the owner's intent to make any such modifications.

The generating facility shall be capable of being manually isolated from NWE's system by means of an external, visible load break, electrically located between the generating facility and the NWE system. The disconnect switch should be located within 10 feet of the customer's electric meter and shall be clearly marked "Generator Disconnect Switch" on a weather resistant placard. This switch shall be readily accessible to NWE personnel at all times, and NWE shall have the right to lock this switch open whenever necessary to maintain safe electrical operating conditions. If the disconnect switch is located farther than 10 feet away from the NWE meter, a weather resistant placard shall be mounted next to the meter indicating clearly where the disconnect switch is located.

### ELECTRIC TARIFF

NorthWestern<sup>®</sup> Energy

	Original	Revised	Sheet No.	<u>R-16.1</u>
Canceling	-	Revised	Sheet No.	<u>R-16.1</u>

Rule No. 16

#### ELECTRIC NET METERING

<u>APPLICABILITY</u>: This schedule is applicable to any residential, commercial, industrial and irrigation customer who uses a solar, hydropower or wind turbine electric generation facility, or a hybrid consisting of any combination of these renewable energy sources, with a nameplate capacity of not more than 50 kilowatts (kW), that is located on the customer's premises, is connected and operates in parallel with the utility's distribution systems, and is intended primarily to offset part or all of the customer's requirements for electricity (hereinafter "eligible customer-generator" or "customer").

<u>PURPOSE:</u> The purpose of this Rule is to specify the rates and applicable terms and conditions applicable to the utility's Net Metering Program.

<u>INTERCONNECTION:</u> Prior to connecting a renewable energy system to operate in parallel with the utility, the eligible customer-generator must comply with the utility's current Interconnection Standards for Customer-Owned, Net Metered, Grid-connected Electric Generating Facilities of 50 Kilowatts or Less Peak Generating Capacity ("Interconnection Standards"). Upon inspection and approval of the renewable energy system by the appropriate State or Local government electrical inspector, the utility will supply and install the necessary metering.

For demand-metered facilities, NWE may require two meters for net metering. The standard utility demand meter currently consists of one meter capable of metering both demand and energy. If two meters are required, this meter shall remain in place as the facility meter. A second energy meter shall be installed on the output from the generator to meter the energy generated by the generator. NWE will net the accounts between the facility and the generator to credit the customer for the energy generated as described under TERMS AND CONDITIONS below. Connection of the output directly to NWE's system may be the preferred approach to establishing interconnection for net metered generators in demandmetered facilities. In such cases, the customer will be required to execute a separate interconnection agreement prior to the interconnection being completed by NWE.

The customer shall pay all costs associated with necessary distribution/metering system modifications directly resulting from the installation and interconnection of the customer's generator.

<u>INTERRUPTION OR REDUCTION OF DELIVERIES</u>: NWE may require the customer to interrupt or reduce deliveries of available energy when NWE determines (a) such interruption is necessary in order to construct, install, maintain, repair, replace, remove, investigate, or inspect any NWE-equipment or part of the NWE system, or (b) that curtailment, interruption, or reduction is necessary because of emergencies, forced outages, force majeure or compliance with any electrical code or standard. Whenever possible, NWE will give the customer notice of the possibility that interruption or reduction of deliveries may be required.

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Staff Approved:April 25, 2008Docket No.:N2007.8.97Tariff Letter No.151-E

Effective for service rendered on or after April 22, 2008

PUBLIC SERVICE COMMISSION Commite Jones Secretary

## ELECTRIC TARIFF

NorthWestern<sup>®</sup> Energy

	<u>Original</u>	Revised	Sheet No.	<u>R-16.2</u>
Canceling		Revised	Sheet No.	<u>R-16.2</u>

Rule No. 16

#### ELECTRIC NET METERING

If at any time NWE determines that either (a) the customer's generator, or its operation, may endanger NWE personnel, or (b) the continued operation of the generator may endanger the integrity of NWE'selectric system, NWE shall have the right to disconnect the generator from NWE's system. NWE will give the customer notice of such occurrence as soon as practical. The customer's generator will remain disconnected until such time as NWE determines that all condition(s) are such that it is safe to reconnect.

NWE is not obligated to pay for energy that would otherwise have been delivered to its system absent the occurrences described in this section.

<u>TERMS AND CONDITIONS:</u> An eligible customer-generator served under this schedule is responsible for all charges for its applicable rate schedule including distribution service charges, transmission and distribution charges, energy and demand charges, USBC charges, CTC-QF charges, and seasonal customer charges.

If during the applicable billing period, the electricity (kWh) supplied by the utility exceeds the electricity generated by the customer, the charges for the net energy (kWh) consumed will be in accordance with the customer's applicable metered rate schedule.

If during the applicable monthly billing period, the electricity generated by the customer exceeds the electricity supplied by the utility, the customer shall be billed for the applicable distribution service charges, and the balance of the electricity generated shall be carried into the following billing period and appear as a credit on the customer's account, until the customer's consumption offsets the credit or the end of the designated 12-month billing period, which ever is earlier. At the end of the 12-month period, any unused energy (kWh) credit accumulated during the previous 12 months will be granted to the utility, with no compensation to the customer. The customer shall designate the start date of the 12-month billing period as January 1, April 1, July 1, or October 1.

#### **DEFINITIONS:**

- 1. <u>Net Energy:</u> Net energy is the difference between electricity supplied through the electric grid to the customer and electricity generated by the customer and fed back to the electric grid over the applicable billing period.
- 2. <u>Parallel Operation:</u> The operation of on-site generation by a customer while the customer is connected to the utility's distribution system.

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### ELECTRIC TARIFF

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Sheet No. $\underline{R-16.3}$ Sheet No. $\underline{R-16.3}$ 

### Rule No. 16

### **ELECTRIC NET METERING**

<u>SERVICE AND RATES SUBJECT TO COMMISSION JURISDICTION</u>: All rates and service conditions under this Rate Schedule are governed by the rules and regulations of the Public Service Commission of Montana and are subject to revision as the Commission may duly authorize in the exercise of its jurisdiction.

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