ROCKY MOUNTAIN POWER
A DIVISION OF PACIFICORP

Application for Electrical Interconnection
Non-Net Metering Level 1, 2 or 3 Interconnection
(For Generator Facilities with Electric Nameplate Capacities of 20 MW and less)

Instructions
An Interconnection Customer who requests a Federal Energy Regulatory Commission jurisdictional interconnection must submit this Interconnection Request by hand delivery, mail, or delivery service to the public utility. The Interconnection Customer is to complete all fields of this application form to the extent that such requested information is applicable to the generating facility. If questions exist about the applicability of the requested information or assistance is needed, please contact the designated contact person identified below:

Designated Contact Person: Laura Raypush

Address: 825 NE Multnomah, Suite 1600, Portland, OR 97232

Telephone Number: 503-813-7040

Facsimile Number: 503-813-6893

E-Mail Address: laura.raypush@pacificorp.com

Legal Name of the Customer (or, if an individual, individual's name):

Name: _____

Contact Person: _____

Mailing Address: _____

Physical Address: _____

City: _____ State: _____ Zip Code: _____

Telephone (Daytime): _____ (Evening): _____

Facsimile Number: _____

E-Mail Address: _____

Address of Customer Facility Where Generating Facility will be Interconnected:

Street Address: _____

City: _____ State: _____ Zip Code: _____

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System Installer/Consulting Engineer:

Name: _____

Contact Person: _____

Mailing Address: _____

Physical Address: _____

City: _____ State: _____ Zip Code: _____

Telephone (Daytime): _____ (Evening): _____

Facsimile Number: _____

E-Mail Address: _____

Electric Service Information for Applicant's Facility Where Generator Will Be Interconnected :

Application is for: _____ New Generating Facility
_____ Capacity addition to Existing Generating Facility

If capacity addition to existing facility, please describe: _____

_____

_____

Will the Generating Facility be used for any of the following?

To Supply Power to the Interconnection Customer? ☐ Yes ☐ No
To Supply Power to Others? ☐ Yes ☐ No

For installations at locations with existing electric service to which the proposed Small Generating Facility will interconnect, provide:

_____ _____
(Local Electric Service Provider*) (Existing Account Number*)

**To be provided by the Interconnection Customer if the local electric service provider is different from Rocky Mountain Power.*

Type of Service: ☐ Single Phase ☐ Three Phase

Requested Point of Interconnection: _____

_____

Interconnection Customer's Requested In-Service Date: _____

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Non-Net Metering Level 1, 2 or 3 Interconnection (cont.)

Is Facility going to be a Qualified Facility ("QF")? ☐ Yes ☐ No

If yes, has Applicant completed FERC "Notice of Self Certification"? Yes☐ No☐

Requested Procedure Under Which to Evaluate Interconnection Request[1]:

Please indicate below which review procedure applies to the interconnection request.

☐ **Level 1 –** Certified, inverter-based generating facility with an aggregate nameplate capacity of 25kW or less. An application fee is not required. Proof provided demonstrating certification with the following standards as applicable; please indicate type of certification below:

- ☐ IEEE standards; and,
- ☐ UL Standards 1741 Inverters, Converters, and Controllers for Use in Independent Power Systems (January 2001).

☐ **Level 2 -** Certified interconnection equipment with an aggregate electric nameplate capacity of 2 MW or less. Generation facility does not qualify for a Level 1 review or has been reviewed but not approved under a Level 1 review. The application fee amount is $50 plus $1.00 per kW of the generation facility. Proof provided demonstrating certification with the following standards as applicable; please indicate type of certification below:

- ☐ IEEE standards; and,
- ☐ UL Standards 1741 Inverters, Converters, and Controllers for Use in Independent Power Systems (January 2001).

☐ **Level 3 –** Aggregate electric nameplate capacity rating is 20 MW or less and the Generating facility is not certified; does not qualify for a Level 1 or Level 2 review; or has been reviewed but not approved under a Level 1or Level 2 review. The application fee amount is $100 plus $2.00 per kW of the generation facility.

[1] **Note:** Descriptions for interconnection review categories do not list all criteria that must be satisfied. For a complete list of criteria, please refer to R746-312, Electrical Interconnection.

Generating Facility Information:

Energy Source: ☐ Solar ☐ Wind ☐ Hydro - Hydro Type (e.g. Run-of-River):_____
☐ Diesel ☐ Natural Gas ☐ Fuel Oil ☐ Biomass
☐ Other (state type) _____

Prime Mover: ☐ Fuel Cell ☐ Reciprocating Engine ☐ Gas Turbine
☐ Steam Turbine ☐ Microturbine ☐ PV
☐ Other_____

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Non-Net Metering Level 1, 2 or 3 Interconnection (cont.)

Type of Generator: ☐ Synchronous ☐ Induction ☐ Inverter

Generator Nameplate Rating: _____kW (Typical) Generator Nameplate kVAr: _____

Interconnection Customer or Customer-Site Load: _____kW (if none, so state)

Typical Reactive Load (if known): _____

Maximum Physical Export Capability Requested: _____ kW

List components of the Small Generating Facility equipment package that are currently certified (include proof from manufacture of certification in accordance with R746-312-5, Certifications):

	Equipment Type or Package	Certifying Entity
1.	_____	_____
2.	_____	_____
3.	_____	_____
4.	_____	_____
5.	_____	_____

Is the prime mover compatible with the certified protective relay package? ☐ Yes ☐ No

Generator (or solar collector) Manufacturer, Model Name & Number: _____

_____

Version Number: _____

Nameplate Output Power Rating in kW: (Summer) _____ (Winter) _____

Nameplate Output Power Rating in kVA: (Summer) _____ (Winter) _____

Rated Power Factor: Leading: _____Lagging: _____

Total Number of Generators in generation facility to be interconnected pursuant to this Interconnection Request:
#: _____ Elevation: _____ ☐ Single phase ☐ Three phase

Inverter Manufacturer, Model Name & Number (if used): _____

_____

List of adjustable set points for the protective equipment or software: _____

_____

Note: A completed Power Systems Load Flow data sheet must be supplied with the Interconnection Request.

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Non-Net Metering Level 1, 2 or 3 Interconnection (cont.)

Generating Facility Characteristic Data (for inverter-based machines):

Manufacturer: _____ Model: _____

Type: ☐ Forced Commutated ☐ Line Commutated

Electric Nameplate Capacity Rated Output: _____ Amps _____ Volts _____kW

Efficiency: _____% Power Factor: _____%

Max design fault contribution current: _____ ☐ Instantaneous ☐RMS

Harmonics characteristics: _____

Start-up requirements: _____

Generating Facility Characteristic Data (for rotating machines):

RPM Frequency: _____

(*) Neutral Grounding Resistor (if applicable): _____

Synchronous Generators:

Submit copies of the Saturation Curve and the Vee Curve.

☐ Salient ☐ Non-Salient

Torque: _____ lb-ft Rated RPM: _____

Field Amperes: _____ at rated generator voltage and current and _____% PF over-excited

Type of Exciter: _____

Output Power of Exciter: _____

Type of Voltage Regulator: _____

Locked Rotor Current: _____ Amps

Synchronous Speed: _____RPM

Min. Operating Freq./Time: _____

Generator Connection: ☐ Delta ☐ Wye ☐ Wye Grounded

Direct Axis Synchronous Reactance, Xd: _____ P.U.

Direct Axis Transient Reactance, X'_d: _____P.U.

Direct Axis Subtransient Reactance, X''_d: _____P.U.

Negative Sequence Reactance, X_2: _____ P.U.

Non-Net Metering Level 1, 2 or 3 Interconnection (cont.)

Zero Sequence Reactance, X_0: _____ P.U.

KVA Base: _____

Field Volts: _____

Field Amperes: _____

Provide appropriate IEEE model block diagram of excitation system and governor system in accordance with the regional reliability council criteria (WECC/NERC Reliability Standard MOD-012-0). A copy of the manufacturer's block diagram may not be substituted.

Induction Generators:

Manufacturer: _____

Model No.: _____ Version No.: _____

Locked Rotor Current: _____ Amps

Phases: ☐ Single ☐ Three-Phase

Motoring Power (kW): _____

I_2^2t or K (Heating Time Constant): _____

Rotor Resistance, Rr: _____

Stator Resistance, Rs: _____

Stator Reactance, Xs: _____

Rotor Reactance, Xr: _____

Magnetizing Reactance, Xm: _____

Short Circuit Reactance, Xd": _____

Exciting Current: _____

Frame Size: _____ Design Letter: ____ Temp. Rise: _____ ^oC.

Reactive Power Required In Vars (No Load): _____

Reactive Power Required In Vars (Full Load): _____

Total Rotating Inertia, H: _____ Per Unit on kVA Base

Excitation and Governor System Data for Synchronous Generators Only:

Provide appropriate IEEE model block diagram of excitation system, governor system and power system stabilizer (PSS) in accordance with the regional reliability council criteria. A PSS may be determined to be required by applicable studies. A copy of the manufacturer's block diagram may not be substituted.

Interconnection Facilities Information:

Will a transformer be used between the generator and the point of common coupling? ☐ Yes ☐ No

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Non-Net Metering Level 1, 2 or 3 Interconnection (cont.)

Will the transformer be provided by the Interconnection Customer? ☐ Yes ☐ No

Interconnection Customer Transformer Data (please provide information for all transformers, attaché separate sheet if necessary):

Is the transformer: ☐ single phase ☐ three phase Size: _____kVA

Transformer Impedance: _____% on _____kVA Base

Transformer Primary: _____ Volts ☐ Delta ☐ Wye ☐ Wye Grounded

Transformer Secondary: _____ Volts ☐ Delta ☐ Wye ☐ Wye Grounded

Transformer Tertiary: _____ Volts ☐ Delta ☐ Wye ☐ Wye Grounded

Transformer Fuse Data (if applicable, for Interconnection Customer-Owned Fuse):
(Attach copy of fuse manufacturer's Minimum Melt and Total Clearing Time-Current Curves)

Manufacturer: _____ Type: _____ Size: _____Speed: _____

Interconnecting Circuit Breaker (if applicable):

Manufacturer: _____ Type: _____

Load Rating (Amps): _____ Interrupting Rating (Amps): _____ Trip Speed (Cycles): _____

Interconnection Protective Relays (if applicable):

If Microprocessor-Controlled:
List of Functions and Adjustable Setpoints for the protective equipment or software:

Setpoint Function	Minimum	Maximum
1. _____	_____	_____
2. _____	_____	_____
3. _____	_____	_____
4. _____	_____	_____
5. _____	_____	_____
6. _____	_____	_____

Non-Net Metering Level 1, 2 or 3 Interconnection (cont.)

If Discrete Components:
(Enclose Copy of any Proposed Time-Overcurrent Coordination Curves)

Manufacturer: _____ Type: _____ Style/Catalog No.: _____ Proposed Setting: _____
Manufacturer: _____ Type: _____ Style/Catalog No.: _____ Proposed Setting: _____
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Manufacturer: _____ Type: _____ Style/Catalog No.: _____ Proposed Setting: _____
Manufacturer: _____ Type: _____ Style/Catalog No.: _____ Proposed Setting: _____

Current Transformer Data (If Applicable):
(Enclose Copy of Manufacturer's Excitation and Ratio Correction Curves)

Manufacturer: _____
Type: _____ Accuracy Class: _____ Proposed Ratio Connection: _____

Manufacturer: _____
Type: _____ Accuracy Class: _____ Proposed Ratio Connection: _____

Potential Transformer Data (If Applicable):

Manufacturer: _____
Type: _____ Accuracy Class: _____ Proposed Ratio Connection: _____

Manufacturer: _____
Type: _____ Accuracy Class: _____ Proposed Ratio Connection: _____

Other Facility Information:

Enclose copy of site electrical one-line diagram showing the configuration of total Generating Facility equipment, current and potential circuits, and protection and control schemes. Please include system impedance and distance for all segments of the generating facility.

One Line Diagram attached: ☐ Yes ☐ No

Enclose copy of any site documentation that indicates the precise physical location of the proposed Small Generating Facility (e.g., USGS topographic map, distance from public utility facility number, other diagram or documentation).

Plot Plan attached: ☐ Yes ☐ No

Enclose copy of any documents that provide proof of site control.

Site Control attached: ☐ Yes ☐ No

Non-Net Metering Level 1, 2 or 3 Interconnection (cont.)

Applicant Signature:

I hereby certify that all of the information provided in this application request form is correct.

Applicant Signature: _____

Name: _____

Title: _____ Date: _____

An application fee may be required before the application can be processed. Please verify that the appropriate fee is included with the application:

Application fee included: ☐ Yes ☐ No

Amount $_____

Printed Name:_____Title:_____