IDAHO POWER
An IDACORP Company

Form 2

Application for Small Generator Facility Interconnection
Tier 2, Tier 3 or Tier 4 Interconnection
(For Small Generator Facilities with Electric Nameplate Capacities of 10 MW and less)

Applicant Contact Information :

Name: _____

Mailing Address: _____

City: _____ State: _____ Zip Code: _____

Telephone (Daytime): _____ (Evening): _____

Facsimile Number: _____ E-Mail Address: _____

Address of Customer Facility Where Small Generator Facility will be Interconnected :
(if different from above)

Street Address: _____

City: _____ State: _____ Zip Code: _____

System Installer/Consulting Engineer :

Name: _____

Mailing 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 :

Capacity: _____(Amps) Voltage: _____(Volts)

Type of Service: ☐ Single Phase ☐ Three Phase

Will a transformer be used between the generator and the point of interconnection? ___Yes ___No

Transformer Data (If Applicable, for Interconnection Customer-Owned Transformer):

Is the transformer: ____single phase _____three phase? Size: _____kVA

Transformer Impedance: _____% on _____kVA Base

If Three Phase:

Transformer Primary: _____ Volts _____ Delta _____Wye _____ Wye Grounded

Transformer Secondary: _____ Volts _____ Delta _____Wye _____ Wye Grounded

Transformer Tertiary: _____ Volts _____ Delta _____Wye _____ Wye Grounded

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

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

☐ **Tier 2 -** Certified interconnection equipment with an aggregate Electric Nameplate Capacity of 2 MW or less. Indicate type of certification below. The application fee amount is $500.

- ☐ Lab Tested - tested to IEEE 1547.1 and other specified standards by a nationally recognized testing laboratory and is appropriately labeled.
- ☐ Field Tested – an identical small generator facility has been approved by an Oregon utility under a Tier 4 study review process within the prior 36 months of the date of this interconnection request.

☐ **Tier 3 –** A Small Generator Facility connected to the T&D system that does not export power. The Electric Nameplate Capacity rating may be 50 kW or smaller, if connecting to area network or 10 MW or smaller, if connecting to a radial distribution feeder. The application fee amount is $1000.

☐ **Tier 4 –** Electric Nameplate Capacity rating is 10 MW or smaller and the Small Generator Facility does not qualify for a Tier 1, Tier 2 or Tier 3 review or has been reviewed but not approved under a Tier 1, Tier 2 or Tier 3 review. Application fee amount is $1000.

[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 PUC Rule OAR 860, Division 082, (Rule).

Field Tested Equipment:

If the field tested equipment box is checked above, please include with the completed application the following information which will be required for review of Tier 2 field tested small generator facilities:

- A copy of the Certificate of Completion, signed by an Oregon utility that has approved an identical small generator facility for parallel operation.
- A copy of all documentation submitted to the Oregon utility that approved the Small Generator Facility for parallel operation under a Tier 4 study process.
- A written statement by the Applicant indicating that the small generator facility being proposed is identical, except for Minor Equipment Modification, to the one previously approved by an Oregon utility for parallel operation.
- If a Tier 2 Application, utilizing Field Tested equipment, is proposed the remainder of the application will not be required to be completed.

Small Generator Facility Information:

List interconnection components/system(s) to be used in the Small Generation Facility that is lab certified (required for Lab Tested, Tier 2 Interconnection requests only).

Component/System NRTL Providing Label & Listing

1._____

2._____

3._____

4._____

5._____

Please provide copies of manufacturer brochures or technical specifications

Energy Production Equipment/Inverter Information:

☐ Synchronous ☐ Induction ☐ Inverter ☐ Other _____

Electric Nameplate Rating: _____ kW _____ kVA

Rated Voltage: _____Volts

Rated Current: _____Amps

System Type Tested (Total System): ☐ Yes ☐ No; (attach product literature)

Customer-Site Load: _____(kW) (if none, so state)

Maximum Physical Export Capability Requested: _____ (kW)

Individual Generator Power Factor

Rated Power Factor: Leading: _____Lagging: _____

For Synchronous Machines:

Manufacturer: _____

Model No.: _____ Version No.: _____

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

Winding Connection: _____

Min. Operating Freq./Time: _____

Generator Connection: ☐ Delta ☐ Wye ☐ Wye Grounded

Direct-axis Synchronous Reactance: (Xd) _____ohms

Direct-axis Transient Reactance: (X'd) _____ohms

Direct-axis Sub-transient Reactance: (X"d) _____ohms

Negative Sequence Reactance, X_2: _____ P.U.

Zero Sequence Reactance, X_0: _____ P.U.

KVA Base: _____

Field Volts: _____

Field Amperes: _____

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.

For Induction Machines:

Manufacturer: _____

Model No.: _____ Version No.: _____

Locked Rotor Current: _____ Amps

Rotor Resistance: (Rr)_____ohms Exciting Current: ____Amps

Rotor Reactance: (Xr)_____ohms Reactive Power Required: _____

Magnetizing Reactance: (Xm)_____ohms ___VARs (No Load)

Stator Resistance: (Rs)_____ohms ___VARs (Full Load)

Stator Reactance: (Xs)_____ohms

Short Circuit Reactance: (X"d)_____ohms

Phases: ☐ Single ☐ Three-Phase

Frame Size: _____ Design Letter: ____ Temp. Rise: _____ ^{o}C.

Reverse Power Relay Information: (This section applies to Tier 3 Review Only)

Manufacturer: _____Model:_____

Electric Nameplate Capacity rating: (kVA)_____

Additional Information For Inverter Based Facilities:

Inverter Information:

Manufacturer:_____ Model: _____

Type: ☐ Forced Commutated ☐ Line Commutated

Electric Nameplate Capacity Rated Output: _____ Amps _____ Volts _____kW

Efficiency: _____% Power Factor: _____%

DC Source / Prime Mover:

☐ Solar ☐ Wind ☐ Hydro ☐ Other _____

Electric Nameplate Capacity Rating: _____ kW Rating: _____ kVA

Rated Voltage: _____Volts

Open Circuit Voltage (If applicable): _____Volts

Rated Current: _____Amps

Short Circuit Current (If applicable): _____Amps

Other Facility Information:

Is Facility a QF? Yes☐ No☐

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

One Line Diagram attached: ☐ Yes ☐ No

Plot Plan attached: ☐ Yes ☐ No

Installation Test Plan attached: ☐ Yes ☐ No

Estimated Commissioning Date (if known): _____

Enclose copy of site electrical one-line diagram showing the configuration of all Small Generating Facility equipment, current and potential circuits, and protection and control schemes.

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).

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

Applicant Signature:

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

Applicant Signature: _____

Title: _____ Date:_____

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

Application fee included ☐

Amount_____

Public Utility Acknowledgement:

I hereby acknowledge the receipt of an Interconnection Request and Application Fee,

Approval for a Tier 2, Tier 3 or Tier 4 Small Generator Facility interconnection is contingent upon the Applicant's Small Generator Facility passing the screens and completing the review process set forth in the PUC rules found in OAR 860, Division 082 and is not granted by the Public Utility's signature on this Application Form.

Public Utility Signature: _____ Date: _____

Printed Name:_____Title:_____

Note: The Public Utility shall retain a copy of this completed and signed form and return the original and any attachments to the Applicant.