



Portland General Electric Company

Legal Department

121 SW Salmon Street • Portland, Oregon 97204

(503) 464-7717 • Facsimile (503) 464-2200

August 21, 2009

Via Electronic Filing and U.S. Mail

Oregon Public Utility Commission
Attention: Filing Center
550 Capitol Street NE, #215
PO Box 2148
Salem OR 97308-2148

Re: AR 521

Attention Filing Center:

Please find attached an original and copy of PGE's small generator interconnection forms and agreements implementing the Division 082 rules. In accordance with Order No. 09-196, and upon consultation with Commission staff, PGE initially submitted these materials in draft form informally to Staff on Wednesday, July 15, 2009.

This document is being filed by electronic mail with the Filing Center. An extra copy of the cover letter is enclosed. Please date stamp the extra copy and return to me in the envelope provided. This document is being served upon the AR 521 service list.

Thank you in advance for your assistance.

Sincerely,

A handwritten signature in black ink, appearing to read "J. Richard George", with a long, sweeping flourish extending to the right.

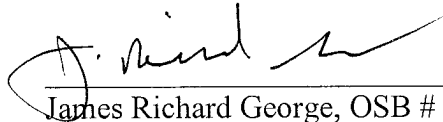
J. Richard George
Assistant General Counsel

JRG:smc
Enclosures
cc: Service List-AR 521

CERTIFICATE OF SERVICE

I hereby certify that I have this day caused **SMALL GENERATOR INTERCONNECTION FORMS AND AGREEMENTS** to be served by electronic mail to those parties whose email addresses appear on the attached service list, and by First Class US Mail, postage prepaid and properly addressed, to those parties on the attached service list who have not waived paper service from OPUC Docket No. AR 521.

Dated at Portland, Oregon, this 21st day of August, 2009.



James Richard George, OSB # 97469
Assistant General Counsel
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SERVICE LIST
OPUC DOCKET # AR 521

* Waived Paper Service

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Energy Trust Alan Cowan alan.cowan@energytrust.org	Idaho Power Company Randy Allphin rallphin@idahopower.com *
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Or Dept of Energy - Renewable Energy Div Carel Dewinkel Senior Policy Analyst 625 Marion St NE Salem, OR 97301-3737 carel.dewinkel@state.or.us	Or Dept of Energy - Renewable Energy Div Sven Anderson Renewable Energy Manager 625 Marion St NE Salem, OR 97301-3737 sven.anderson@state.or.us
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Sorenson Engineering John Lowe 12050 SW Tremont St Portland, Or 97225 jravenesanmarcos@yahoo.com	Voltair Wind Electric Robert Migliori 24745 Ne Mountain Top Rd Newberg, OR 97132 windy@freewirebroadband.com
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Triaxis Engineering Diane Broad 1600 SW Western Blvd Corvallis, OR 97333 dbroad@trixaxiseng.com	



**Small Generator Facility
Tier 1 Interconnection Application**
(Applies to Lab-Certified, Inverter-Based Small Generator Facilities
with a Name Plate Capacity of 25 kW or Less)

Applicant Contact Information:

Name: _____

Company Name (if applicable) _____

Mailing Address: _____

City: _____ State: _____ Zip Code: _____

Telephone (Daytime): _____ (Cell/Evening): _____

E-Mail Address: _____

System Installer:

Name: _____

Mailing Address: _____

City: _____ State: _____ Zip Code: _____

Telephone (Office): _____ (Cell): _____

Facsimile Number: _____ E-Mail Address: _____

Consulting Engineer (if applicable):

Name: _____

Mailing Address: _____

City: _____ State: _____ Zip Code: _____

Telephone (Office): _____ (Cell): _____

Facsimile Number: _____ E-Mail Address: _____

Tier 1 Interconnection Application (continued)

Small Generator Facility Information:

Location: _____

Electric Distribution Company (EDC): Portland General Electric Company
 other _____

Estimated Commissioning Date: _____

Proposed Operation Mode: FERC Qualifying Facility (QF) Other

Energy Source: Solar Wind Hydro Other

If **Other**, Specify Energy Source & Prime Mover: _____

System Design Capacity: _____ (kW) _____ (kVA)

Maximum Physical Export Capability Requested: _____ (kW) _____ (kVA)

Is the inverter lab-certified? Yes No

(If yes, attach manufacturer's cut sheet showing listing and label information from the appropriate listing authority, e.g. UL 1741 listing. If no, facility does not qualify for Tier 1 consideration. Refer to the PUC rules found in OAR 860, Division 082 for details.)

Inverter Manufacturer: _____ Model _____

Inverter Electric Nameplate Capacity: _____ (DC kW)

Inverter Output: ____ (AC Volts) Single-phase 3-phase

Enclosure Checklist:

Application fee (\$100) included.

Make checks payable to *Portland General Electric Co.*

Enclose FERC "Notice of Self-Certification" for QF (if applicable).

Electrical One-Line Diagram (showing complete circuit between generator and proposed point-of-interconnection, including all protective devices, etc.)

Site Plan (documenting generator location, accessibility of lockable disconnect, etc.)

Manufacturer brochures or technical specifications for all lab-tested interconnection/system components to be used in the small generator facility.

Tier 1 Interconnection Application (continued)

Applicant Signature:

I hereby attest that the information submitted on this application is accurate to the best of my knowledge and have included the non-refundable application fee of \$100 with my Tier 1 Interconnection Request:

Applicant Signature _____ Date: _____

Printed Name: _____ Title (if applicable): _____

.....

Interconnection Request Acknowledgement:

Receipt of the application and application fee is hereby acknowledged.

Approval for a Small Generator Facility Tier 1 Interconnection is contingent upon the Applicant's Small Generator Facility passing the Tier 1 screens and completing the review process set forth in PUC Rule OAR 860, Division 082 and is not granted by the PGE representative's signature on this Application Form.

PGE Representative Signature: _____ Date: _____

Printed Name: _____ Title: _____

Indicate whether PGE plans to perform Witness Test: Yes No



**Small Generator Facility Interconnection
Tier 2, Tier 3 or Tier 4 Interconnection Application**

(For Small Generator Facilities with Electric Nameplate Capacities of 10 MW or Less)

Applicant Contact Information:

Name: _____

Mailing Address: _____

City: _____ State: _____ Zip Code: _____

Telephone (Daytime): _____ (Evening): _____

E-Mail Address: _____

Site Location for Small Generator Facility (if different from previous):

Street Address/GPS Coordinates: _____

City: _____ State: _____ Zip Code: _____

Electric Service Information for Site Location:

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

Type of Service: Single-Phase 3-Phase Wye 3-Phase Delta

Estimated Commissioning Date (if known): _____

System Installer:

Name: _____

Mailing Address: _____

City: _____ State: _____ Zip Code: _____

Telephone (office): _____ (cell): _____

Facsimile Number: _____ E-Mail Address: _____

Consulting Engineer (if applicable):

Name: _____

Mailing Address: _____

City: _____ State: _____ Zip Code: _____

Telephone (office): _____ (cell): _____

Facsimile Number: _____ E-Mail Address: _____

Tier 2, Tier 3 or Tier 4 Interconnection Application (cont.)

Requested Procedure Under Which to Evaluate Interconnection Request¹:

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 - system equipment 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** – Interconnected facility will not export power beyond point of interconnection. The Electric Nameplate Capacity rating may be 50 kW or smaller, if connecting to an area network or 10 MW or smaller, if connecting to a radial distribution feeder. The application fee amount is \$1,000.
- 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 \$1,000.

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.

Tier 2, Tier 3 or Tier 4 Interconnection Application
(cont.)

Small Generator Facility Information:

List of lab-certified component(s)/system(s) to be used in the Small Generation Facility.

Component/System	NRTL Providing Label & Listing
1. _____	_____
2. _____	_____
3. _____	_____
4. _____	_____
5. _____	_____

Please provide copies of manufacturer brochures or technical specifications

Customer-Owned Transformer Information:

Will Applicant own and maintain transformer? Yes No,

If yes, is it Single-phase 3-phase

If 3-phase:

Primary: _____ Volts Delta Wye Wye Grounded

Secondary: _____ Volts Delta Wye Wye Grounded

Tertiary: _____ Volts Delta Wye Wye Grounded

Transformer Impedance _____ % on _____ kVA base

Mode of Operation / Energy Source:

Proposed Operation Mode QF Other

If QF, FERC "Notice of Self Certification" completed? Yes No

Energy Source: Solar Wind Hydro Diesel Natural Gas

Other _____

Prime Mover Type: Photovoltaic Reciprocating Engine Fuel Cell

Turbine Other _____

Energy Production Equipment/Inverter Information:

Synchronous Induction Inverter Other _____

Total Electric Nameplate Rating: _____ kW _____ kVA
(**DC total** for inverter-based solar arrays, wind turbines, etc. —or— **AC generator capacity**)

Rated Voltage: _____ Volts

Rated Current: _____ Amps

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

Tier 2, Tier 3 or Tier 4 Interconnection Application (cont.)

For Synchronous Machines:

Manufacturer: _____

Model No.: _____ Version No.: _____

Saturation Curve and the Vee Curve (*submit copies*): 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: (X_d) _____ ohms

Direct-axis Transient Reactance: (X'_d) _____ ohms

Direct-axis Sub-transient Reactance: (X''_d) _____ ohms

For Induction Machines:

Manufacturer: _____

Model No.: _____ Version No.: _____

Locked Rotor Current: _____ Amps

Rotor Resistance: (R_r) _____ ohms Exciting Current: _____ Amps

Rotor Reactance: (X_r) _____ ohms Reactive Power Required: _____

Magnetizing Reactance: (X_m) _____ ohms _____ VARs (No Load)

Stator Resistance: (R_s) _____ ohms _____ VARs (Full Load)

Stator Reactance: (X_s) _____ ohms

Short Circuit Reactance: (X''_d) _____ ohms

Phases: Single 3-Phase

Frame Size: _____ Design Letter: _____ Temp. Rise: _____ °C.

Tier 2, Tier 3 or Tier 4 Interconnection Application
(cont.)

For Inverter Based Facilities:

Manufacturer: _____ Model: _____

Rated Voltage: _____ Volts

Open Circuit Voltage (if applicable): _____ Volts

Rated Current: _____ Amps

Short Circuit Current (if applicable): _____ Amps

Inverter Information:

Manufacturer: _____ Model: _____

Electric Nameplate Capacity Rated Output: _____ Amps _____ Volts _____ kW

Efficiency: _____ % Power Factor: _____

Reverse Power Relay Information: (This section applies to Tier 3 review only)

Manufacturer: _____ Model: _____

Electric Nameplate Capacity rating: _____ kVA

Enclosure Checklist:

- Application fee.
 Make checks payable to *Portland General Electric Co.*
- Enclose FERC "Notice of Self Certification" for QF (*if applicable*).
- Electrical One-Line Diagram (*showing complete circuit between generator and proposed point-of-interconnection, including all protective devices, etc.*)
- Site Plan (*documenting generator location, accessibility of lockable disconnect, etc.*)
- Manufacturer brochures or technical specifications for all lab-tested interconnection/system components to be used in the small generator facility.
- Proof of site control (e.g. property tax bill, deed, lease agreement, or other legally binding document proving ownership, leasehold option, or other right to develop small generator facility on-site).
- Installation Test Plan attached (*if applicable*)
- For Small Generator Facility with nameplate greater than 3 MW, include communication equipment product sheets, protocol, and design to meet requirements of OAR 860-082-0070(5), Telemetry Requirements.

Applicant Signature:

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

Applicant Signature: _____ Date: _____

Printed Name: _____ Title (*if applicable*): _____

Application Fee included: \$ _____

.....

PGE Acknowledgement:

I hereby acknowledge the receipt of a 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 PGE Representative's signature on this Application Form.

PGE Representative Signature: _____ Date: _____

Printed Name: _____ Title: _____



**Small Generator Facility
Feasibility Study Agreement**

This Agreement is made and entered into this ___ day of _____ (month and year) by and between _____, an individual a company, (“Applicant”) and Portland General Electric Company, a corporation existing under the laws of the State of Oregon, (“PGE”). Applicant and PGE each may be referred to as a “Party,” or collectively as the “Parties.”

Recitals:

Whereas, Applicant is proposing to develop a Small Generator Facility or adding generating capacity to an existing Small Generator Facility consistent with the Application completed on _____; and

Whereas, Applicant desires to interconnect the Small Generator Facility with PGE’s Transmission & Distribution (T&D) System; and

Whereas, Applicant has requested for PGE to perform a Feasibility Study to assess the feasibility of interconnecting the proposed Small Generator Facility to PGE’s T&D System.

Now, therefore, in consideration of and subject to the mutual covenants contained herein the Parties agree as follows:

1. When used in this Agreement, with initial capitalization, the terms specified shall have the meanings set forth in this Agreement or as given in OAR 860-082-0005 through 860-082-0085 and to the extent that this Agreement conflicts with the Rules, the Rules shall take precedence.
2. Applicant elects and PGE shall cause to be performed a Feasibility Study consistent with OAR 860-082-0060(6).
3. The scope of the Feasibility Study shall be subject to the assumptions set forth in the Rule and detailed in Attachment A to this Agreement.
4. The Feasibility Study shall be based on the technical information provided by Applicant in its Application, as may be modified as the result of the Scoping Meeting. PGE reserves the right to request additional technical information from Applicant as may reasonably become necessary consistent with Good Utility Practice during the course of the Feasibility Study. If, in the course of the Study, Applicant finds it necessary to modify the Application, the time to complete the Feasibility Study may be extended.

5. In performing the study, PGE will rely, to the extent reasonably practicable, on existing studies of recent vintage. Applicant will not be charged for such existing studies. OAR 860-082-0035 details cost responsibility associated with any new study or modifications to existing studies that are reasonably necessary to perform the Feasibility Study.
6. The Feasibility Study report shall provide the following information:
 - 6.1 An identification of the potential Adverse System Impacts on PGE's transmission and/or distribution system or any Affected System.
 - 6.2 Preliminary identification of any circuit breaker short circuit capability limits exceeded as a result of the interconnection,
 - 6.3 Preliminary identification of any thermal overload or voltage limit violations resulting from the interconnection, and
 - 6.4 Preliminary description and non-bonding estimated cost of facilities required to interconnect the Small Generator Facility to PGE's T&D System and to address the identified short circuit and power flow issues.
7. As required by OAR 860-082-0060(8)(a), the public utility will provide scope for the Facilities Study, a reasonable schedule for completion of the study, and a good-faith, non-binding cost estimate to perform the study (Attachment B). The Feasibility Study shall be completed and the results shall be transmitted to Applicant within thirty (30) calendar days after this Agreement is signed by the Parties unless an alternate schedule has been agreed to by parties. Attachment B shall be incorporated as part of this Agreement.
8. Study fees will be based on actual costs in accordance with the provisions of the Rule as detailed in 860-082-0035 and as follows:
 - 8.1 The non-binding good faith estimate of the cost to complete the Feasibility Study is \$. Applicant is required to pay a deposit of fifty (50) percent this estimate or \$1,000, whichever is less, prior to start date of study.
 - 8.2 Any study fees shall be based on PGE's actual costs and will be invoiced to Applicant after the study is completed and delivered and will include a summary of professional time.
 - 8.3 Applicant must pay any study costs that exceed the deposit without interest within thirty (30) calendar days on receipt of the invoice or resolution of any dispute. If the deposit exceeds the invoiced fees, PGE shall refund such excess within thirty (30) calendar days of the invoice without interest.

Signatures:

In witness whereof, the Parties have caused this Agreement to be executed by their respective duly authorized representatives.

For APPLICANT:

Signature: _____

Printed Name: _____

Title (*if any*): _____

Date: _____

For PORTLAND GENERAL ELECTRIC COMPANY:

Signature: _____

Printed Name: _____

Title: _____

Date: _____

Attachment A
Feasibility Study Agreement
Assumptions Used in Conducting the Feasibility Study

The Feasibility Study will be based upon the information set forth in the Application and agreed upon in the Scoping Meeting held on _____ (*write "N/A" if Scoping Meeting was waived by both Parties*).

Below to be completed by PGE in consultation with Applicant.

1. Designation of Point of Interconnection and configuration to be studied.

2. Designation of alternative Point(s) of Interconnection and configuration.

3. Other Assumptions.

Attachment B
Feasibility Study Agreement
PGE Provided Scope, Schedule and Budget for Feasibility Study



**Small Generator Facility
System Impact Study Agreement**

This Agreement is made and entered into this ___ day of _____ (*month and year*) by and between _____, an individual a company, (“Applicant”) and Portland General Electric Company, a corporation existing under the laws of the State of Oregon, (“PGE”). Applicant and PGE each may be referred to as a “Party,” or collectively as the “Parties.”

Recitals:

Whereas, Applicant is proposing to develop a Small Generator Facility or adding generating capacity to an existing Small Generator Facility consistent with the Application completed on _____; and

Whereas, Applicant desires to interconnect the Small Generator Facility with PGE’s Transmission & Distribution (T&D) System; and

Whereas, PGE has completed a Feasibility Study and provided the results of said study to Applicant (This recital to be omitted if the Parties have agreed to forego the Feasibility Study.); and

Whereas, Applicant has requested PGE perform a System Impact Study to assess the impact of interconnecting the Small Generator Facility to PGE’s T&D System.

Now, therefore, in consideration of and subject to the mutual covenants contained herein the Parties agree as follows:

1. When used in this Agreement, with initial capitalization, the terms specified shall have the meanings set forth in this Agreement or as given in OAR 860-082-0005 through 860-082-0085 and to the extent that this Agreement conflicts with the Rules, the Rules shall take precedence.
2. Applicant elects and PGE shall cause to be performed a System Impact Study consistent with OAR 860-082-0060(7).
3. The Parties shall set out the assumptions to be used in conducting the System Impact Study in Attachment A which is incorporated as part of this Agreement.
4. The System Impact Study will be based upon the results of the Feasibility Study, if applicable, technical information provided in the Application, and by Attachment A to this Agreement. PGE reserves the right to request additional technical information from Applicant as may reasonably become necessary consistent with Good Utility Practice during the course of the System Impact Study. If Applicant modifies its

designated Point of Interconnection, Application, or the technical information provided therein is modified, the time to complete the System Impact Study may be extended.

5. The System Impact Study report shall provide the following information:
 - 5.1 Identification of any circuit breaker short circuit capability limits exceeded as a result of the interconnection,
 - 5.2 Identification of any thermal overload or voltage limit violations resulting from the interconnection,
 - 5.3 Identification of any instability or inadequately damped response to system disturbances resulting from the interconnection, and
 - 5.4 Description and good faith non-binding cost estimate of facilities required to interconnect the Small Generator Facility to PGE's T&D System and to address the identified short circuit, instability, and power flow issues.
6. As required by OAR 860-082-0060(7)(a), Attachment A to this Agreement provides a detail of the scope for the System Impact Study, a reasonable schedule for completion of the study, and a good-faith, non-binding estimate of the cost to perform the System Impact Study. The System Impact Study shall be completed and the results transmitted to the Applicant within thirty (30) calendar days after this Agreement is signed by the Parties unless otherwise agreed to as part of this Agreement. Attachment A shall be incorporated as part of this Agreement.
7. PGE may require a study deposit as described OAR 860-082-0035 of the Rule.
8. Study fees and cost responsibility are described in OAR 860-082-0035 of the Rule and will be based on actual costs and as follows:
 - 8.1 The non-binding good faith estimate of the cost to complete the Impact Study is \$. Applicant is required to pay a deposit of fifty (50) percent this estimate or \$1,000, whichever is less, prior to start date of study.
 - 8.2 Any study fees shall be based on PGE's actual costs and will be invoiced to Applicant after the study is completed and delivered and will include a summary of professional time.
 - 8.3 Applicant must pay any study costs that exceed the deposit without interest within thirty (30) calendar days on receipt of the invoice or resolution of any dispute. If the deposit exceeds the invoiced fees, PGE shall refund such excess within thirty (30) calendar days of the invoice without interest.

9. Cost responsibility is detailed in OAR 860-082-0035 of the Rule.

Signatures:

In witness whereof, the Parties have caused this Agreement to be executed by their respective duly authorized representatives.

For APPLICANT:

Signature: _____

Printed Name: _____

Title (*if any*): _____

Date: _____

For PORTLAND GENERAL ELECTRIC COMPANY:

Signature: _____

Printed Name: _____

Title: _____

Date: _____

Attachment A

**System Impact Study Agreement
PGE Provided Scope, Schedule, and Budget for System Impact Study**



**Small Generator Facility
Facilities Study Agreement**

This Agreement is made and entered into this ___ day of _____ (*month and year*) by and between _____, an individual a company, (“Applicant”) and Portland General Electric Company, a corporation existing under the laws of the State of Oregon, (“PGE”). Applicant and PGE each may be referred to as a “Party,” or collectively as the “Parties.”

Recitals:

Whereas, Applicant is proposing to develop a Small Generator Facility or adding generating capacity to an existing Small Generator Facility consistent with the Application completed on _____; and

Whereas, Applicant desires to interconnect the Small Generator Facility with PGE’s Transmission & Distribution (T&D) System; and

Whereas, PGE has completed a System Impact Study and provided the results of said study to Applicant (This recital to be omitted if the Parties have agreed to forego the System Impact Study.); and

Whereas, Applicant has requested PGE to perform a Facilities Study to specify and estimate the cost of the equipment, engineering, procurement and construction work in accordance with Good Utility Practice needed to physically and electrically connect the Small Generator Facility to PGE’s T&D System.

Now, therefore, in consideration of and subject to the mutual covenants contained herein the Parties agree as follows:

1. When used in this Agreement, with initial capitalization, the terms specified shall have the meanings set forth in this Agreement or as given in OAR 860-082-0005 through 860-082-0085 and to the extent that this Agreement conflicts with the Rules, the Rules shall take precedence.
2. Applicant and PGE shall cause to be performed a Facilities Study consistent with OAR 860-082-0060(8).
3. The scope of the Facilities Study shall be subject to data provided by Applicant in its Application as well as the data provided by the Applicant in Attachment A of this Agreement.
4. A Facilities Study report (1) shall provide a description, estimated cost, and schedule

for required Interconnection Facilities and System Upgrade(s) to interconnect the Small Generator Facility to PGE’s T&D System including a description of any facilities or upgrades necessary to address impacts to Affected Systems and (2) shall address the short circuit, instability, and power flow issues identified in any prior System Impact Studies.

5. PGE may require a study deposit as described in OAR 860-082-0035(1).

6. As required by OAR 860-082-0060(8)(a), the public utility will provide scope for the Facilities Study, a reasonable schedule for completion of the study, and a good-faith, non-binding cost estimate to perform the study (Attachment B). In cases where no System Upgrade or Interconnection Facilities is required, the Facilities Study shall be completed and the results will be transmitted to Applicant within thirty (30) calendar days after this Agreement is signed by the Parties.

7. Study fees will be based on actual costs in accordance with the provisions of 860-082-0035 and as follows:

7.1 The non-binding good faith estimate of the cost to complete the Facilities Study is \$. Applicant is required to pay a deposit of fifty (50) percent this estimate or \$1,000, whichever is less, prior to start date of study.

7.2 Any study fees shall be based on PGE’s actual costs and will be invoiced to Applicant after the study is completed and delivered and will include a summary of professional time.

7.3 Applicant must pay any study costs that exceed the deposit without interest within thirty (30) calendar days on receipt of the invoice or resolution of any dispute. If the deposit exceeds the invoiced fees, PGE shall refund such excess within thirty (30) calendar days of the invoice without interest.

8. Cost Responsibility is detailed in OAR 860-082-0035 of the Rule.

Signatures:

In witness whereof, the Parties have caused this Agreement to be executed by their respective duly authorized representatives.

For APPLICANT:

Signature: _____

Printed Name: _____

Title (*if any*): _____

Date: _____

For PORTLAND GENERAL ELECTRIC COMPANY:

Signature: _____

Printed Name: _____

Title: _____

Date: _____

Attachment A
Facilities Study Agreement

Data to be Provided by Applicant with the Facilities Study Agreement

Provide location plan and simplified one-line diagram of the plant and station facilities. For staged projects, please indicate future generation, distribution circuits, etc.

Please provide a 7.5-minute quadrangle map of the site. Indicate the plant, station, distribution line, and property lines.

Estimated line length from interconnection station to the PGE's T&D System:
_____.

On the one-line diagram, indicate the generation capacity attached at each utility metering location (maximum load on CT/PT).

One set of metering is required for each generation connection to the new ring bus or existing PGE station. Number of generation connections: _____

On the one-line diagram, indicate the location of any auxiliary power and minimum load on CT/PT (Amps).

Will an alternate source of auxiliary power be available during CT/PT maintenance?
Yes _____ No _____.

Will a transfer bus on the generation side of the metering require that each meter set be designed for the total plant generation?
Yes _____ No _____ (Please indicate on the one-line diagram.)

What type of control system or PLC will be located at the Generating Facility?
_____.

What protocol does the control system or PLC use? _____.

Attachment B
Facilities Study Agreement
PGE Provided Scope, Schedule, and Budget for Facilities Study



Small Generator Facility Certificate of Completion Form¹

Applicant Information

Name: _____

Mailing Address: _____

City: _____ State: _____ Zip Code: _____

Telephone (Daytime): _____ (Cell/Evening): _____

E-Mail Address: _____

Site Location for Small Generator Facility:

Street Address/GPS Coordinates: _____

City: _____ State: _____ Zip Code: _____

Installer

Name: _____

Mailing Address: _____

City: _____ State: _____ Zip Code: _____

Telephone (Office): _____ (Cell): _____

E-Mail Address: _____

Final electric inspection form attached

¹ The interconnection shall not be deemed complete and ready for operation until the Applicant has complete this form, secured the necessary attachments and signatures and returned a copy to PGE at PGE's designated address.

Final Electric Inspection and Applicant Signature

The Small Generator Facility is complete and has been approved by the local electric inspector having jurisdiction. **A signed copy of the electric inspector's form indicating final approval is attached.** The Applicant acknowledges that the Small Generator Facility is not ready for operation until receipt of the acceptance and final approval by Portland General Electric (PGE) as provided below.

Applicant Signature _____ Date: _____

Printed Name: _____ Title (if applicable): _____

.....

Acceptance and Final Approval of Interconnection Installation (for PGE use only)

The interconnection installation is approved and the Small Generator Facility is approved for operation under the terms and conditions of the PUC rules found in OAR 860, Division 082 and a duly signed and executed Interconnection Agreement.

PGE waives Witness Test? (Initial) Yes (_____) No (_____)

If not waived, date of successful Witness Test: _____ (Initial) (_____)

PGE Signature: _____ Date: _____

Printed Name: _____ Title: _____



Small Generator Facility Interconnection Equipment As-Built Specifications, Initial Settings, and Operating Requirements*

Facility Location and Contact Information

Applicant: _____
 Facility Operator (if different than previous): _____
 Facility Contact Phone: _____ Cell phone: _____
 Location Address/ GPS Coordinates: _____
 City: _____ State: _____ Zip Code: _____
 Application Completion Date: _____
 Revision Date (if applicable): _____

Energy Production Equipment/Inverter Information

Synchronous Induction Inverter Other _____
 Electric Nameplate Rating: _____ kW _____ kVA
 Rated Voltage: _____ Volts
 Rated Current: _____ Amps
 Phase: Single 3-Phase
 System Type Tested (Total System): Yes No (attach product literature)

Other Facility Information

Electrical One-Line Diagram (showing complete circuit between generator and proposed point-of-interconnection, including all protective devices, etc.)
 Site Plan (including all protective devices, including isolation device location, point(s) of common coupling, and generator location)
 Isolation Device Type: _____
 Grounding Configuration: _____
 Initial Commissioning Date: _____

* Initial operating set points and 'as-built' equipment data is to be recorded on or about the time of the Witness Test. It shall remain part of the permanent interconnection record described in OAR 860-082-0065. **Parties may not deviate from initial settings and agreed upon operating parameters except as permitted by the Rule, without written authorization of PGE.** The Interconnection Customer will furnish updated information to PGE any time a special operating requirement initial set point or the Interconnection Equipment is materially changed.

Switchgear/Circuit Interruption Devices

Switchgear type and control: (used to bring generator on line)

Circuit Breakers: Closed-transition Open-transition Auto Transfer Switch

Nameplate: _____

Telemetry

Telemetry Requirements: _____

System Configuration: _____

Data Scan Rate: _____

Data Point List: _____

Telemetry Data Delivery Location: _____

Initial Set Points at Point of Interconnection

Voltage: _____ kVAr: _____

Power factor: _____

Other: _____

Other: _____

Trip Re-Start Protocol

Reclosing Practice: _____

Hold out time: _____

Ramp Rate: _____

Notification required: Yes No

Operations and Maintenance Schedule

Operating Hours: _____ Availability: _____ %

Seasonal Effect: _____

Routine and Annual Maintenance Schedule: _____

Applicant Signature:

I hereby certify that all of the information provided in this document is correct.

Applicant Signature: _____ Date: _____

Printed Name: _____ Title (*if applicable*): _____



Interconnection Agreement for Small Generator Facility Tier 1, Tier 2, Tier 3 or Tier 4 Interconnection

(Small Generator Facilities with Electric Nameplate Capacities of 10 MW or Less)

This Interconnection Agreement (sometimes also referred to as “Agreement”) is made and entered into this ___ day of (*month and year*) by and between _____, an individual a company, (“Applicant”) and Portland General Electric Company, a corporation existing under the laws of the State of Oregon, (“PGE”). Applicant and PGE each may be referred to as a “Party,” or collectively as the “Parties.”

Recitals:

Whereas, the Applicant is proposing to develop a Small Generator Facility, or to add generating capacity to an existing Small Generator Facility, consistent with the Application completed on _____;

Whereas, the Applicant desires to interconnect the Small Generator Facility with PGE’s Transmission and Distribution System (T&D System); and

Whereas, the Agreement shall be used for all approved Tier 1, Tier 2, Tier 3 and Tier 4 Interconnection Applications according to the procedures set forth in OPUC Rule OAR 860, Division 082 (Rule). Terms with initial capitalization, when used in this Agreement, shall have the meanings given in the Rule and, to the extent this Agreement conflicts with the Rule, the Rule shall take precedence.

Now, therefore, in consideration of and subject to the mutual covenants contained herein, the Parties agree as follows:

Article 1. **Scope and Limitations of Agreement**

1.1 Scope

The Agreement establishes standard terms and conditions approved by the Commission under which the Small Generator Facility with a Nameplate Capacity of 10 MW or less will interconnect to, and operate in parallel with PGE’s T&D System. Additions, deletions or changes to the standard terms and conditions of an Interconnection Agreement will not be permitted unless they are mutually agreed to by the Parties or approved by the Commission if required by the Rule.

1.2 Power Purchase

The Agreement does not constitute an agreement to purchase, transmit, or deliver the Applicant’s power nor does it constitute an electric service agreement.

1.3 Other Agreements

Nothing in the Interconnection Agreement is intended to affect any other agreement between PGE and the Applicant or another Interconnection Customer. However, in the event that the provisions of the Agreement are in conflict with the provisions of other PGE tariffs, PGE tariff shall control.

1.4 Responsibilities of the Parties

- 1.4.1 The Parties shall perform all obligations of this Agreement in accordance with all applicable laws.
- 1.4.2 The Applicant will construct, own, operate, and maintain its Small Generator Facility in accordance with the Agreement, IEEE Standard 1547 (2003 ed), the National Electrical Code (2005 ed) and applicable standards required by the Commission.
- 1.4.3 Each Party shall be responsible for the safe installation, maintenance, repair and condition of their respective lines and appurtenances on their respective sides of the Point of Interconnection. Each Party shall provide Interconnection Facilities that adequately protect the other Parties' facilities, personnel, and other persons from damage and injury. The allocation of responsibility for the design, installation, operation, maintenance and ownership of Interconnection Facilities is prescribed in the Rule.

1.5 Parallel Operation and Maintenance Obligations

Once the Small Generator Facility has been authorized to commence Parallel Operation by execution of the Interconnection Agreement, the Applicant will abide by all written provisions for operating and maintenance as required by the Rule and detailed by PGE in Form 7, title "**Interconnection Equipment As Built Specifications, Initial Settings and Operating Requirements**" a copy of which is provided on PGE's website.

1.6 Metering and Monitoring

The Interconnection Customer will be responsible for metering and monitoring as required by OAR 860-082-0070.

1.7 Power Quality

The Applicant will design its Small Generator Facility to maintain a composite power delivery at continuous rated power output at the Point of Interconnection that meets the requirements set forth in IEEE 1547. PGE may, in some circumstances, also require the Applicant to follow voltage or VAR schedules used by similarly situated, comparable generators in the control area. Any special operating requirements will be detailed in Form 7 provided on the Commission website and completed by PGE as required by the Rule. Under no circumstances shall these additional requirements for voltage or reactive power support exceed the normal operating capabilities of the Small Generator Facility. For purposes of this Agreement, "control area" shall mean an electrical system or systems bounded by interconnection metering and telemetry, capable of controlling generation to maintain its interchange schedule with other control areas and contributing to frequency regulation of the interconnection.

Article 2. Inspection, Testing, Authorization, and Right of Access**2.1 Equipment Testing and Inspection**

The Applicant will test and inspect its Small Generator Facility Facilities prior to interconnection in accordance with IEEE 1547 Standards as provided for in the Rule. The Interconnection will not be final until the Witness Test and Certificate of Completion provisions in the Rule have been satisfied. Operation of the Small Generator Facility requires an-Interconnection Agreement; electricity sales require a Power Purchase Agreement.--To the extent that the Applicant decides to conduct interim testing of the Small Generator Facility prior to the Witness Test, it may request that PGE observe these tests and that these tests be deleted from the final Witness Test. If PGE agrees to send

qualified personnel to the Small Generator Facility to observe such interim testing, it will be doing so at its own expense unless the Parties agree otherwise

2.2 Right of Access

As provided in OAR 860-082-0020, PGE will have access to the Applicant's premises for any reasonable purpose in connection with the Interconnection Application and any Interconnection Agreement that is entered in to pursuant to this Rule or if necessary to meet the legal obligation to provide service to its customers. Access will be requested at reasonable hours and upon reasonable notice, or at any time without notice in the event of an emergency or hazardous condition.

Article 3. Effective Date, Term, Termination, and Disconnection

3.1 Effective Date

The Agreement shall become effective upon execution by the Parties.

3.2 Term of Agreement

The Agreement will be effective on the Effective Date and will remain in effect for a period of twenty (20) years or the life of the Power Purchase Agreement, whichever is shorter or a period mutually agreed to by Parties, unless terminated earlier by the default or voluntary termination by the Interconnection Customer or by action of the Commission.

3.3 Termination

No termination will become effective until the Parties have complied with all applicable laws and any clauses of the Rule or this Agreement applicable to such termination.

3.3.1 The Applicant may terminate this Agreement at any time by giving PGE twenty (20) business days written notice.

3.3.2 Either Party may terminate this Agreement after default pursuant to Article 5.6 of this Agreement.

3.3.3 The Commission may order termination of this Agreement.

3.3.4 Upon termination of this Agreement, the Small Generator Facility will be disconnected from PGE's T&D System at the Applicant's expense. The termination of this Agreement will not relieve either Party of its liabilities and obligations, owed or continuing at the time of the termination.

3.3.4 The provisions of this Article shall survive termination or expiration of this Agreement.

3.4 Temporary Disconnection

PGE or the Applicant may temporarily disconnect the Small Generator Facility from its T&D System for so long as reasonably necessary, as provided in OAR 860-082-0075 of the Rule, in the event one or more of the following conditions or events occurs:

3.4.1 Under emergency conditions, PGE or the Interconnection Customer may immediately suspend interconnection service and temporarily disconnect the Small Generator Facility. PGE shall notify the Applicant promptly when it becomes aware of an emergency condition that may reasonably be expected to affect the Small Generator Facility operation. The Applicant will notify PGE promptly when it becomes aware of an emergency condition that may reasonably be expected to affect PGE's T&D System. To the extent information is known, the notification shall describe the emergency condition, the extent of the damage or deficiency, the expected effect on the operation of both Parties' facilities and operations, its anticipated duration, and the necessary corrective action.

- 3.4.2 For routine Maintenance, Parties will make reasonable efforts to provide five (5) business days notice prior to interruption caused by routine maintenance or construction and repair to the Small Generator Facility or PGE's T&D system and shall use reasonable efforts to coordinate such interruption.
- 3.4.3 For Forced outages of the T&D System, PGE shall use reasonable efforts to provide the Applicant with prior notice of forced outages to effect immediate repairs to the T&D System. If prior notice is not given, PGE shall, upon request, provide the Applicant written documentation after the fact explaining the circumstances of the disconnection.
- 3.4.4 For disruption or deterioration of service, where PGE determines that operation of the Small Generator Facility will likely cause disruption or deterioration of service to other customers served from the same electric system, or if operating the Small Generator Facility could cause damage to PGE's T&D System, PGE may disconnect the Small Generator Facility. PGE will provide the Applicant upon request all supporting documentation used to reach the decision to disconnect. PGE may disconnect the Small Generator Facility if, after receipt of the notice, the Applicant fails to remedy the adverse operating effect within a reasonable time which shall be at least five (5) business days from the date the Applicant receives PGE's written notice supporting the decision to disconnect, unless emergency conditions exist, in which case the provisions of 3.4.1 of the Agreement apply.
- 3.4.5 If the Applicant makes any change other than Minor Equipment Modifications without prior written authorization of PGE, PGE will have the right to temporarily disconnect the Small Generator Facility.

3.5 Restoration of Interconnection

The Parties shall cooperate with each other to restore the Small Generator Facility, Interconnection Facilities, and PGE's T&D System to their normal operating state as soon as reasonably practicable following any disconnection pursuant to section 3.4.

Article 4. Cost Responsibility and Billing

The Applicant is responsible for the application fee and for such facilities, equipment, modifications and upgrades as required in 860-082-0035.

4.1 Minor T&D System Modifications

Modifications to the existing T&D System identified by PGE and set forth in Attachment A, such as changing meters, fuses or relay settings, are deemed Minor Modifications. It is PGE's sole discretion to decide what constitutes a Minor Modification. The Applicant will bear the costs of making such Minor Modifications as may be necessary to gain approval of an Application.

4.2 Interconnection Facilities

PGE will identify, under the study procedures of an Application review, the Interconnection Facilities necessary to safely interconnect the Small Generator Facility with PGE. Attachment A itemizes the Interconnection Facilities for the Applicant, including the cost of the facilities and the time required to build and install those facilities. The Applicant is responsible for the cost of the Interconnection Facilities.

4.3 Interconnection Equipment

The Applicant is responsible for all reasonable expenses, including overheads, associated with owning, operating, maintaining, repairing, and replacing its Interconnection Equipment.

4.4 System Upgrades

PGE will design, procure, construct, install, and own any System Upgrades. The actual cost of the System Upgrades, including overheads, is set forth in Attachment A and will be directly assigned to the Applicant. An Interconnection Customer may be entitled to financial compensation from other PGE Interconnection Customers who, in the future, benefit from the System Upgrades paid for by the Interconnection Customer. Such compensation will be governed by separate rules promulgated by the Commission or by terms of a tariff filed and approved by the Commission. Such compensation will only be available to the extent provided for in the separate rules or tariff.

4.5 Adverse System Impact

PGE is responsible for identifying Adverse System Impacts on any Affected Systems and for determining what mitigation activities or upgrades may be required to accommodate a Small Generator Facility. The actual cost of any actions taken to address the Adverse System Impacts, including overheads, shall be directly assigned to the Applicant. The Applicant may be entitled to financial compensation from other public utilities or other Interconnection Customers who, in the future, utilize the upgrades paid for by the Applicant, to the extent as allowed by the Commission. Adverse System Impacts are set forth in Attachment A.

4.6 Billings

PGE may require a deposit of not more than 50% of the cost estimate, not to exceed \$1,000, to be paid up front by the Applicant for studies necessary to complete an Application and to interconnect the Small Generator Facility to the T&D System. PGE may require a deposit of no more than 25% of the estimated costs, not to exceed \$10,000, for Interconnection Facilities necessary to complete an Application and to interconnect the Small Generator Facility to the T&D System. Progress billing, final billing and payment schedules must be agreed to by Parties prior to commencing work.

Article 5. Assignment, Liability, Indemnity, Force Majeure, Consequential Damages, and Default**5.1 Assignment**

The Interconnection Agreement may be assigned by either Party upon fifteen (15) business days prior written notice. Except as provided in Articles 5.1.1 and 5.1.2, said assignment shall only be valid upon the prior written consent of the non-assigning Party, which consent shall not be unreasonably withheld.

5.1.1 Either Party may assign the Agreement without the consent of the other Party to any affiliate (which shall include a merger of the Party with another entity), of the assigning Party with an equal or greater credit rating and with the legal authority and operational ability to satisfy the obligations of the assigning Party under this Agreement;

5.1.2 The Applicant shall have the right to assign the Agreement, without the consent of PGE, for collateral security purposes to aid in providing financing for the Small Generator Facility. For Small Generator systems that are integrated into a building facility, the sale of the building or property will result in an automatic transfer of the Agreement to the new owner who shall be responsible for complying with the terms and conditions of this Agreement.

5.1.3 Any attempted assignment that violates this Article is void and ineffective. Assignment shall not relieve a Party of its obligations, nor shall a Party's

obligations be enlarged, in whole or in part, by reason thereof. An assignee is responsible for meeting the same obligations as the Applicant.

5.2 Limitation of Liability and Consequential Damages

A Party is liable for any loss, cost claim, injury, or expense including reasonable attorney's fees related to or arising from any act or omission in its performance of the provisions of an Interconnection Agreement entered into pursuant to the Rule except as provided for in ORS 757.300(4)(c). Neither Party will seek redress from the other Party in an amount greater than the amount of direct damage actually incurred.

5.3 Indemnity

5.3.1 This provision protects each Party from liability incurred to third parties as a result of carrying out the provisions of the Agreement. Liability under this provision is exempt from the general limitations on liability found in Article 5.2.

5.3.2 Each Party shall, to the extent allowed by law, and subject to the limitations imposed by ORS 30.260 to ORS 30.300, if applicable, at all times indemnify, defend, and hold the other Party harmless from, any and all damages, losses, claims, including claims and actions relating to injury to or death of any person or damage to property, demands, suits, recoveries, costs and expenses, court costs, attorney fees at trial and on appeal, and all other obligations by or to third parties (hereinafter "Harm"), arising out of or resulting from its negligent action or failure to meet its obligations under this Agreement. Such indemnity obligation shall be limited to the proportional extent the Harm is caused by the negligence of the indemnified Party.

5.3.3 If an indemnified person is entitled to indemnification under this Article as a result of a claim by a third party, and the indemnifying Party fails, after notice and reasonable opportunity to proceed under this Article, to assume the defense of such a claim, such indemnified person may at the expense of the indemnifying Party contest, settle or consent to the entry of any judgment with respect to, or pay in full, such claim.

5.3.4 If an indemnifying party is obligated to indemnify and hold any indemnified person harmless under this Article, the amount owing to the indemnified person shall be the amount of such indemnified person's actual loss, net of any insurance or other recovery.

5.3.5 Promptly after receipt by an indemnified person of any claim or notice of the commencement of any action or administrative or legal proceeding or investigation as to which the indemnity provided for in this Article may apply, the indemnified person shall notify the indemnifying party of such fact. Any failure of or delay in such notification shall not affect a Party's indemnification obligation unless such failure or delay is materially prejudicial to the indemnifying party.

5.3.6 The indemnifying Party shall have the right to assume the defense thereof with counsel designated by such indemnifying Party and reasonably satisfactory to the indemnified person. If the defendants in any such action include one or more indemnified persons and the indemnifying Party and if the indemnified person reasonably concludes that there may be legal defenses available to it and/or other indemnified persons which are different from or additional to those available to the indemnifying Party, the indemnified person shall have the right to select separate counsel to assert such legal defenses and to otherwise participate in the defense of such action on its own behalf. In such instances, the indemnifying

Party shall only be required to pay the fees and expenses of one additional attorney to represent an indemnified person or indemnified persons having such differing or additional legal defenses.

- 5.3.7 The indemnified person shall be entitled, at its expense, to participate in any such action, suit or proceeding, the defense of which has been assumed by the indemnifying Party. Notwithstanding the foregoing, the indemnifying Party (i) shall not be entitled to assume and control the defense of any such action, suit or proceedings if and to the extent that, in the opinion of the indemnified person and its counsel, such action, suit or proceeding involves the potential imposition of criminal liability on the indemnified person, or there exists a conflict or adversity of interest between the indemnified person and the indemnifying Party, in such event the indemnifying Party shall pay the reasonable expenses of the indemnified person, and (ii) shall not settle or consent to the entry of any judgment in any action, suit or proceeding without the consent of the indemnified person, which shall not be reasonably withheld, conditioned or delayed.

5.4 Consequential Damages

Neither Party shall be liable to the other Party, under any provision of the Agreement, for any losses, damages, costs or expenses for any special, indirect, incidental, consequential, or punitive damages, including but not limited to loss of profit or revenue, loss of the use of equipment, cost of capital, cost of temporary equipment or services, whether based in whole or in part in contract, in tort, including negligence, strict liability, or any other theory of liability; provided, however, that damages for which a Party may be liable to the other Party under another agreement will not be considered to be special, indirect, incidental, or consequential damages hereunder.

5.5 Force Majeure

- 5.5.1 As used in this Agreement, a Force Majeure Event shall mean “any act of God, labor disturbance, act of the public enemy, war, acts of terrorism, insurrection, riot, fire, storm or flood, explosion, breakage or accident to machinery or equipment through no direct, indirect, or contributory act of a Party, any order, regulation or restriction imposed by governmental, military or lawfully established civilian authorities, or any other cause beyond a Party’s control. A Force Majeure Event does not include an act of negligence or intentional wrongdoing.”
- 5.5.2 If a Force Majeure Event prevents a Party from fulfilling any obligations under this Agreement, the Party affected by the Force Majeure Event (Affected Party) shall promptly notify the other Party of the existence of the Force Majeure Event. The notification must specify in reasonable detail the circumstances of the Force Majeure Event, its expected duration, and the steps that the Affected Party is taking to mitigate the effects of the event on its performance, and if the initial notification was verbal, it should be promptly followed up with a written notification. The Affected Party shall keep the other Party informed on a continuing basis of developments relating to the Force Majeure Event until the event ends the Affected Party will be entitled to suspend or modify its performance of obligations under this Agreement (other than the obligation to make payments) only to the extent that the effect of the Force Majeure Event cannot be reasonably mitigated. The Affected Party will use reasonable efforts to resume its performance as soon as possible. The Parties shall immediately report to the Commission should a Force Majeure

Event prevent performance of an action required by Rule that the Rule does not permit the Parties to mutually waive.

5.6 Default

- 5.6.1 No default shall exist where such failure to discharge an obligation (other than the payment of money) is the result of a Force Majeure Event as defined in this Agreement, or the result of an act or omission of the other Party. Upon a default, the non-defaulting Party shall give written notice of such default to the defaulting Party. Except as provided in Article 5.6.2, the defaulting Party shall have sixty (60) calendar days from receipt of the default notice within which to cure such default; provided however, if such default is not capable of cure within sixty 60 calendar days, the defaulting Party shall commence such cure within twenty (20) calendar days after notice and continuously and diligently complete such cure within six (6) months from receipt of the default notice; and, if cured within such time, the default specified in such notice shall cease to exist.
- 5.6.2 If a default is not cured as provided for in this Article, or if a default is not capable of being cured within the period provided for herein, the non-defaulting Party shall have the right to terminate the Agreement by written notice at any time until cure occurs, and be relieved of any further obligation hereunder and, whether or not that Party terminates the Agreement, to recover from the defaulting Party all amounts due hereunder, plus all other damages and remedies to which it is entitled at law or in equity. Alternately, the non-defaulting Party shall have the right to seek dispute resolution pursuant to Article 7 with the Commission in lieu of default. The provisions of this Article will survive termination of the Agreement.

Article 6. Insurance

A Party is liable for any loss, cost claim, injury, or expense including reasonable attorney's fees related to or arising from any act or omission in its performance of the provisions of this Rule or the Interconnection Agreement entered into pursuant to this Rule.

- 6.1 Pursuant to the Rule adopted by the Commission, PGE may not require the Interconnection Customer to maintain general liability insurance in relation to the interconnection of a Small Generator Facility with an Electric Nameplate Capacity of 200 kW or less. With regard to the interconnection of a Small Generator Facility with an Electric Nameplate Capacity equal to or less than 10 MW but in excess of 200 kW, the Interconnection Customer shall, at its own expense, maintain in force throughout the period of this Agreement general liability insurance sufficient to protect any person (including PGE) who may be affected by the Interconnection Customer's Small Generator Facility and its operation and such insurance shall be sufficient to satisfy the Interconnection Customer's indemnification responsibilities under Article 5.3 of this Agreement.
- 6.2 Within ten (10) business days following execution of this Agreement, and as soon as practicable after the end of each fiscal year or at the renewal of the insurance policy and in any event within ninety (90) calendar days there after, the Interconnection Customer shall provide the Public Utility with certification of all insurance required in this Agreement, executed by each insurer or by an authorized representative of each insurer.
- 6.3 All insurance required by this Article 6 shall name the Public, its parent, associated and Affiliate companies and their respective directors, officers, agents, servants and employees ("Other Party Group") as additional insured. All policies shall contain provisions whereby

the insurers waive all rights of subrogation against the Other Party Group and provide thirty (30) calendar days advance written notice to the Other Party Group prior to anniversary date of cancellation or any material change in coverage or condition. The Interconnection Customer's insurance shall contain provisions that specify that the policies are primary and shall apply to such extent without consideration for other policies separately carried and shall state that each insured is provided coverage as though a separate policy had been issued to each, except the insurer's liability shall not be increased beyond the amount for which the insurer would have been liable had only one insured been covered. The insurance policies, if written on a Claims First Made Basis, shall be maintained in full force and effect for two (2) years after termination of this Agreement, which coverage may be in the form of tail coverage or extended reporting period coverage if agreed by the Parties.

- 6.4 The Parties agree to report to each other in writing as soon as practical all accidents or occurrences resulting in injuries to any person, including death, and any property damage arising out of this Agreement.
- 6.5 The requirements contained herein as to insurance are not intended to and shall not in any manner limit or qualify the liabilities and obligations assumed by the Parties under this Agreement.

Article 7. Dispute Resolution

Parties will adhere to the dispute resolution provisions in OAR 860-082-0080.

Article 8. Miscellaneous

8.1 Governing Law, Regulatory Authority, and Rules

The validity, interpretation and enforcement of the Agreement and each of its provisions shall be governed by the laws of the State of Oregon, without regard to its conflicts of law principles. The Agreement is subject to all applicable laws. Each Party expressly reserves the right to seek changes in, appeal, or otherwise contest any laws, orders, or regulations of a governmental authority.

8.2 Amendment

The Parties may mutually agree to amend the Agreement by a written instrument duly executed by both Parties in accordance with provisions of the Rule and applicable Commission Orders and provisions of the laws if the State of Oregon.

8.3 No Third-Party Beneficiaries

The Agreement is not intended to and does not create rights, remedies, or benefits of any character whatsoever in favor of any persons, corporations, associations, or entities other than the Parties, and the obligations herein assumed are solely for the use and benefit of the Parties, their successors in interest and where permitted, their assigns.

8.4 Waiver

- 8.4.1 The failure of a Party to the Agreement to insist, on any occasion, upon strict performance of any provision of the Agreement will not be considered a waiver of any obligation, right, or duty of, or imposed upon, such Party.
- 8.4.2 The Parties may agree to mutually waive a section of this Agreement so long as prior Commission approval of the waiver is not required by the Rule.
- 8.4.3 Any waiver at any time by either Party of its rights with respect to the Agreement shall not be deemed a continuing waiver or a waiver with respect to any other

failure to comply with any other obligation, right, or duty of the Agreement. Any waiver of the Agreement shall, if requested, be provided in writing.

8.5 Entire Agreement

The Interconnection Agreement, including any supplementary Form attachments that may be necessary, constitutes the entire Agreement between the Parties with reference to the subject matter hereof and supersedes all prior and contemporaneous understandings or agreements, oral or written, between the Parties with respect to the subject matter of the Agreement. There are no other agreements, representations, warranties, or covenants that constitute any part of the consideration for, or any condition to, either Party's compliance with its obligations under the Agreement.

8.6 Multiple Counterparts

The Agreement may be executed in two or more counterparts, each of which is deemed an original but all constitute one and the same instrument.

8.7 No Partnership

The Agreement will not be interpreted or construed to create an association, joint venture, agency relationship, or partnership between the Parties or to impose any partnership obligation or partnership liability upon either Party. Neither Party shall have any right, power or authority to enter into any agreement or undertaking for, or act on behalf of, or to act as or be an agent or representative of, or to otherwise bind, the other Party.

8.8 Severability

If any provision or portion of the Agreement shall for any reason be held or adjudged to be invalid or illegal or unenforceable by any court of competent jurisdiction or other governmental authority; (1) such portion or provision shall be deemed separate and independent; (2) the Parties shall negotiate in good faith to restore insofar as practicable the benefits to each Party that were affected by such ruling; and (3) the remainder of the Agreement shall remain in full force and effect.

8.10 Subcontractors

Nothing in the Agreement shall prevent a Party from utilizing the services of any subcontractor, or designating a third party agent as one responsible for a specific obligation or act required in the Agreement (collectively subcontractors), as it deems appropriate to perform its obligations under the Agreement; provided, however, that each Party will require its subcontractors to comply with all applicable terms and conditions of the Agreement in providing such services and each Party will remain primarily liable to the other Party for the performance of such subcontractor.

8.10.1 The creation of any subcontract relationship shall not relieve the hiring Party of any of its obligations under the Agreement. The hiring Party shall be fully responsible to the other Party for the acts or omissions of any subcontractor the hiring Party hires as if no subcontract had been made. Any applicable obligation imposed by the Agreement upon the hiring Party shall be equally binding upon, and will be construed as having application to, any subcontractor of such Party.

8.10.2 The obligations under this Article will not be limited in any way by any limitation of subcontractor's insurance.

8.11 Reservation of Rights

Either Party will have the right to make a unilateral filing with the Commission to modify the Interconnection Agreement. This reservation of rights provision will include but is not limited to modifications with respect to any rates terms and conditions, charges, classification of service, rule or regulation under tariff rates or any applicable State or

Federal law or regulation. Each Party shall have the right to protest any such filing and to participate fully in any proceeding before the Commission in which such modifications may be considered.

Article 9. Notices and Records

9.1 General

Unless otherwise provided in the Agreement, any written notice, demand, or request required or authorized in connection with the Agreement shall be deemed properly given if delivered in person, delivered by recognized national courier service, or sent by first class mail, postage prepaid, to the person specified below:

If to the Applicant:

Applicant: _____
Attention: _____
Address: _____
City: _____ State: _____ Zip: _____
Phone: _____
Fax: _____
E-mail _____

If to PGE:

Attention: _____
Address: _____
City: _____ State: _____ Zip: _____
Phone: _____
Fax: _____
E-mail _____

9.2 Records

The utility will maintain a record of all Interconnection Agreements and related Form attachments for as long as the interconnection is in place as required by OAR 860-082-065. PGE will provide a copy of these records to the Applicant or Interconnection Customer within fifteen (15) business days if a request is made in writing.

9.3 Billing and Payment

Billings and payments shall be sent to the addresses set out below:

If to the Applicant (complete if different than Article 9.1 above):

Applicant: _____
Attention: _____
Address: _____
City: _____ State: _____ Zip: _____

If to PGE:

Attention: _____
Address: _____
City: _____ State: _____ Zip: _____

9.4 Designated Operating Representative

The Parties will designate operating representatives to conduct the communications which may be necessary or convenient for the administration of the operations provisions of the Agreement. This person will also serve as the point of contact with respect to operations and maintenance of the Party's facilities:

Applicant's Operating Representative (complete if different than Article 9.1 above):

Attention: _____
Address: _____
City: _____ State: _____ Zip: _____
Phone: _____
Fax: _____
E-mail: _____

PGE's Operating Representative:

Attention: _____
Address: _____
City: _____ State: _____ Zip: _____
Phone: _____
Fax: _____
E-mail: _____

9.5 Changes to the Notice Information

Either Party may change this notice information by giving five (5) business days written notice prior to the effective date of the change.

Article 10. Signatures

IN WITNESS WHEREOF, the Parties have caused the Agreement to be executed by their respective duly authorized representatives.

For the Applicant:

Signature: _____

Printed Name: _____

Title (*if applicable*): _____

Date: _____

For PGE:

Signature: _____

Printed Name: _____

Title: _____

Date: _____

Attachment A

**Description and Costs of Minor Modifications, Interconnection Facilities,
System Upgrades, and Adverse System Impacts**

Attachment B

**Description of Interconnection Facilities
and Metering Equipment Operated or Maintained by the Public Utility**

PGE will provide description and best estimate itemized cost, including overheads, to operate and maintain the Interconnection Facilities and metering equipment for the interconnected small generator (if applicable).

Attachment C**One-Line Diagram**

One-line diagram depicting the Generator Facility, Interconnection Facilities, metering equipment, and upgrades including safety lockout features and any special accessibility requirements.

Attachment D

Scope of Work/Milestones

In-Service Date: _____

Critical milestones and responsibility as agreed to by the Parties:

	Milestone/Date	Responsible Party
(1)	_____	_____
(2)	_____	_____
(3)	_____	_____
(4)	_____	_____
(5)	_____	_____
(6)	_____	_____
(7)	_____	_____
(8)	_____	_____
(9)	_____	_____
(10)	_____	_____

Attachment E

Additional Operating Requirements