

1. Scope and Applicability

- 1.1. These rules may be cited as the South Dakota Small Generation Interconnection Rules, (hereafter "SGIR") and govern the interconnection of small generator facilities with an electric nameplate capacity of 20 MW or less to the electric transmission and distribution system of a Public Utility. These rules do not apply if the small generator facility is producing electricity for resale to a person other than the interconnecting Public Utility.

2. Request for Waiver

- 2.1. For good cause shown, a person may request that the Commission waive any of the SGIR.
 - 2.1.1. An interconnecting Public Utility and an interconnection applicant may mutually agree to reasonable extensions to the required times for notices and submissions of information set forth in the SGIR for the purpose of allowing efficient and complete review of an interconnection application.
 - 2.1.2. If an interconnecting Public Utility unilaterally seeks waiver of the timelines set forth in the SGIR, the Commission must consider the number of pending applications for interconnection and the type of applications, including review level, facility type, and facility size.
 - 2.1.3. The parties may also agree to mutually waive a section of the SGIR or an Interconnection Agreement entered in to pursuant to these Rules without the Commission's permission where the SGIR or Agreement expressly so provides.

3. Definitions

- 3.1. "Adverse system impact" means a negative effect caused by the proposed interconnection that may compromise the safety and reliability of an electric transmission and distribution system.
- 3.2. "Affected System" means an electric transmission and distribution system, not owned or operated by the interconnecting public utility, which may experience an Adverse System Impact from the proposed interconnection.
- 3.3. "Applicant" means a person or entity who has submitted an application to interconnect a Small Generator Facility to a Public Utility's electric transmission and distribution system.
- 3.4. "Application" means a request to interconnect a Small Generator Facility with a Public Utility's electric transmission and distribution system. An Application must follow the standard form application developed by the Public Utility and filed with and approved by the Commission.

- 3.5. "Area Network" means a type of electric distribution system served by multiple transformers interconnected in an electrical network circuit in order to provide high reliability of service. This term has the same meaning as the term "secondary grid network" as defined in IEEE standard 1547 Section 4.1.4 (published July 2003).
- 3.6. "Certificate of completion" means a certificate signed by the Applicant and attesting that the Small Generator Facility is complete, meets the applicable requirements of the SGIR, and has been inspected, tested and certified as physically ready for operation. The Certificate of Completion must follow the standard form developed by the Public Utility and filed with the Commission.
- 3.7. "Electric Nameplate Capacity" means the net maximum electric output capability measured in watts, kilowatts or megawatts of a Small Generator Facility as designated by the facility's manufacturer.
- 3.8. "Public utility" has the meaning set forth in **[substitute SD statutory citation]** and is limited to a public utility that provides electric service.
- 3.9. "Electrical Service Agreement" means the agreement between a Public Utility and a customer providing for electricity and ancillary services according to provisions of a tariff.
- 3.10. "Electric Transmission and Distribution System or "TDS" means the facilities and equipment used to transmit electricity to ultimate usage points.
- 3.11. "Fault Current" means electrical current that flows through a circuit and is produced by an electrical fault, such as to ground, double-phase to ground, three phase to ground, phase-to-phase, and three-phase.
- 3.12. "Field Tested Equipment" means Interconnection Equipment that is identical to equipment that:
 - 3.12.1. Was approved for another interconnection under a Tier 4 study review and;
 - 3.12.2. Has successfully completed a Witness Test within 36 months from the date of the submission of the current application.
- 3.13. "Good utility practice" means a practice, method, policy, or action engaged in or accepted by a significant portion of the electric industry in a region, which a reasonable utility official would expect, in light of the facts reasonably discernable at the time, to accomplish the desired result reliably, safely and expeditiously.
- 3.14. "IEEE 1547" means the Standard 1547 published in 2003 by the Institute of Electrical and Electronics Engineers (IEEE) entitled "Interconnecting Distributed Resources with Electric Power Systems."
- 3.15. "IEEE 1547.1" means the Standard 1547.1 published in 2005 by the Institute of Electrical and Electronics Engineers (IEEE) entitled "Conformance Test Procedures

for Equipment Interconnecting Distributed Resources with Electric Power Systems.”

- 3.16. "Interconnection agreement" means an agreement between an applicant or interconnection customer and the interconnecting public utility that governs the connection of the small generator facility to the public utility's TDS, as well as the ongoing operation of the small generator facility after it is connected to the system. An interconnection agreement will follow the standard form agreement developed by the public utility and filed with the Commission.
- 3.17. "Interconnection Customer" means a person or an entity with one or more Small Generator Facilities that is interconnected to a Public Utility in accordance with the SGIR. (Note: Staff is currently still evaluating the question of whether or not existing interconnection agreements are subject to these rules. Staff will comment more fully on this matter shortly.)
- 3.18. "Interconnection equipment" means a group of components or an integrated system provided by the interconnection customer to connect a small generator facility to a public utility's TDS, including all interface equipment such as switchgear, protective devices, inverters, or other interface devices. Interconnection equipment may be installed as part of an integrated equipment package that includes a generator or other electric source.
- 3.19. "Interconnection facilities" means the facilities and equipment required by the public utility to accommodate the interconnection of a small generator facility to the public utility's TDS and used exclusively to interconnect a specific small generator facility. Interconnection facilities do not include system upgrades that may benefit the public utility, other customers (including other interconnection customers), or an owner of an affected system.
- 3.20. "Interconnection Facilities Study" means a study conducted by a Public Utility or a third-party consultant retained by the Public Utility or the Applicant that determines the additional Interconnection Facilities and System Upgrades required to interconnect the Small Generator Facility to the Public Utility's TDS, the cost of the facilities and upgrades, and the time required to complete the interconnection.
- 3.21. "Interconnection Facilities Study Agreement" means a contract between the Applicant and the interconnecting Public Utility that provides a detailed scope and timeline for the Interconnection Facilities study and a good faith, non-binding estimate of the costs to perform the study. An Interconnection Facilities Study Agreement will follow the standard form agreement developed by the public utility and approved by the Commission.
- 3.22. "Interconnection Feasibility Study" means a preliminary evaluation of the system impact and cost of interconnecting the Small Generator Facility to the EDC's Public Utility's TDS. T&D System.

- 3.23. "Interconnection feasibility study agreement" means a contract between the applicant and the interconnecting Public Utility that provides a scope, timeline and a good faith, non-binding estimate of the costs for the Public Utility to conduct an Interconnection Feasibility Study for the Applicant. An Interconnection Feasibility Study Agreement will follow the standard form agreement developed by the Public Utility and approved by the Commission.
- 3.24. "Interconnection Service" means service to an electric customer under which an on site generating facility on a customer's premises shall be connected to the local distribution facilities and is the same meaning set forth in 16 U.S.C. 2621(d)(15).
- 3.25. "Interconnection System Impact Study" means an engineering study performed by the, Public Utility that evaluates the impact of the proposed interconnection on the safety and reliability of the TDS. The study focuses on the Adverse System Impacts identified in the Interconnection Feasibility Study and other potential impacts including those identified in the Scoping Meeting.
- 3.26. "Interconnection System Impact Study Agreement" means a contract between the Applicant and the interconnecting Public Utility that provides a statement of scope, timeline and a good faith, non-binding estimate of cost to conduct an Interconnection System Impact Study. An interconnection system impact study agreement will follow the standard form agreement developed by the public utility and approved by the Commission.
- 3.27. "Lab Tested Equipment" means the Interconnection Equipment which has been tested by the original equipment manufacturer in accordance IEEE 1547.1 and found to be in compliance with the appropriate codes and standards referenced therein and is labeled and listed by a Nationally Recognized Testing Laboratory (NRTL). For interconnection equipment to gain status as Lab Tested Equipment, its use must fall within the use or uses for which the interconnection equipment is labeled and listed by the NRTL; and the generator or other electric source being utilized must be compatible with the interconnection equipment and consistent with the testing and listing specified for the type of interconnection equipment.
- 3.28. "Line Section" means that portion of a Public Utility's TDS connected to an Interconnection Customer and bounded by automatic sectionalizing devices or the end of the distribution line.
- 3.29. "Minor Equipment Modification" means a change to the proposed Small Generator Facility, the output capacity of the facility, or the proposed interconnection equipment that:
- 3.29.1. Does not affect the application of the screening criteria in Tiers 1, 2, or 3;
 - 3.29.2. In the Public Utility's reasonable opinion, does not have a material impact on safety or reliability of the public utility's TDS or an Affected System; and

- 3.29.3. Does not include a change in the Electric Nameplate Capacity of an existing Small Generator Facility.
- 3.30. “Nationally Recognized Testing Laboratory” or “NRTL” means a qualified private organization that performs independent safety testing and product certification. Each NRTL must meet the requirements as set forth by OSHA for a NRTL program.
- 3.31. “Parallel Operation” or “Parallel” means a Small Generator Facility is connected electrically to a T&D System and the potential exists for electricity to flow from the Small Generator Facility to the T&D System or for the Small Generator Facility and the T&D System to simultaneously feed the same load.
- 3.32. “Pending Completed Applications” means applications for interconnection of other Small Generator Facilities, Net Metering Facilities, or FERC wholesale generators that the Public Utility has deemed completed, but has not yet reviewed or approved pursuant to applicable procedures.
- 3.33. “Point of Interconnection” means the point where the Small Generator Facility is electrically connected to the Public Utility’s TDS. This term has the same meaning as “point of common coupling” as defined in IEEE Standard 1547, section 3.1.13.
- 3.34. “Primary Line” is a term that describes a distribution line with an operating voltage greater than 480 volts.
- 3.35. “Queue Position” means the order of a completed Application, relative to all other pending completed Applications, that is established based upon the date and time of the, interconnecting Public Utility’s receipt of the completed Applications including application fees.
- 3.36. “Scoping Meeting” means an initial meeting between representatives of the Applicant and the interconnection Public Utility that is conducted for the purpose of discussing alternative interconnection options, to exchange information, including any TDS data and earlier study evaluations that would be reasonably expected to impact such interconnection options, to analyze such information, or to determine the potentially feasible Points of Interconnection.
- 3.37. “Secondary Line” is a term used to describe a service line subsequent to the Public Utility’s primary line that has an operating voltage of 408 volts or less.
- 3.38. “Small Generator Facility” means a facility for the production of electrical energy that has an electric nameplate capacity of 20 MW or less and can operate in parallel with a public utility’s TDS.
- 3.39. “Spot Network” means a type of electric TDS that uses two or more inter-tied transformers protected by network protectors to supply an electrical network circuit. A spot network may be used to supply power to a single customer or a small group of customers.

- 3.40. "System Upgrades" means additions or modifications to the interconnecting Public Utility's TDS or to an Affected System that are required to accommodate the proposed interconnection. System upgrades do not include Interconnection Facilities.
- 3.41. "Transmission Line" means any line operating at or above 50,000 volts.
- 3.42. "Witness Test" means the on-site visual verification of the interconnection installation and commissioning as required in IEEE standard 1547 Sections 5.3 and 5.4. For interconnection equipment that does not meet the definition of Lab Tested Equipment, the Witness Test may, at the discretion of the Public Utility, also include a system design and production evaluation according to IEEE standard 1547 Sections 5.1 and 5.2 as applicable to the specific interconnection system technology employed.
- 3.43. "Written Notice" means a required notice sent by the Public Utility or Applicant via electronic mail, if electronic mail addresses are provided. If any Party has not provided an electronic mail address, or has requested in writing to be notified by United States Mail, or a Party elects to provide Written Notice by United States mail, then written notices from the Party shall be sent via First Class United States mail. A Party will be deemed to have fulfilled its duty to respond under these rules on the day it sends the Written Notice via electronic mail or deposits such notice in First Class mail. Each Party will be responsible for informing other Parties of any change in its notification address.

4. General Interconnection Provisions

- 4.1. Application: A Party wishing to interconnect, make a capacity change or change the status of a proposed or operating facility, for example from FERC wholesale generator to a Small Generator Facility must submit an Application to the Public Utility that owns and operates the T&D System to which interconnection is sought.
- 4.1.1. The Application must be made using a standardized Application form found on the Commission's website as Form 1 or Form 2.
- 4.1.2. A Small Generator Facility that is Lab Tested, inverter-based and has an Electric Nameplate Capacity of 25 kW or less must use application Form 1 which is a Tier 1 application form. Applications for all other Small Generator Facilities up to 20 MW in size must use Form 2, which is the Tier 2, Tier 3 and Tier 4 Application Form.
- 4.2. Fees: A non-refundable application processing fee is required for all Applications. The amount of the fee is dependent upon the review Tier requested in the application and is intended to cover reasonable costs for processing, minor study and evaluation of the application. The application fees are as follows:
- 4.2.1. Tier 1: \$100 No fee required.

- 4.2.2. Tier 2: \$500 \$50 plus \$1 per kW of rated generating facility output up to a maximum of \$500.
- 4.2.3. Tier 3: \$1000 \$100 plus \$2 per kW of rated generating facility output up to a maximum of \$1,000.
- 4.2.4. Tier 4: \$1000 \$100 plus \$2 per kW of rated generating output facility up to a maximum of \$1,000. Any Tier 4 deposit applies against the study fee.
- 4.2.5. Applications requiring detailed studies and engineering evaluations may incur costs that are not covered by the application fee. Before any costs above the application fee are assessed, the Applicant must authorize the Public Utility to continue by assuming responsibility for the additional costs, or the application will be deemed withdrawn and the original application fee forfeited.
- 4.2.6. Should an Applicant fail to receive approval at one review Tier and make a subsequent application for the same facility at a different Tier within the time frame for preserving the queue position, the original application fee and any other fees paid in conjunction with the original application will be applied to the fees for the updated application.
- 4.3. Interconnection Application Review Procedures: Each Public Utility must review all Interconnection Requests duly submitted to the Public Utility at their authorized mailing address based on the following review procedures:
 - 4.3.1. Tier 1 Interconnection Review Procedures: A Public Utility must use the Tier 1 review procedures more specifically set forth in Section 10. Tier 1 Interconnection for evaluation of all Applications to connect Small Generation Facilities
 - 4.3.1.1. The Electric Nameplate Capacity rating is 25 kW or less,
 - 4.3.1.2. The interconnection equipment is inverter based, and
 - 4.3.1.3. The Customer Interconnection Equipment proposed for the Small Generator Facility is Lab Tested.
 - 4.3.2. Tier 2 Interconnection Review Procedures: A Public Utility must use the Tier 2 review procedures more specifically set forth in Section 11 Tier 2 Interconnection for evaluating all Applications to connect Small Generation Facilities:
 - 4.3.2.1. The Electric Nameplate Capacity is 2 MW or less and;
 - 4.3.2.2. The proposed connection is to a radial distribution circuit, or to a Spot Network that is serving one premise and;

- 4.3.2.3. The Customer Interconnection Equipment proposed for the Small Generator Facility is either Lab Tested Equipment or Field Tested Equipment and;
- 4.3.2.4. The Application does not qualify for a Tier 1 review.
- 4.3.3. Tier 3 Interconnection Review Procedures: An Applicant with a proposed project capacity of 10 MW or less that does not qualify for Tier 1 or Tier 2 review and does not export power beyond the Point of Interconnection may request to be evaluated under Tier 3 procedures more specifically set forth in Section 12 Tier 3 Interconnection.
- 4.3.4. Tier 4 Interconnection Review Procedures: an Public Utility must use the Tier 4 review procedures more specifically set forth in Section 13 Tier 4 Interconnection for evaluating all Applications to connect Small Generation Facilities that:
 - 4.3.4.1. Sell power to the Public Utility and,
 - 4.3.4.2. Have an Electric Nameplate Capacity of 20 MW or less and,
 - 4.3.4.3. Do not qualify for or have failed either the Tier 1, Tier 2 or Tier 3 interconnection review procedures.
- 4.4. Agreement Term: Interconnection of a Small Generator Facility, under the provisions of the SGIR, is deemed to be in effect for a period of up to 20 years at the Applicant's option, unless terminated earlier by the default or voluntary termination by the Interconnection Customer or by action of the Commission. Interconnection Agreements entered in to before the effective date of this Rule will remain in effect until the term of the agreement expires.
- 4.5. Renewal: The Public Utility will not unreasonably refuse to grant an expedited review of a request to renew an Interconnection Agreement and may waive all or part of the application fee commiserate with less expenses incurred in renewing the application provided:
 - 4.5.1. The facility has not undergone anything other than minor modifications, as determined by the Public Utility, since the expired agreement was approved, and;
 - 4.5.2. Conditions on the T&D system are essentially the same as when the agreement was originally approved.

5. General Requirements

- 5.1. Aggregating Multiple Generators: If the Interconnection Request is for a Small Generator Facility that includes multiple Small Generator Facilities at a site for which the Applicant seeks a single Point of Interconnection, the Application must

be evaluated for the purposes of the interconnection on the basis of the aggregate Electric Nameplate Capacity of the multiple Small Generator Facilities.

- 5.2. **Capacity Change:** An Interconnection Customer must submit a new Application if it proposes to increase the capacity of its existing Small Generator Facility or if it changes its Small Generator Facility equipment or operations that increase its capacity. The Application and application fees are based on the new total Electric Nameplate Capacity of the Small Generator Facility. If an Applicant, after having its application accepted by the Public Utility and being assigned a Queue Position, decides to increase the capacity of its proposed Small Generator Facility, it must submit a new application and will relinquish its original Queue Position.
- 5.3. **Point of Contact:** The Public Utility must designate a contact person from whom information on the Application process and about the Public Utility's T&D System may be obtained. Such information must include studies and other materials useful to an understanding of the feasibility of interconnecting a Small Generator Facility at a particular point on the Public Utility's T&D System, except to the extent providing such materials would violate security requirements, confidentiality obligations or be contrary to state or federal regulations. The Public Utility must comply with reasonable requests for access to or copies of such studies, subject to any confidentiality agreements as may be required to protect the confidential or proprietary information interests of the Public Utility or third parties.
- 5.4. **Timeframes:** The Public Utility and Interconnection Customer must meet all time frames provided in the SGIR, unless the parties mutually agree to a different schedule. If a Party cannot meet a deadline provided herein, the Party must notify the other Party, explain the reason for the failure to meet the deadline, and provide an estimated time by which it will complete the applicable interconnection procedure in the process.
- 5.5. **Modifications:** Once an Application is deemed complete by the Public Utility and a queue position assigned, any modification to the application, other than a Minor Equipment Modification, requires that a new Application be submitted and the original Queue Position be relinquished. If, after an Interconnection Agreement has been entered in to under provisions of the SGIR, the Interconnection Customer desired to modify the Small Generator Facility, other than a Minor Equipment Modification, a new Application must be submitted and approved before the proposed modifications can take place.
- 5.6. **Site Control:** Documentation of site control must be available and, if the Applicant is not currently a customer of the Public Utility, provided with the Application. Site control may be demonstrated through ownership of, a leasehold interest in, or an option or other right to develop a site for the purpose of constructing the Small Generator Facility. Site control may be documented by a property tax bill, deed, a lease agreement or other legally binding contract.

- 5.7. Right of Access: The Public Utility must have access to the Applicant's premises for any reasonable purpose in connection with the Interconnection Application and any Interconnection Agreement pursuant to the SGIR or if necessary to meet the legal obligation to provide service to its customers. Access must be requested at reasonable hours and upon reasonable notice, or at any time without notice in the event of an emergency or hazardous condition.
- 5.8. Multiple Interconnections: The Public Utility may propose to interconnect more than one Small Generator Facility at a single Point of Interconnection in order to minimize costs, and must not unreasonably refuse a request to do so. However, an Applicant or an Interconnection Customer may elect to pay the entire cost of separate Interconnection Facilities.
- 5.9. Isolation Device: Small Generator Facilities qualifying for interconnection under Tier 2, Tier 3 or Tier 4 interconnection review procedures must be capable of being isolated from the Public Utility.
 - 5.9.1. For Small Generator Facilities interconnecting to a Primary Line, the isolation must be by means of a lockable, visible-break isolation device readily accessible by the Public Utility.
 - 5.9.2. For Small Generator Facilities interconnecting to a Secondary Line, the isolation must be by means of a lockable isolation device whose status is clearly indicated and is readily accessible by the Public Utility. An exception is allowed for a Small Generation Facility that has a maximum total output of 30 amperes or less, is connected to a Secondary Line, utilizes Lab Tested, inverter-based Interconnection Equipment and is interconnected to the T&D System through a Public Utility-owned metered service. In this case, the meter base may serve as the required isolation device, provided it is readily accessible to the Public Utility.
 - 5.9.3. All other interconnection isolation devices must be installed, owned, and maintained by the owner of the Small Generator Facility and be capable of interrupting the full load of the Small Generator Facility and must be located between the Small Generator Facility and the Point of Interconnection.
 - 5.9.3.1. A draw-out type circuit breaker with the provision for padlocking at the draw-out position can be considered an isolation device for purposes of this requirement.
 - 5.9.3.2. Alternatively, the Applicant or Interconnection Customer may elect to provide the Public Utility access to an isolation device that is contained in a building or area that may be unoccupied and locked or not otherwise readily accessible to the Public Utility, by providing a lockbox capable of accepting a lock provided by the Public Utility that will provide ready access to the isolation device. Where a lockbox is required, the Applicant or Interconnection Customer must install the lockbox in a location that is

readily accessible by the Public Utility. The Applicant or Interconnection Customer must affix a placard in a location acceptable to the Public Utility that provides clear instructions to its operating personnel on how to gain access to the isolation device.

6. Technical Standard

- 6.1. The technical standard to be used in evaluating all Applications, unless otherwise provided for in the SGIR, is IEEE 1547. Should a Public Utility wish to utilize other standards in addition to IEEE standard 1547, it may do so only after seeking and being granted a waiver from the Commission to do so.
- 6.2. The Applicant must construct, own, operate, and maintain its Small Generator Facility and associated Interconnection Facilities in accordance with the provisions of IEEE Standard 1547, the safety standards required there in and with reasonable safety and reliability standards required by the Commission.

7. Cost Responsibility

- 7.1. Study Costs: Whenever additional studies are required under provisions of the SGIR, the Applicant must pay the additional study costs above what is covered by the initial application fee must be paid for by the Applicant. Study costs must be based on the scope of work determined and documented in the Feasibility, Facilities and System Impact study agreements based on the estimated hours needed to complete the evaluation using an engineering cost not to exceed \$100 per hour (a factor that may be escalated annually, at the Public Utility's election, for inflation at the CPI index).
- 7.2. Minor T&D System Modifications: Modifications to the existing T&D Systems identified by the Public Utility under a Tier 2 or Tier 3 review; such as changing meters, fuses, or relay settings; are deemed Minor T&D Modifications. It is at the Public Utility's sole discretion to decide what constitutes a Minor T&D Modification. The Applicant must bare the costs of making such Minor T&D Modifications as may be necessary to gain approval of an Application.
- 7.3. Interconnection Facilities: The Public Utility must identify under the review procedures of a Tier 2 review or under a Tier 4 Facilities Study, the Interconnection Facilities necessary to safely interconnect the Small Generator Facility with the Public Utility. The Public Utility must itemize the Interconnection Facilities for the Applicant including the cost of the facilities and the time required to build and install those facilities. The Interconnection Customer is responsible for the cost of the Interconnection Facilities.
- 7.4. Interconnection Equipment: The Interconnection Customer is responsible for all expenses, including overheads, associated with owning, operating, maintaining, repairing, and replacing its Interconnection Equipment.

- 7.5. System Upgrades: The Public Utility must design, procure, construct, install, and own any System Upgrades. The actual cost of the System Upgrades, including overheads, is directly assigned to the Applicant.
- 7.6. Adverse System Impact: The Public Utility 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, is the responsibility of the Applicant who may be entitled to financial compensation from other Public Utility's, or other Interconnection Customers who, in the future, utilize the upgrades paid for by the Applicant, only to the extent as may be provided for by the Commission.
- 7.7. Billings: The Public Utility may require a deposit of not more than 50 percent of the cost estimate, not to exceed \$1000, to be paid in advance by the Applicant for studies necessary to complete an interconnection to the TDS.
- 7.8. The Public Utility 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 interconnection to the T&D System. Progress billing, final billing and payment schedules must be agreed to by Parties prior to commencing work.

8. Insurance

- 8.1. General liability insurance is not required for approval of an interconnection Application, or for the related Interconnection Agreement, for a Small Generator Facility with an Electric Nameplate Capacity of 200 KW or smaller
- 8.2. All other Interconnection Customers must obtain prudent amounts of general liability insurance to protect any person who may be affected by their Small Generator Facility and its operation.

9. Damage Limitation

- 9.1. Neither Party may seek redress from the other counter party in an amount greater than the amount of direct damage actually incurred.

10. Tier 1 Interconnection

- 10.1. Applicability: The Public Utility must use the Tier 1 review procedures for an Application that meets all of the following:
 - 10.1.1. The Small Generator Facility is inverter-based;
 - 10.1.2. The Small Generator Facility has an Electric Nameplate Capacity of 25 kW or less

- 10.1.3. The Interconnection Equipment proposed for the Small Generator Facility is Lab Tested Equipment; and
- 10.1.4. The proposed Point of Interconnection is not to a Transmission Line.
- 10.2. Approval: For a Small Generator Facility described in Section 10.1, the Public Utility must approve an Application under the requirements set forth in Section 10.4 if all the screening criteria set forth in Section 10.3 are met. A Public Utility may not impose additional requirements to a Tier 1 interconnection not specifically authorized under Section 10.4.
- 10.3. Tier 1 Evaluation and Screening Criteria:
 - 10.3.1. For interconnection of a proposed Small Generator Facility to a radial distribution circuit, the aggregated generation, which includes the proposed Small Generator Facility as well as existing Net Metering Facilities and FERC wholesale generators and Net Metering Facilities and FERC wholesale generators with a higher Queue Position, must not exceed 15 percent of the Line Section annual peak load as most recently measured at the sub-station or calculated for the Line Section.
 - 10.3.2. For interconnection of a proposed Small Generator Facility to the load side of Spot Network protectors, the proposed Small Generator Facility and the aggregated other generation and applications with a higher Queue Position must not exceed the lesser of five percent of a Spot Network's maximum load or 50 kW.
 - 10.3.3. If the proposed Small Generator Facility is to be interconnected on a single-phase shared secondary service line, the aggregate generation capacity on the shared secondary, which includes the proposed Small Generator Facility and applications with a higher Queue Position, must not exceed 20 kW.
 - 10.3.4. If the proposed Small Generator Facility is single-phase and is to be interconnected on a center tap neutral of a 240 volt service line, its addition must not create a current imbalance between the two sides of the 240 volt service of more than 20 percent of the nameplate rating of the service transformer.
 - 10.3.5. The proposed interconnection must use existing Public Utility facilities.
- 10.4. Tier 1 Interconnection Review Procedure:
 - 10.4.1. The Applicant must submit its Application and appropriate fees to the Public Utility at its designated address. The appropriate application is available at the Commission web site, Form 1.
 - 10.4.2. The Public Utility must, within 5 business days of receipt of the Application, inform the Applicant that the Application is either complete or incomplete. If

the application is incomplete, the Public Utility must indicate what information is missing. In the event the Applicant does not receive notification within 5 business days, the Applicant may contact the Public Utility to determine the status of the Application. If the Public Utility notified the Applicant that the Application is incomplete, the Applicant must provide the required information within 10 business days (or such other time as the parties mutually agree) or the Application is deemed to be withdrawn.

- 10.4.3. If the Public Utility does not have a record of receipt of the Application, the Applicant must provide the Public Utility with an additional copy of the Application. If the Applicant can demonstrate that the original completed Application was delivered to the Public Utility, the Public Utility must forgo the initial 10 business day response period and complete its review within 15 business days.
- 10.4.4. **Queuing Priority:** Once the Public Utility deems the Application to be complete, it must assign the project a Queue Position. The Queue Position of each Application is used to determine any potential Adverse System Impacts of the proposed Small Generator Facility based on the relevant screening criteria set forth in Section 10.1.3. The Applicant must proceed under the timeframes of this section. The Public Utility must schedule a Scoping Meeting to notify the Applicant about other higher-queued Applications including, but not limited to, Net Metering Facilities and FERC wholesale generator Interconnection Applications on the same radial line or Spot Network to which the Applicant is seeking interconnection.
- 10.4.5. If, in the process of evaluating a completed Application, the Public Utility determines that supplemental or clarifying information is required, the Public Utility must request the information from the Applicant. The time required for the receipt of the additional information may extend the time necessary to complete the evaluation, but only to the extent of the time required for the receipt of the additional information. The Public Utility may not alter the Applicant's Queue Position.
- 10.4.6. The Public Utility must evaluate the proposed Small Generator Facility equipment using Tier 1 screening criteria set forth in Section 10.3. No later than 15 business days from the date the Application is deemed complete; the Public Utility must notify the Applicant whether the Small Generator Facility meets the screening criteria.
- 10.4.7. The Applicant must provide the Public Utility at least 5 business days notice of the planned commissioning for the Small Generator Facility. The Public Utility has the option of conducting a Witness Test at a mutually agreeable time within 10 business days of the scheduled commissioning or waiving the Witness Test and notifying the Applicant. If the Public Utility does not conduct the Witness Test within 10 business days of the scheduled

commissioning date or within a time otherwise mutually agreed upon by the Parties, the Witness Test is deemed waived.

10.5. Interconnection of a Tier 1 Small Generation Facility: The interconnection process is not complete until:

10.5.1. The Application has passed the Tier 1 screening criteria;

10.5.2. The Small Generator Facility installation is approved by the electric code inspector with jurisdiction over the interconnection;

10.5.3. The Witness Test, if conducted by the Public Utility, is successful; and

10.5.4. The Parties execute a Certificate of Completion.

10.6. Witness Test Not Acceptable: If the Witness Test is conducted and is not acceptable to the Public Utility, the Applicant must be granted a period of 30 calendar days to resolve any deficiencies. The Parties may mutually agree to extend the time period for resolving any deficiencies. A request for extension may not be unreasonably denied by the Public Utility. If the Applicant fails to address and resolve the deficiencies to the satisfaction of the Public Utility within the agreed upon time period, the Application is deemed withdrawn.

10.7. Non-approval: If the Small Generator Facility is not approved under a Tier 1 review, the Applicant may submit a new Application, including the difference in the application fee or deposit, for consideration under Tier 2, Tier 3 or Tier 4 procedures specified in Sections 11 through 13 without losing its original Queue Position if the new Application is submitted within 15 business days of notice that the original Application was not approved. If requested, the Public Utility must provide a written explanation of why the Application was not approved.

10.8. Operation: The Applicant must notify the Public Utility before commencing operation.

11. Tier 2 Interconnection

11.1. Applicability: The Public Utility must use the Tier 2 review procedures for an Application that does not qualify for Tier 1 review and meets the requirements for a Tier 2 interconnection as set forth in Subsections 11.1.1 through 11.1.3 below:

11.1.1. The Small Generator Facility has an Electric Nameplate Capacity of 2 MW or less;

11.1.2. The proposed Point of Interconnection is to either:

11.1.2.1. A radial distribution circuit, or

11.1.2.2. A Spot Network distribution circuit limited to serving one premise; and

- 11.1.3. The Interconnection Equipment proposed for the Small Generator Facility is either Lab Tested Equipment or Field Tested Equipment. For equipment to gain Field Tested Equipment status, the Applicant must provide all the documentation of the prior Tier 4 study, review and approval, as well as any interconnection studies, and the Certificates of Completion.
- 11.2. Approval: The Public Utility must approve interconnection under the Tier 2 interconnection review process set forth in Section 11.4 of this rule if the Small Generator Facility qualifies as a Tier 2 facility as specified in Section 11.1 and all of the Tier 2 screening criteria set forth in Section 11.3 are met. A Public Utility may not impose additional requirements not specifically authorized under Section 11.4.
- 11.3. Tier 2 Evaluation and Screening Criteria:
 - 11.3.1. For interconnection of a proposed Small Generator Facility to a radial distribution circuit, the aggregated generation, which includes the proposed Small Generator Facility as well as existing Net Metering Facilities and FERC wholesale generators and Net Metering Facilities and FERC wholesale generators with a higher Queue Position, on the circuit must not exceed 15 percent of the Line Section annual peak load as most recently measured at the substation or calculated for the Line Section.
 - 11.3.2. For interconnection of a proposed Small Generator Facility to the load side of Spot Network protectors, the aggregated other generation which includes the proposed Small Generator Facility as well as existing Net Metering Facilities and FERC wholesale generators and Net Metering Facilities and FERC wholesale generators with a higher Queue Position must not exceed the lesser of five percent of a Spot Network's maximum load or 50 kW.
 - 11.3.3. The proposed Small Generator Facility, in aggregation with other generation on the distribution circuit, must not contribute more than ten percent to the distribution circuit's maximum Fault Current at the point on the primary voltage distribution line nearest the Point of Interconnection.
 - 11.3.4. The proposed Small Generator Facility, in aggregate with other generation and existing Net Metering Facilities and FERC wholesale generators and Net Metering Facilities and FERC wholesale generators with a higher Queue Position, on the distribution circuit, must not cause any distribution protective devices and equipment (including, but not limited, to substation breakers, fuse cutouts, and line reclosers), or other Public Utility equipment on the T&D System to be exposed to Fault Currents exceeding 90 percent of the short circuit interrupting capability; and the Small Generator Facility's Point of Interconnection must not be located on a circuit that already exceeds 90 percent of the short circuit interrupting capability.

- 11.3.5. The proposed Small Generator Facility's Point of Interconnection must not be on a Transmission Line.
- 11.3.6. The Small Generator Facility, in aggregate with other generation and existing Net Metering Facilities and FERC wholesale generators and Net Metering Facilities and FERC wholesale generators with a higher Queue Position, interconnected to the distribution side of a substation transformer feeding the circuit where the Small Generator Facility proposes to interconnect, must not exceed 10 MW in an area where there are known, or posted, transient stability limitations to generating units located in the general electrical vicinity (e.g., three or four distribution busses from the point of interconnection).
- 11.3.7. If the proposed Small Generator Facility interconnection is to a Primary Line on the distribution system, the interconnection must be according to the screening criteria set forth in paragraphs 11.3.7.1 and 11.3.7.2 of this subsection, depending on the type of electrical service provided by the Public Utility.
 - 11.3.7.1. If the Small Generator Facility is 3-phase or single-phase and is to be connected to a 3-phase 3 wire Primary Line, it must be connected phase-to-phase.
 - 11.3.7.2. If the Small Generator Facility is 3-phase or single-phase and is to be connected to a 3-phase 4-wire Primary Line, it must be connected line to neutral and effectively grounded.
- 11.3.8. If the Small Generator Facility is to be interconnected on single-phase shared service line on the T&D System, the aggregate generation capacity on the shared secondary line, including the proposed Small Generator Facility, must not exceed 20 kW.
- 11.3.9. If the proposed Small Generator Facility is single-phase and is to be interconnected on a center tap neutral of a 240 volt service line, its addition must not create a current imbalance between the two sides of the 240 volt service of more than 20 percent of the nameplate rating of the service transformer.
- 11.3.10. Except as provided in Subsection 11.4.7, the interconnection must only use existing Public Utility facilities and the Applicant's proposed facilities.
- 11.3.11. The Small Generator Facility, in aggregate with existing Net Metering Facilities and FERC wholesale generators and Net Metering Facilities and FERC wholesale generators with a higher Queue Position, and exiting transmission loads must not cause a transmission system circuit to exceed its design capacity on the transmission system circuit directly connected to the distribution circuit where the interconnection is proposed.

- 11.3.12. If the Public Utility's distribution circuit utilizes high speed reclosing with less than 2 seconds of interruption and the proposed generator must not be a synchronous machine.

11.4. Tier 2 Interconnection Review Procedure

- 11.4.1. The Applicant must submit its Application and appropriate fees to the Public Utility at its designated address. The Application form is available on the Commission web site as Form 2. The Applicant may request, from the Public Utility, non-confidential from the Public Utility for an identified, approved interconnection to facilitate obtaining Field Tested status. The Public Utility may charge a nominal processing fee but will not unreasonably refuse to provide such information if requested.
- 11.4.2. The Public Utility must, within 5 business days of receipt of the Application, inform the Applicant that the Application is either complete or incomplete. If the application is incomplete, the Public Utility must indicate what information is missing. In the event the Applicant does not receive notification within 5 business days, the Applicant may contact the Public Utility to determine the status of the Application.
- 11.4.3. If the Public Utility does not have a record of receipt of the Application, the Applicant must provide the Public Utility with an additional copy of the Application. If the Applicant can demonstrate that the original completed Application was delivered to the Public Utility, the Public Utility must forgo the initial 10 business day response period and complete its review within 20 business days of its receipt.
- 11.4.4. **Queuing Priority:** Once the Public Utility deems the Application to be complete, it must assign the project a Queue Position. The Queue Position of each Application is used to determine any potential Adverse System Impacts of the proposed Small Generator Facility based on the relevant screening criteria summarized in Section 11.3. The Parties must proceed under the timeframes of this section to maintain queue position. The Public Utility must schedule a Scoping Meeting to notify the Applicant about other higher-queued Applications including, but not limited to, FERC Interconnection Applications on the same radial line or Spot Network to which the Applicant is seeking to interconnect.
- 11.4.5. **Initial Review:** Within 20 business days after the Public Utility notifies the Applicant that it has received a completed Interconnection Request, or within a time period mutually agreed to by Parties, the Public Utility must:
 - 11.4.5.1. Evaluate the Application using the Tier 2 screening criteria set forth in Section 11.3 and;
 - 11.4.5.2. Review any independent analysis that may be provided by the Applicant using the same criteria, and;

- 11.4.5.3. Provide the Applicant the results of its review, including a comparison of these results and the independent analysis provided by the Applicant (if applicable).
- 11.4.6. If in the process of evaluating the completed Application, the Public Utility determines that supplemental or clarifying information is required, the Public Utility must request the information from the Applicant. The time required for the receipt of the additional information may extend the time necessary to complete the review, but only to the extent of the time required for the receipt of the additional information. The Public Utility may not alter the Applicant's Queue Position.
- 11.4.7. If the Small Generator Facility fails to meet one or more of the Tier 2 screening criteria, but the, Public Utility determines that the Small Generator Facility could be interconnected safely if minor modifications to the T&D System (for example, changing meters, fuses, or relay settings) were made; it must offer the Applicant a non-binding, good faith estimate of the costs of such proposed minor modifications and proceed with the minor modifications if authorized by the Applicant.
- 11.4.8. The Public Utility must approve the application if:
 - 11.4.8.1. The Public Utility determines that the Application passes the Tier 2 screening criteria, or
 - 11.4.8.2. The Application initially fails one or more of the Tier 2 screening criteria but the Public Utility determines that the Small Generator Facility passes the screens and can be interconnected safely and reliably after making the modifications described in Subsection 11.4.7, and the Public Utility has received authorization from the Applicant to implement the minor modifications.
- 11.4.9. The Applicant must provide the Public Utility at least 5 business days notice of the planned commissioning for the Small Generator Facility. The Public Utility has the option of conducting a Witness Test at a mutually agreeable time within 10 business days of the scheduled commissioning. If the Public Utility does not conduct the Witness Test within 10 business days of the scheduled commissioning date, or within the time otherwise mutually agreed upon by the parties, or if the Public Utility notifies the Applicant of its intent not to perform the test, the Witness Test is deemed waived.
- 11.5. Interconnection of a Tier 2 Small Generator Facility: The interconnection is not complete until:
 - 11.5.1. All Tier 2 screening criteria are satisfied and any minor T&D modifications, are implemented and;

- 11.5.2. The Small Generator Facility installation is approved by electric code inspector with jurisdiction over the interconnection and;
- 11.5.3. The Witness Test, if conducted by the Public Utility, is successful and;
- 11.5.4. The Parties execute a Certificate of Completion.
- 11.6. Witness Test Not Acceptable: If the Witness Test is conducted and is not acceptable to the Public Utility, the Applicant must be allowed a period of 30 calendar days to resolve any deficiencies. A request for extension may not be unreasonably denied by the Public Utility. The Parties may mutually agree to extend the time period for resolving any deficiencies. If the Applicant fails to resolve the deficiencies to the satisfaction of the Public Utility within the agreed upon time period, the Application is deemed withdrawn.
- 11.7. Non-approval: If the Small Generator Facility is not approved under a Tier 2 review, the Applicant may submit a new Application including the difference in the application fee or deposit, for consideration under Tier 3 or Tier 4 procedures specified in Sections 12 through 13 without losing its original Queue Position provided the new Application is submitted within 15 business days of notice that the Application was not approved. If requested, the Public Utility must provide a written explanation of why the Application was not approved.
- 11.8. Operation: The Applicant must notify the Public Utility before commencing operation.

12. Tier 3 Interconnection

- 12.1. Applicability: The Public Utility must use the Tier 3 interconnection review procedures for an Application that does not qualify for Tier 1 or Tier 2 review and meets all the requirements set forth in subsections 12.1.1 through 12.1.3 below:
 - 12.1.1. The Small Generator Facility has an Electric Nameplate Capacity rating of 10 MW or less; and
 - 12.1.2. The proposed Point of Interconnection is not to a Transmission Line; and
 - 12.1.3. The Small Generator Facility does not export power beyond the point of interconnection and utilizes low forward power relays or other protection functions that prevent power flow onto the TDS;
- 12.2. Approval: A Tier 3 Small Generator Facility, as defined in Section 12.1 of this rule, meeting the screening criteria set forth in Sections 12.3 and 12.4 below must be further evaluated using Tier 2 Screening Criteria set forth in Section 11.3 except that the 15 percent screen of Section 11.3.1 shall not apply to Tier 3 Small Generator Facilities. Once the Tier 2 Screening Criteria are met, the Application must be reviewed using the procedure set forth in Section 12.5 of this rule. Tier 3 interconnections do not require an Interconnection Feasibility Study; however, the

Public Utility may choose to conduct such a study at its own expense, and it must complete the Interconnection Feasibility Study within 25 calendar days.

- 12.3. Tier 3 Evaluation and Screening Criteria- Area Networks: For a Small Generator Facility to interconnect to the load side of an Area Network distribution circuit, the criteria set forth in Subsections 12.3.1 through 12.3.5 below must be met:
 - 12.3.1. The Electric Nameplate Capacity of the Small Generator Facility is 50 kW or less;
 - 12.3.2. The proposed Small Generator Facility utilizes a Lab Tested, inverter-based equipment package for interconnection;
 - 12.3.3. The Small Generator Facility utilizes r low forward power relays or other protection functions that prevent power flow on to the Area Network;
 - 12.3.4. The aggregated other generation on the Area Network, including existing Net Metering Facilities and FERC wholesale generators and Net Metering Facilities and FERC wholesale generators with a higher Queue Position,, does not exceed the lesser of 5 percent of an Area Network's maximum load or 50 kW; and
 - 12.3.5. The interconnection must use only existing Public Utility facilities and the Applicant's proposed facilities.
- 12.4. Tier 3 Alternative Evaluation and Screening Criteria -- Not Networked: For a Small Generator Facility to interconnect to a distribution circuit that is not networked, the criteria set forth in Subsections 12.4.1 through 12.4.5 below must be met:
 - 12.4.1. The Small Generator Facility has an Electric Nameplate Capacity of 10 MW or less and;
 - 12.4.2. The aggregated total of the Electric Nameplate Capacity of all of the generators on the circuit including existing FERC wholesale generators and FERC wholesale generators with a higher Queue Position, and the proposed Small Generator Facility, is 10 MW or less and;
 - 12.4.3. The Small Generator Facility does not export power beyond the point of interconnection and employs reverse power relays or other protection functions that prevent power flow onto the T&D System and;
 - 12.4.4. The Small Generator Facility's proposed interconnection must be to a radial distribution circuit and;
 - 12.4.5. The Small Generator Facility is not served by a shared transformer and;
 - 12.4.6. Except as allowed in subsection 12.5.7, the interconnection must use only existing Public Utility facilities and the Applicant's proposed facilities and;

12.4.7. If the Public Utility's distribution circuit utilizes high speed reclosing with less than 2 seconds of interruption and the proposed generator must not be a synchronous machine.

12.5. Tier 3 Interconnection Review Procedure:

12.5.1. The Applicant must submit its Application and appropriate fees to the Public Utility at its designated address. The Application form is available on the Commission web site as Form 2.

12.5.2. The Public Utility must, within 5 Business Days of receipt of the Application, inform the Applicant that the Application is either complete or incomplete. If the Application is incomplete, the Public Utility must indicate what information is missing. In the event the Applicant does not receive notification within 10 business days, the Applicant may contact the Public Utility to determine the status of the Application.

12.5.3. If the Public Utility does not have a record of receipt of the Application, the Applicant must provide the Public Utility with an additional copy of the Application. If the Applicant can demonstrate that the original completed Application was delivered to the Public Utility, the Public Utility must forgo the initial 5 business day response period; and complete its review within 20 business days of its receipt.

12.5.4. Queuing Priority: Once the Public Utility deems the Application to be complete, it must assign the project a Queue Position. The Queue Position of each Application is used to determine any potential Adverse System Impacts of the proposed Small Generator Facility based on the relevant screening criteria summarized in Sections 12.3 and 12.4. The Applicant must proceed under the timeframes of this section. The Public Utility must schedule a Scoping Meeting to notify the Applicant about other higher-queued Applications including, but not limited to, FERC Interconnection Applications on the same radial line or Area Network to which the Applicant is seeking to interconnect.

12.5.5. Initial Review: Within 20 business days after the Public Utility notifies the Applicant that it has received a completed Interconnection Request or within a time period mutually agreed to by Parties, the Public Utility must:

12.5.5.1. Evaluate the Application using the Tier 3 screening criteria set forth in sections 12.3 and 12.4 and;

12.5.5.2. Review any independent analysis that may be provided by the Applicant using the same criteria and;

12.5.5.3. Provide the Applicant the results of its review, including a comparison of these results and the independent analysis provided by the Applicant (if applicable).

- 12.5.6. If in the process of evaluating the interconnection request, the Public Utility determines that supplemental or clarifying information is required, the Public Utility must request the information from the Applicant. The time required for the receipt of the additional information may extend the time necessary to complete the review, but only to the extent of the time required for the receipt of the additional information. The Public Utility may not alter the Applicant's Queue Position.
- 12.5.7. If the Small Generator Facility fails to meet one or more of the Tier 3 screening criteria, but the Public Utility determines that the Small Generator Facility could likely be interconnected safely if minor modifications to the T&D system (for example, changing meters, fuses, or relay settings) were made, it must offer the Applicant a non-binding, good faith estimate of the costs of such proposed minor modifications and proceed with the minor modifications if authorized by the Applicant.
- 12.5.8. The Public Utility must approve the Application if the Public Utility determines that the Application:
 - 12.5.8.1. Passes the Tier 3 screening criteria in Sections 12.3 or 12.4; or
 - 12.5.8.2. Fails one or more of the Tier 3 screening criteria, or does not meet every approval requirement in section 12.2, but the Public Utility determines that the Small Generator Facility can be interconnected safely and reliably after making the modifications described in subsection 12.5.7 above and the Public Utility has received authorization from the Applicant to implement the minor modifications.
- 12.5.9. The Applicant must provide the Public Utility at least 5 business days notice of the planned commissioning for the Small Generator Facility. The Public Utility has the option of conducting a Witness Test at a mutually agreeable time within 10 business days of the scheduled commissioning. If the Public Utility does not conduct the Witness Test within 10 business days of the scheduled commissioning date, or within the time otherwise mutually agreed upon by the parties, or if the Public Utility notifies the Applicant of its intent not to perform the test, the Witness Test is deemed waived.
- 12.5.10. Non-approval:
 - 12.5.10.1. If the Small Generator Facility fails to pass the screening criteria set forth in sections 12.3 or 12.4, or is not approved under a Tier 3 review; then the Public Utility must provide, at the request of the Applicant, a written justification for denying the Application.
 - 12.5.10.2. If the Small Generator Facility is not approved under a Tier 3 review, the Applicant may submit a new Application including the difference in the application fee or deposit, for consideration under Tier 4 review procedures specified in Section 13 without losing its original Queue

Position provided the new Application is submitted within 15 business days of notice that the Application was not approved. Any previous application fee or deposit must be applied toward the Tier 4 application fee.

- 12.6. Interconnection of a Tier 3 Small Generator Facility: The interconnection review process is not complete until:
 - 12.6.1. All Tier 3 screening criteria are satisfied and any minor modifications to the T&D System that may have been identified are implemented;
 - 12.6.2. The Small Generator Facility installation is approved by electric code inspector with jurisdiction over the interconnection;
 - 12.6.3. There is a successful completion of the Witness Test, if required; and
 - 12.6.4. The Parties execute a Certificate of Completion.
- 12.7. Witness Test Not Acceptable: If the Witness Test is conducted and is not acceptable to the Public Utility, the Applicant must be allowed a period of 30 calendar days to resolve any deficiencies. A request for extension may not be unreasonably denied by the Public Utility. The Parties may mutually agree to extend the time period for resolving any deficiencies. If the Applicant fails to resolve the deficiencies to the satisfaction of the Public Utility within the agreed upon time period, the Application is deemed withdrawn.
- 12.8. Operation: The Applicant must notify the Public Utility prior to commencing operation.

13. Tier 4 Interconnection

- 13.1. Applicability: The Public Utility must use the Tier 4 interconnection review procedures for an Application that does not qualify for Tier 1, Tier 2, or Tier 3 review and for which the Small Generator Facility has an Electric Nameplate Capacity that is 20 MW or less. Generators larger than 20 MW still subject to state jurisdiction will be handled as Tier 4 applications.
- 13.2. Approval: The Public Utility must approve interconnection under the Tier 4 interconnection review procedure set forth in section 13.3 and studies set forth in Sections 13.4 through 13.6 of this rule. The Public Utility may not impose requirements in addition to those set forth in the SGIR.
- 13.3. Tier 4 Interconnection Review Procedure
 - 13.3.1. The Applicant must submit its Application and appropriate fees to the Public Utility at its designated address. The Application form is available on the Commission web site as Form 2.

- 13.3.2. The Public Utility must, within 10 business days of receipt of the Application, inform the Applicant that the Application is either complete or incomplete. If the application is incomplete, the Public Utility must indicate what information is missing. In the event the Applicant does not receive notification within 10 business days, the Applicant may contact the Public Utility to determine the status of the Application.
- 13.3.3. If the Public Utility does not have a record of receipt of the Application, the Applicant must provide the Public Utility with an additional copy of the Application. If the Applicant can demonstrate that the original completed Application was delivered to the Public Utility, the Public Utility must forgo the initial 10 business day response period and complete its review within 20 business days of its receipt.
- 13.3.4. Queuing Priority: Once the Public Utility deems the Application to be complete, it must assign the project a Queue Position unless a queue position was already assigned under a previous lower-Tier Application that was not approved. The Queue Position of each Application is used to determine any potential Adverse System Impacts of the proposed Small Generator Facility based on the relevant data contained in the Application, the outcomes of the various studies and the Applicant's desired interconnection location. The Applicant must proceed under the timeframes of this section. The Public Utility must schedule a Scoping Meeting to notify the Applicant about other higher-queued Applications including, but not limited to, FERC Interconnection Application on the same radial line or Area Network to which the Applicant is seeking to interconnect.
- 13.3.5. If in the process of evaluating the completed Application, the Public Utility determines that supplemental or clarifying information is required, the Public Utility must request the information. The time required for the receipt of the additional information may extend the time before the Scoping Meeting can be convened but only to the extent of the time required for the receipt of the additional information. The Public Utility may not alter the Applicant's Queue Position. Supplemental or clarifying information can be provided in the scoping meeting.
- 13.3.6. Studies: By mutual agreement of the Parties, the Scoping Meeting, Interconnection Feasibility Study, Interconnection Impact Study, or Interconnection Facilities Studies (or any combination thereof) as set forth in these Tier 4 procedures may be waived.
- 13.3.7. Scoping Meeting: A Scoping Meeting must be held within 10 business days, or as agreed upon by the Parties, after the Public Utility has notified the Applicant that the Application is deemed complete. The purpose of the meeting is to review the Application including any existing studies relevant to the Application, (such as the results from the Tier 1, Tier 2 or Tier 3 screening criteria and studies or, if available, the Applicant's analysis of the proposed

interconnection using the same criteria as the Public Utility applies to the Application). Parties are expected to bring to the Scoping Meeting such personnel, including system engineers and other resources, as may be reasonably required to accomplish the purpose of the meeting. Some Scoping Meeting outcomes may include:

- 13.3.7.1. An identification of the need for further studies as described in sections 13.4, 13.5 and 13.6 and an outline of the expected study timeline based on the Public Utility resources and work load;
 - 13.3.7.2. Possible changes or modifications to the Application to facilitate the interconnection or reduce costs; or
 - 13.3.7.3. No changes at all and the Public Utility being able to proceed with the application without further studies. In any case, where changes result from the scoping meeting, the Applicant maintains the assigned queue position so long as the additions or changes to the Application can be rectified within a 10 business day window, or a period mutually agreed upon by parties, from the date of notification.
- 13.3.8. If the Parties agree at the Scoping Meeting that an Interconnection Feasibility Study needs to be performed, the Public Utility has up to 15 business days to complete an Interconnection Feasibility Study Agreement that provides the Applicant with an outline of the scope and a good faith, non-binding estimate of the cost to perform the study. A model form of an Interconnection Feasibility Study Agreement is provided on the Commission's website.
- 13.4. Interconnection Feasibility Study:
- 13.4.1. If the Applicant agrees to the cost estimate, the Public Utility must perform an Interconnection Feasibility Study. The study must evaluate the effects of the proposed Small Generator Facility on the existing Public Utility's T&D System and look for possible Adverse System Impacts. Some Feasibility Study outcomes may include:
 - 13.4.1.1. Initial identification of any circuit breaker short circuit capability limits exceeded as a result of the interconnection;
 - 13.4.1.2. Initial identification of any thermal overload or voltage limit violations resulting from the interconnection;
 - 13.4.1.3. Initial review of grounding requirements and system protection; and
 - 13.4.1.4. Description and estimated cost of Interconnection Facilities and System Upgrades required to interconnect the Small Generator Facility to the Public Utility in a safe and reliable manner.

- 13.4.2. If the Applicant asks that the Interconnection Feasibility Study evaluate multiple potential points of interconnection, the Public Utility will perform the additional evaluations at the Applicant's expense.
- 13.4.3. If the Interconnection Feasibility Study identifies possible Adverse System Impacts from the Small Generator Facility, an Interconnection System Impact Study is required. The Public Utility has up to 15 business days to complete an Interconnection System Impact Study Agreement that provides the Applicant with an outline of the scope and a good faith, non-binding estimate of the cost to perform the study. A model form of an Interconnection System Impact Study Agreement is provided on the Commission's website.

13.5. Interconnection System Impact Study

- 13.5.1. If the Applicant agrees to the cost estimate, the Public Utility must conduct an Interconnection System Impact Study. The study must evaluate the Adverse System Impacts identified in the Interconnection Feasibility Study, and study other potential impacts including, but not limited to, those identified in the Scoping Meeting.

- 13.5.2. The study must consider all generating facilities that, on the date the Interconnection System Impact Study is commenced:

- 13.5.2.1. Are directly interconnected with the Public Utility's system;
- 13.5.2.2. Have a pending higher Queue Position to interconnect to the system; or;
- 13.5.2.3. Have a signed Interconnection Agreement.

- 13.5.3. The study must include, among other things:

- 13.5.3.1. A short circuit analysis,
- 13.5.3.2. A stability analysis,
- 13.5.3.3. A power flow analysis,
- 13.5.3.4. Voltage drop and flicker studies,
- 13.5.3.5. Protection and set point coordination studies, and
- 13.5.3.6. Grounding reviews.

- 13.5.4. The Interconnection System Impact Study must:

- 13.5.4.1. State the underlying assumptions of the study,
- 13.5.4.2. Show the results of the analyses, and

- 13.5.4.3. List any potential impediments to providing the requested interconnection service.
 - 13.5.5. If the Applicant sponsored a separate independent impact study, the Public Utility must also evaluate and address any alternative findings from that study.
 - 13.5.6. The outcome of the System Impact Study must include a report of any Interconnection Facilities and System Upgrades to the Public Utility's T&D system and any System Upgrades to Affected Systems required to allow the proposed interconnection to occur including an estimate of the equipment costs and standard delivery schedules.
 - 13.5.7. If Interconnection Facilities are found to be necessary in the System Impact Study, the Public Utility must determine the price and delivery of the facilities. The Public Utility has up to 15 business days after completion of the Interconnection System Impact Study, or a period mutually agreed upon by parties, to develop an Interconnection Facilities Study Agreement that provides the Applicant with the scope and a good faith, non-binding estimate of the cost to perform the study. A model form of an Interconnection Facilities Study Agreement is provided on the Commission's website.
- 13.6. Interconnection Facilities Study
- 13.6.1. If the Applicant agrees to the cost estimate, an Interconnection Facilities Study must be performed by the Public Utility to evaluate the cost of equipment, and the engineering, procurement and construction work (including overheads) needed to implement the conclusions of the Interconnection Feasibility Study and Interconnection System Impact Study for interconnection of the proposed Small Generator Facility. The Interconnection Facilities Study must also identify:
 - 13.6.1.1. The electrical switching configuration of the equipment, including, without limitation, transformer, switchgear, meters, and other station equipment;
 - 13.6.1.2. The nature and estimated cost of the Public Utility's Interconnection Facilities;
 - 13.6.1.3. System Upgrades required at the Public Utility and on Affected System that are necessary to accomplish the interconnection; and
 - 13.6.1.4. A detailed estimate of the time required to procure materials and equipment and complete the construction and installation of such facilities.
 - 13.6.2. Parties may agree to permit the Interconnection Customer to separately arrange for a third party to design and estimate the construction costs for the required Interconnection Facilities. In such a case, the Public Utility must review the design and cost estimates of the facilities, under the provisions of

the Interconnection Facilities Study Agreement. If the Parties agree to separately arrange for design and construction estimates, and comply with any security and confidentiality requirements, the Public Utility must make all relevant information and required specifications available to the Applicant at no cost in order to permit the Applicant to obtain an independent design and cost estimate for the facilities, to be built in accordance with such specifications.

- 13.7. Approval: Upon completion of the Interconnection Facilities Study, and with the agreement of Applicant to pay for necessary Interconnection Facilities and System Upgrades identified in the Interconnection Facilities Study as approved by the Public Utility, and provided the Public Utility determines, based in the studies in Sections 13.4 through 13.6, that safety and reliability will not be compromised from interconnecting the Small Generator Facility, the Public Utility must approve the application
 - 13.7.1. The interconnection customer must provide the Public Utility at least 20 days notice of the planned commissioning for the small generator facility.
 - 13.7.2. The Public Utility has the option of conducting a witness test at a mutually agreeable time within 10 business days of the scheduled commissioning or waiving the test and notifying the Applicant. If the Public Utility does not conduct the witness test within the 10 business days or within the time otherwise mutually agreed upon by the parties, or if the Public Utility notifies the Applicant of its intent not to perform the test, the witness test is deemed waived.
- 13.8. Non-Approval: If the Application is denied, the Public Utility must provide a written explanation explaining why the Application was denied.
- 13.9. Interconnection of the Small Generator Facility: The Interconnection is not final until:
 - 13.9.1. Any facilities and upgrades agreed upon in sections 13.3 through 13.6 are satisfied;
 - 13.9.2. The Small Generator Facility installation is inspected and approved by the electric code inspector with jurisdiction over the interconnection;
 - 13.9.3. The Parties execute a Certificate of Completion; and
 - 13.9.4. There is a successful completion of the Witness Test, if conducted by the Public Utility.
- 13.10. Witness Test Not Acceptable: If the Witness Test is conducted and is not acceptable to the Public Utility, the Applicant must be allowed a period of 30 calendar days to resolve any deficiencies. The Parties may mutually agree to extend the time period for resolving any deficiencies. If the Applicant fails to resolve the deficiencies to

the satisfaction of the Public Utility within the agreed upon time period, the Application is deemed withdrawn. The Applicant has the right to submit a new Interconnection Request for consideration at a later time but relinquishes the current Small Generation Facility's position in the queue.

- 13.11. Operation: The Applicant must notify the Public Utility prior to commencing operation and must operate the Small Generator Facility in accordance with the executed Interconnection Agreement and the executed Power Purchase Agreement.

14. Recordkeeping and Reporting Requirements

- 14.1. The Public Utility must maintain, for a period of not less than two years, a record of all Applications received, the time required to complete its review of each Application, and reasons for the actions taken on the Applications.
- 14.2. The Public Utility must maintain, for as long as the interconnection is in place, a record of all Interconnection Agreements completed and including the related "As Built" Form 7 that records equipment specifications and initial settings. The utility must provide a copy of these records to the Applicant or Interconnection Customer within 15 business days upon receipt of a written request.
- 14.3. The Public Utility must prepare and submit to the Commission, an annual report summarizing the Public Utility's interconnection activities including, but not necessarily limited to, the following information:
 - 14.3.1. For all Tiers of Interconnection Applications:
 - 14.3.1.1. The number Interconnection Applications made,
 - 14.3.1.2. The number of interconnections established,
 - 14.3.1.3. The individual types of generators applying for interconnection and their capacity, and
 - 14.3.1.4. Interconnection Application location by Zip code.
 - 14.3.1.5. A report of any disputes and their resolution.
 - 14.3.2. For each Tier 2 through Tier 4 Interconnection Applications:
 - 14.3.2.1. Estimated facilities costs from studies,
 - 14.3.2.2. Whether telemetry is required and if so, its basic configuration, and
 - 14.3.2.3. System upgrades required and their estimated costs.
 - 14.3.3. For all applications that led to successful interconnections:

14.3.3.1. Whether or not timelines were met and if not an explanation of why they were not met, and

14.3.3.2. A record of any item(s) that Parties mutually agreed to waive.

15. Metering and Monitoring

15.1. Metering: The Interconnection Customer is responsible for the cost of the purchase, installation, operation, maintenance, testing, repair, and replacement of any special metering and data acquisition equipment deemed necessary by the terms of the (separate) Power Purchase Agreement except that Tier 1 customers may use existing metering equipment unless the Public Utility elects to install metering equipment at its expense. The Public Utility must install, maintain and operate the metering equipment. Parties must be granted unrestricted access to such equipment as may be necessary for the purposes of conducting routine business.

15.2. Monitoring: Small Generator Facilities approved and interconnected to the Public Utility under a Tier 1, Tier 2 or Tier 3 Interconnection Application, and under a Tier 4 Interconnection Application, up to an Electric Nameplate Capacity rating of 3 MW, except as noted herein, are not required to provide for remote monitoring of the electric output by the Public Utility. Tier 4 Interconnection Applications with Electric Nameplate Capacities greater than 3 MW or Tier 3 Interconnection Applications where the aggregated generation on the circuit, including the Applicant's Small Generator Facility, would exceed 50 percent of the line section annual peak load may be required to provide remote monitoring at the Public Utility's discretion. For Small Generator Facilities required to provide remote monitoring pursuant to provisions this subsection, the data acquisition and transmission to a point where it can be used by the Public Utility's control system operations must meet the performance based standards described in Section 15.3. Any data acquisition and telemetry equipment required by this rule must be installed, operated and maintained at the Interconnection Customer's expense.

15.3. Telemetry is the remote communication from a Small Generator Facility to a point on the Public Utility's communication network where the data can be assimilated into the Public Utility's grid operations if desired.

15.3.1. Parties may mutually agree to waive or modify any of the telemetry requirements contained in Section 15.3 of this rule.

15.3.2. The communication must take place via a Private Network Link using a Frame Relay or Fractional T-1 line or other such suitable device. Dedicated Remote Terminal Units, from the Interconnected Small Generator Facility to a Public Utility's substation and Energy Management System are not required.

15.3.3. A single communication circuit from the Small Generator Facility to the Public Utility is sufficient.

- 15.3.4. Communications protocol must be DNP 3.0 or other standard used by the Public Utility.
- 15.3.5. The Small Generator Facility must be capable of sending telemetric monitoring data to the Public Utility at a minimum rate of every 2 seconds (from the output of the Small Generator Facility's telemetry equipment to the Public Utility's Energy Management System).
- 15.3.6. The minimum data points that a Small Generator Facility is required to provide telemetric monitoring to the Public Utility on are:
 - 15.3.6.1. Net real power flowing out or into the Small Generator Facility (analog);
 - 15.3.6.2. Net reactive power flowing out or into the Small Generator Facility (analog);
 - 15.3.6.3. Bus bar voltage at the point of common coupling (analog);
 - 15.3.6.4. Data Processing Gateway (DPG) Heartbeat (used to certify the telemetric signal quality); and
 - 15.3.6.5. On-line or off-line status (digital).
- 15.3.7. If an Interconnection Customer operates the equipment associated with the high voltage switchyard interconnecting the Small Generator Facility to the T&D System, and is required by this rule to provide monitoring and telemetry, the Interconnection Customer must provide the following monitoring to the Public Utility in addition to provisions in Subsection 15.3.5 above:
 - 15.3.7.1. Switchyard Line and Transformer MW and MVAR values;
 - 15.3.7.2. Switchyard Bus Voltage; and
 - 15.3.7.3. Switching Devices Status.

16. Temporary Disconnection

- 16.1. The Public Utility or Interconnection Customer may temporarily disconnect the Small Generator Facility from its T&D System at any time and for as long as reasonably necessary in the event one or more of the following conditions or events occurs:
 - 16.1.1. Under emergency conditions, the Public Utility or the Interconnection Customer may immediately suspend interconnection service and temporarily disconnect the Small Generator Facility.
 - 16.1.1.1. The Public Utility must notify the Interconnection Customer promptly when it becomes aware of an emergency condition that may reasonably be

expected to affect the Small Generator Facility operation. The Interconnection Customer must notify the Public Utility promptly when it becomes aware of an emergency condition that may reasonably be expected to affect the Public Utility's T&D System.

- 16.1.1.2. 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.
- 16.1.2. Parties must make reasonable efforts to provide 5 business days notice prior to interruption caused by routine maintenance or construction and repair to the Small Generator Facility or Public Utility's T&D system and must use reasonable efforts to coordinate such interruption.
- 16.1.3. In the case forced outages of the T&D System, the Public Utility must use reasonable efforts to provide the Interconnection Customer with prior notice of forced outages to effect immediate repairs to the T&D System. If prior notice is not given, the Public Utility must, upon request, provide the Interconnection Customer written documentation after the fact explaining the circumstances of the disconnection.
- 16.1.4. If the Public Utility 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 the Public Utility's T&D System then the Public Utility may disconnect the Small Generator Facility under the procedures of this section.
 - 16.1.4.1. The Public Utility must provide the Interconnection Customer supporting documentation used to reach the decision to disconnect upon request.
 - 16.1.4.2. The Public Utility may disconnect the Small Generator Facility if, after receipt of the notice, the Interconnection Customer fails to remedy the adverse operating effect within a reasonable time, no less than 5 business days from the date the Interconnection Customer receives the Public Utility's written notice supporting the decision to disconnect, unless emergency conditions exist, in which case the Temporary Disconnection provisions of Interconnection Agreement apply.
- 16.2. If the Interconnection Customer makes any change other than Minor Equipment Modifications without prior written authorization of the Public Utility, the Public Utility has the right to temporarily disconnect the Small Generator Facility.

17. Termination and Default

- 17.1. No termination is effective until the Parties have executed provisions of this section applicable to such termination.

- 17.1.1. The Interconnection Customer may terminate the Interconnection at any time by giving the Public Utility 20 business days' written notice.
 - 17.1.2. Either Party may terminate their Interconnection after default pursuant to section 17.2 of this rule.
 - 17.1.3. The Commission may terminate the Interconnection
 - 17.1.4. Upon termination of the Interconnection, any Small Generator Facility Interconnection Equipment must be disconnected from the Public Utility's T&D System at the Interconnection Customer's expense. The termination of the Interconnection does not relieve either Party of its liabilities and obligations, owed or continuing at the time of the termination.
- 17.2. Default: Failure of a Party or Parties to meet the obligations of the SGIR may constitute Default. Upon a default, the non-defaulting Party must give written notice of such default to the defaulting Party. The defaulting Party has 60 calendar days from receipt of the default notice within which to cure such default. If a default is not capable of being cured within 60 calendar days, the non-defaulting Party has the right to terminate the Interconnection Agreement by written notice.

18. Dispute Resolution

- 18.1. Before filing a Complaint with the Commission, the Public Utility, Applicant or Interconnection Customer must first provide the other Party and Commission Staff with a written Notice of Dispute (Notice). Such Notice may describe in detail the nature of the dispute and a proposed resolution. Commission Staff may assist the parties in informal resolution if so requested. In the event the parties are unable to resolve the dispute within 30 calendar days or such other period as the Parties may agree upon by mutual agreement, the complaining party may formally file a Complaint with the Commission according to ARSD 20:10:01:08.01.

End

**Small Generator Facility
Tier 1 Interconnection Request Application Form**
(Applies to Lab Certified, Inverter-based Small Generator Facilities
With a Name Plate capacity of 25 kW or less)

Applicant Contact Information;

Name _____

Mailing Address: ____

City: __ State: _____ Zip Code: __

Telephone (Daytime): _____ (Evening): __

Facsimile Number: _ E-Mail Address: ____

System Installer;

Check if Owner Installed

Name: _____

Mailing Address: _____

City: _____ State: _____ Zip Code: _____

Telephone (Daytime): _____ (Evening): _____

Facsimile Number: _____ E-Mail Address: _____

Small Generator Facility Information:

Location (if different from above): _____

Electric Distribution Company (EDC): _____

Account Number (existing EDC customers): _____

Proposed Operation Mode QF Other

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

Prime Mover Type _____

Tier 1 Interconnection Request Application Form

(continued)

Inverter Manufacturer: _____ Model _____

Inverter Electric Nameplate Capacity: _____(kW) _____ (kVA) _____

Inverter Electrical Connection: _____(AC Volts), Phase: Single or Three Phase

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

Prime Mover: Photovoltaic Reciprocating Engine Fuel Cell

 Turbine Other _____

Energy Source: Solar Wind Hydro Diesel Natural Gas

 Fuel Oil Other _____

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)

Estimated Commissioning Date: _____

Estimated Commissioning Cost: _____

1.1.1.1

1.1.1.2 Applicant Signature:

I here-by 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)

Title: __ Date: _____

~~Application fee (\$100) included~~

1.1.1.3

1.1.1.4 Interconnection Request Acknowledgement:

Receipt of the application and application fee is hereby acknowledged.

Approval for a Tier 1 Small Generator Facility 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)AR 860, Division 082 and is not granted by the Public Utility's signature on this Application Form..

Public Utility Representative Signature: _____ Date: _____

Printed
Name: _____ Title: _____

Indicate whether Public Utility plans to perform Witness Test: Yes No

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

**Application for Small Generator Facility Interconnection
Tier 2, Tier 3 or Tier 4 Interconnection
(For Small Generator Facilities with Electric Nameplate Capacities of ~~10~~ 20 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

If 3 Phase Transformer, Indicate Type: Wye Delta

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. \$50 plus \$1 per kW of rated generating facility output up to a maximum of \$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 a 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. \$100 plus \$2 per kW of rated generating facility output up to a maximum of \$1,000.**

Tier 4 – Electric Nameplate Capacity rating is ~~10~~ **20** 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. \$100 plus \$2 per kW of rated generating output facility up to a maximum of \$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 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)

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: _____

Tier 2, Tier 3 or Tier 4 Interconnection Application

(cont.)

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

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: _____ °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: _____ %

Tier 2, Tier 3 or Tier 4 Interconnection Application

(cont.)

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): _____

1.1.1.5

1.1.1.6 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 _____

1.1.1.7 Public Utility 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 EDC'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.

Small Generator Facility Interconnection

Certificate of Completion Form¹

Applicant Information

Name: _____

Mailing Address: _____

City: _____ State: _____ Zip Code: _____

Telephone (Daytime): _____ (Evening): _____

E-Mail Address/ Fax number: _____

Installer

Check if

owner-installed

Name: _____

Mailing Address: _____

City: _____ State: _____ Zip Code: _____

Telephone (Daytime): _____ (Evening): _____

E-Mail Address/ Fax number: _____

1.2 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 Interconnection Customer acknowledges that the Small Generator Facility is not ready for operation until receipt of the final acceptance an approval by the-Public Utility as provided below.

Signed _____ Date _____

(Signature of Applicant)

Printed Name: _____

Check if copy of signed electric inspection form is attached

.....
..

Acceptance and Final Approval of interconnection installation(for EDC 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:

Public Utility waives Witness Test? *(Initial)* Yes (_____) No (_____)

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

Public Utility Signature: _____ Date:

Printed Name: _____ Title: _____

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 the Public Utility at the Public Utility's designated address.

Interconnection Facilities Study Form Agreement

This agreement is made and entered into this _____ day of _____ by and between _____, a _____ organized and existing under the laws of the State of _____, (“Applicant,”) and _____, a _____ existing under the laws of the State of _____, (Public Utility). Applicant and Public Utility each may be referred to as a “Party, ” or collectively as the “Parties.”

Recitals:

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

Whereas, The Applicant desires to interconnect the Small Generating Facility with the Public Utility’s T&D System;

Whereas, The Public Utility has completed an Interconnection System Impact Study and provided the results of said study to the Applicant; and

Whereas, The Applicant has requested the Public Utility to perform an Interconnection Facilities Study to specify and estimate the cost of the equipment, engineering, procurement and construction work needed to implement the conclusions of the Interconnection System Impact Study in accordance with Good Utility Practice to physically and electrically connect the Small Generating Facility to the Public Utility’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 given in the PUC’s rules found at OAR 860-082-0010 through 860-082-0080.
2. Interconnection Customer and Public Utility shall cause an Interconnection Facilities Study consistent with OAR 860-082-0010 through 860-082-0080.
3. The Applicant will provide the data requested in Section 2 of this Form. The scope of the Interconnection Facilities Study shall be subject to this data.
4. An Interconnection Facilities Study report (1) shall provide a description, estimated cost of (consistent with Section 2), schedule for required facilities to interconnect the Small Generator Facility to the Public Utility’s T&D System and (2) shall address the short circuit, instability,

and power flow issues identified in the Interconnection System Impact Study.

5. The Public Utility will may require a study deposit as described in OAR 860-082-0030(6).
6. In cases where no Upgrades are required, the Interconnection Facilities Study shall be completed and the results will be transmitted to the Applicant within thirty Calendar Days after this agreement is signed by the Parties.
7. Study fees will be detailed in OAR 860-082-0030 and will be based on actual costs.
8. The Cost Responsibility for Studies is detailed in OAR 860-082-0030.

In witness whereof, the Parties have caused this agreement to be duly executed by their duly authorized officers or agents on the day and year first above written:

[Insert name of the-Public Utility]

Signed _____

Name (Printed): _____ Title _____

[Insert name of the Applicant]

Signed _____

Name (Printed): _____ Title _____

Section 2 to the Interconnection Facilities Study Agreement

Data To Be Provided by Applicant With the Interconnection 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. On the one-line diagram, indicate the generation capacity attached at each metering location (Maximum load on CT/PT).

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

One set of metering is required for each generation connection to the new ring bus or existing Public Utility station.

Number of generation connections: _____

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? _____.

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

Physical dimensions of the proposed interconnection station: _____.

Bus length from generation to interconnection station: _____

Line length from interconnection station to the Public Utility's T&D System: _____.

Tower number observed in the field. (Painted on tower leg)*: _____.

Number of third party easements required for distribution lines*: _____.*

To be completed in coordination with Public Utility

Is the Small Generating Facility located in Public Utility's service area?

Facility Location: _____

Yes _____ No _____

If No, please provide name of local provider:

Please provide the following proposed schedule dates:

Begin Construction Date: _____

Generator step-up transformers receive back feed power Date: _____

Generation Testing Date: _____

Commercial Operation Date: _____

Interconnection Feasibility Study Form Agreement

This agreement is made and entered into this _____ day of _____ by and between _____, a _____ organized and existing under the laws of the State of _____, (“Applicant,”) and _____, a _____ existing under the laws of the State of _____, (“Public Utility”). Applicant and Public Utility each may be referred to as a “Party,” or collectively as the “Parties.”

Recitals:

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

Whereas, Applicant desires to interconnect the Small Generating Facility with Public Utility's T&D System; and

Whereas, Applicant has requested for the Public Utility to perform an Interconnection Feasibility Study to assess the feasibility of interconnecting the proposed Small Generating Facility to Public Utility'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 given in PUC Rule OAR 860-082-0010- 860-082-0080.
2. Interconnection Customer elects and Electric Distribution Company shall cause to be performed an Interconnection Feasibility Study consistent with OAR 860-082-0010- 860-082-0080.
3. The scope of the Interconnection Feasibility Study shall be subject to the assumptions set in the rule and detailed in Section 2 to this agreement form.
4. The Interconnection Feasibility Study shall be based on the technical information provided by the Applicant in their Application, as may be modified as the result of the Scoping Meeting. The Public Utility reserves the right to request additional technical information from Interconnection Customer as may reasonably become necessary consistent with Good Utility Practice during the course of the Interconnection Feasibility Study. If, in the course of the Study, the Applicant finds it necessary to modify the Application, the time to complete the Interconnection Feasibility Study may be extended by mutual agreement of the Parties.
5. In performing the study, the Public Utility will rely, to the extent reasonably practicable, on existing studies of recent vintage. The Applicant will not be charged for such existing studies. OAR 860-082-0030 details cost responsibility associated with any new study or modifications to existing studies that are reasonably necessary to perform the Interconnection Feasibility

Study.

6. The Interconnection Feasibility Study report shall provide the following information:

6.1 Preliminary identification of any circuit breaker short circuit capability limits exceeded as a result of the interconnection,

6.2 Preliminary identification of any thermal overload or voltage limit violations resulting from the interconnection, and

6.3 Preliminary description and non-bonding estimated cost of facilities required to interconnect the Small Generating Facility to the Public Utility's T&D System and to address the identified short circuit and power flow issues.

7. The Interconnection Feasibility Study shall be completed and the results shall be transmitted to Interconnection Customer within thirty Calendar Days after this agreement is signed by the Parties.

8. Study fees will be based on actual costs in accordance with the provisions of 860-082-0030.

In witness whereof, the Parties have caused this agreement to be duly executed by their duly authorized officers or agents on the day and year first above written:

[Insert name of Public Utility]

Signed _____
Name (Printed): _____ Title _____

[Insert name of Applicant]

Signed _____
Name (Printed): _____ Title _____

Section 2: Interconnection Feasibility Study Agreement
Assumptions Used in Conducting the Interconnection Feasibility Study

The Interconnection Feasibility Study will be based upon the information set forth in the Application and agreed upon in the Scoping Meeting held on _____:

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

2. Designation of alternative Points of Interconnection and configuration.

Note: 1 and 2 are to be completed by the Applicant. Any other assumptions (listed below) are to be provided by the Applicant or the Public Utility.

**Interconnection Equipment Specifications, Initial Settings and
Operating Requirements ***

Address of Facility

Interconnection Customer: _____
Facility Operator (if different than above): _____
Facility Location/ Name: _____ Phone #: _____
Street Address: _____
City: __ State: _____ Zip Code: __
Revision Date: _____

Energy Production Equipment/Inverter Information

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

For Synchronous Machines

Manufacturer: _____
Model No.: _____ Version No.: _____
Submit copies of the Saturation Curve and the Vee Curve Salient Non-Salient
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

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

Electric Nameplate Capacity rating: (kVA) _____

For Inverter Based Facilities

Manufacturer: _____ Model: _____

Type: Forced Commutated Line Commutated

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

Efficiency: _____% Power Factor: _____%

Is Inverter Lab Tested? Yes (attach product literature) No

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

One Line Diagram attached: Yes No

Plot Plan attached: Yes No

Isolation Device Type/ Location: _____

Grounding Configuration: _____

Initial Commissioning Date: _____

Switchgear/ Circuit Interruption Devices

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

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

Nameplate: _____

Metering

Location: _____

Metering Issues: _____

Monitoring Provisions: Yes No

Monitoring Values: _____

Monitoring Issues: _____

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: _____

* 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 860-082-0060. Parties may not deviate from initial settings and agreed upon operating parameters except as permitted by the Rule without written authorization of the Public Utility. The Interconnection Customer will furnish updated information to the Public Utility any time a special operating requirement initial set point or the Interconnection Equipment is materially changed.

Interconnection Agreement for Small Generator Facility

Tier 1, Tier 2, Tier 3 or Tier 4 Interconnection
(Small Generator Facilities with Electric Nameplate Capacities ~~or 10~~ of 20 MW or smaller)

This Interconnection Agreement (sometimes also referred to as "Agreement") is made and entered into this ___ day of _____ by and between _____, a _____ organized and existing under the laws of the State of _____, ("Applicant") and _____, a _____, existing under the laws of the State of _____, ("Public Utility"). The Applicant and Public Utility 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 Public Utility's T&D System.; and

Whereas, the Agreement shall be used for all approved Tier 1, Tier 2, Tier 3 and Tier 4 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 Name Plate Capacity of ~~10~~ 20 MW or smaller will interconnect to, and operate in Parallel with, the Public Utility'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 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 the Public Utility 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 Public Utility tariffs, the Public Utility tariff shall control.

1.4 Responsibilities of the Parties

- 1.4.1 The Parties shall perform all obligations of the 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 the Public Utility in Form 7, title "Specifications, Special Operating Requirements and Initial Settings" a copy of which is provided on the Commission's website.

1.6 Metering & Monitoring

The Interconnection Customer will be responsible for metering and monitoring as required by OAR 860-082-0065.

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. The EDC may, in some circumstances, also require Applicants 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 4 provided on the Commission website and completed by the Public Utility 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.

Article 2. Inspection, Testing, Authorization, and Right of Access

1.2.1 Equipment Testing and Inspection

1.2.2 The Applicant will test and inspect its Small Generator Facility and Interconnection 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 Agreements-

1.2.3 To the extent that an Applicant decides to conduct interim testing of the Small Generator Facility prior to the Witness Test, it may request that the Public Utility observe these tests and that these tests be deleted from the final Witness Test. If the EDC sends qualified personnel to the Small Generator Facility to observe such interim testing, it will be doing so at its own expense.

2.1 Right of Access:

As provided in OAR 860-082-0020, the EDC 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.

1.2.3.1 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.

1.2.3.2 3.3 Termination

No termination will become effective until the Parties have complied with all applicable laws and any clauses of the Rule as detailed in OAR 860-082-0075 or this Agreement applicable to such termination.

3.3.1 The Applicant may terminate this Agreement at any time by giving the Public Utility 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 the Public Utility'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

The Public Utility or 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, the Public Utility or the Interconnection Customer may immediately suspend interconnection service and temporarily disconnect the Small Generator Facility. The Public Utility 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 the Public Utility promptly when it becomes aware of an emergency condition that may reasonably be expected to affect the Public Utility'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 Business Days notice prior to interruption caused by routine maintenance or construction and repair to the Small Generator Facility or Public Utility's T&D system and shall use reasonable efforts to coordinate such interruption.
- 3.4.3 Forced outages of the T&D System, the Public Utility 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, the Public Utility 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 the Public Utility 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 the Public Utility's T&D System, the Public Utility may disconnect the Small Generator Facility. The Public Utility will provide the Applicant upon request all supporting documentation used to reach the decision to disconnect. The Public Utility 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 Business Days from the date the Applicant receives the

Public Utility'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 the Public Utility, the Public Utility 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 Public Utility's T&D System to their normal operating state as soon as reasonably practicable following any disconnection pursuant to this section.

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 860-082-0030.

4.1 Minor T&D System Modifications:

Modifications to the existing T&D Systems identified by the Public Utility under a Tier 2 or Tier 3 review, such as changing meters, fuses or relay settings, are deemed Minor Modifications. It is the Public Utility's sole discretion to decide what constitutes a Minor Modification. The Applicant will bare the costs of making such Minor Modifications as may be necessary to gain approval of an Application.

4.2 Interconnection Facilities:

The Public Utility will identify under the review procedures of a Tier 2 review or under a Tier 4 Facilities Study, the Interconnection Facilities necessary to safely interconnect the Small Generator Facility with the Public Utility. The Public Utility will itemize 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:

The Public Utility will design, procure, construct, install, and own any System Upgrades. The actual cost of the System Upgrades, including overheads, will be directly assigned to the Applicant. An Interconnection Customer may be entitled to financial compensation from other Public Utility 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:

The Public Utility 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.

4.6 Billings:

The Public Utility may require a deposit of not more than 50% of the cost estimate, not to exceed \$1000, to be paid up front by the Applicant for studies necessary to complete an Application and to interconnect interconnection to the T&D System. The Public Utility 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 interconnection 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 the Public Utility, 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 this 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 The Parties shall 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, demand, suits, recoveries, costs and expenses, court costs, attorney fees, and all other obligations by or to third parties, arising out of or resulting from the other Party's action or failure to meet its obligations under this Agreement on behalf of the indemnifying Party, except in cases of gross negligence or intentional wrongdoing by 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.

5.4 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 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 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 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. General liability insurance is not required for approval of an interconnection Application, or for the related Interconnection Agreement, for a Small Generator Facility with an Electric Nameplate Capacity of 200 KW or smaller. All other Interconnection Customers must obtain a prudent amount of general liability insurance to protect any person who may be affected by their facility and its operation

Article 7. **Dispute Resolution**

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

Article 8. **Miscellaneous**

1.2.3.2.1 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

1.2.3.2.1.1 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, 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.

1.2.3.2.2 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:

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 860-082-006. The Public Utility will provide a copy of these records to the Applicant or Interconnection Customer within 15 Business Days if a request is made in writing.

If to the Applicant:

Applicant: _____

Attention: _____

Address: _____

City: _____ State: _____ Zip: _____

Phone: _____ Fax: _____ E-mail _____

If to Public Utility:

EDC _____

Attention: _____

Address: _____

City: _____ State: _____ Zip: _____

Phone: _____ Fax: _____ E-mail _____

9.3 Billing and Payment

Billings and payments shall be sent to the addresses set out below: (complete if different than article 9.2 above)

If to the Applicant

Applicant: _____

Attention: _____

Address: _____

City: _____ State: _____ Zip: _____

If to Public Utility

EDC: _____

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 (complete if different than article 9.2 above)

Applicant's

Operating representative: _____

Attention: _____

Address: _____

City: _____ State: _____ Zip: _____

Phone: _____ Fax: _____ E-Mail _____

Public Utility's

Operating Representative: _____

1.3 Attention: _____

Address: _____

City: _____ State: _____ Zip: _____

Phone: _____ Fax: _____

9.5 Changes to the Notice Information

Either Party may change this notice information by giving five 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 Public Utility:

Name: _____

Title: _____

Date: _____

For the Applicant:

Name: _____

Title: _____

Date: _____