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September 12, 2023

**VIA ELECTRONIC FILING**

Attention: Filing Center  
Public Utility Commission of Oregon  
201 High Street SE, Suite 100  
Salem, Oregon 97308-1088

**Re: Docket UM 2032 – Investigation into the Treatment of Network Upgrade Costs for Qualifying Facilities**

Attention Filing Center:

Attached for filing in the above-captioned docket is the Joint Utilities' Application for Approval of Compliance Filing. A table of contents is included on the next page for ease of review.

Please contact this office with any questions.

Sincerely,

Alisha Till  
Paralegal

Attachments

## **DOCKET UM 2032: JOINT UTILITIES' APPLICATION FOR APPROVAL OF COMPLIANCE FILING**

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<sup>1</sup> Page numbering is based on the PDF page numbering.

**BEFORE THE PUBLIC UTILITY COMMISSION  
OF OREGON**

**UM 2032**

In the Matter of

PUBLIC UTILITY COMMISSION OF  
OREGON,

Staff Investigation into Treatment of Network  
Upgrade Costs for QFs.

**JOINT UTILITIES' APPLICATION FOR  
APPROVAL OF COMPLIANCE FILING**

**I. INTRODUCTION**

In accordance with Order No. 23-005, issued by the Public Utility Commission of Oregon (Commission) on January 20, 2023,<sup>1</sup> PacifiCorp d/b/a Pacific Power (PacifiCorp), Portland General Electric Company (PGE), and Idaho Power Company (Idaho Power) (together, the Joint Utilities) submit this Application for Approval of Compliance Filing.

In Order No. 23-005, the Commission concluded that QFs should interconnect with Network Resource Interconnection Service (NRIS) subject to a limited exception—the Commission allowed QFs to be studied for both Energy Resource Interconnection Service (ERIS) and NRIS, at the QF's expense; however, if the QF selects ERIS, it must negotiate a non-standard power purchase agreement (PPA).<sup>2</sup> To implement this change in policy, the Commission directed the Joint Utilities to “develop and make filings, as necessary, to facilitate a QF's ability to pay for both ERIS and NRIS analysis” and to “negotiate a non-standard contract implementing a QF's decision . . . to interconnect with a host utility using ERIS.”<sup>3</sup>

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<sup>1</sup> In response to requests for reconsideration, the Commission affirmed Order No. 23-005 in Order No. 23-164, issued on May 9, 2023.

<sup>2</sup> *In re Pub. Util. Comm'n of Or. Staff Investigation into Treatment of Network Upgrade Costs for QFs*, Docket No. UM 2032, Order No. 23-005 at 2 (Jan. 20, 2023).

<sup>3</sup> Order No. 23-005 at 35-36.

With this filing, the Joint Utilities provide narrowly tailored and targeted revisions to: (1) the Commission’s Qualifying Facility Large Generator Interconnection Procedures (QF-LGIP) and Appendices;<sup>4</sup> (2) the Commission’s small generator Interconnection Request form and small generator Facilities Study Agreement; and (3) PGE’s Schedule 201 and Schedule 202, PacifiCorp’s Oregon Standard Avoided Cost Rates – Avoided Cost Purchases from Eligible Qualifying Facilities Schedule, and Idaho Power’s Schedule 85 (collectively, the QF Schedules). The proposed revisions explicitly allow a QF to be studied for both ERIS and NRIS, and to select ERIS.

The Joint Utilities also include critical protections in the QF-LGIP and QF Schedules to prevent the execution of ERIS interconnection agreements for QFs that have not negotiated and signed non-standard PPAs, consistent with the Commission decision in Order No. 23-005 and the Commission’s underlying goal of ensuring more efficient optimization of the existing transmission system.<sup>5</sup> In particular, the Commission should require any QF seeking an ERIS interconnection agreement to provide evidence that it negotiated and signed a non-standard PPA before the utility’s transmission function is required to sign the interconnection agreement.

If the Joint Utilities are required to sign ERIS interconnection agreements without evidence the QF complied with the Commission’s requirement to negotiate a non-standard PPA, then it will potentially create a multitude of signed ERIS interconnection agreements for QFs that may never reach commercial operation. This will bog down subsequent interconnection studies that must assume projects with signed interconnection agreements are in-service. The harm of speculatively signed interconnection agreements can be long-term because the QF can suspend the executed

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<sup>4</sup> Appendix 6 to the QF-LGIP is the Qualifying Facility Large Generator Interconnection Agreement (QF-LGIA).

<sup>5</sup> Order No. 23-005 at 2.

agreement for up to three years, thereby locking in study assumptions for other interconnection customers that will prove incorrect if the QF never reaches commercial operation. And when the QF with an executed interconnection agreement but no PPA eventually terminates the interconnection agreement, it will potentially lead to cascading restudies, further exacerbating the harm to lower priority interconnection customers. To avoid these issues and comply with the Commission's express direction in Order No. 23-005, the Commission should require QFs to have an executed non-standard PPA before signing an ERIS interconnection agreement.

In addition to this Application, the Joint Utilities submit the following:

- Revised QF-LGIP and QF-LGIA applicable to PGE and Idaho Power;
- Revised QF-LGIP and QF-LGIA applicable to PacifiCorp and its cluster study process;
- Revised QF Schedules;
- Revised small generator Interconnection Request form and Facilities Study Agreement.

## II. DISCUSSION

### A. Revisions to Large Generator Interconnection Documents

The QF-LGIP, which includes the QF-LGIA as Appendix 6, governs interconnection of large QFs greater than 20 MW and was adopted by the Commission in Order No. 10-132.<sup>6</sup> The Commission's QF-LGIP was based on the Federal Energy Regulatory Commission's (FERC) pro forma LGIP, subject to revisions necessary to implement Oregon's QF interconnection policies,

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<sup>6</sup> *In re Pub. Util. Comm'n of Or. Investigation into Interconnection of PURPA QFs with Nameplate Capacity Larger than 20 Megawatts to a Pub. Util.'s Transmission or Distribution System*, Docket UM 1401, Order No. 10-132, Appendix A (QF-LGIP) (Apr. 7, 2010).

including the requirement that QFs receive NRIS.<sup>7</sup> The QF-LGIP adopted in Order No. 10-132 currently applies to PGE and Idaho Power. In 2020, the Commission modified PacifiCorp’s QF-LGIP to implement its cluster study process.<sup>8</sup> The Joint Utilities’ compliance filing here began with the QF-LGIPs applicable to PGE/Idaho Power and PacifiCorp and proposed limited revisions to allow a QF to be studied for both ERIS and NRIS, to select ERIS, and to demonstrate compliance with the requirement to negotiate a non-standard PPA in order to receive an ERIS interconnection agreement.

### **1. Proposed Revisions to QF-LGIP**

The Joint Utilities propose to insert language taken from FERC’s pro forma LGIP to allow the interconnection customer to be studied for NRIS or both NRIS and ERIS. Specifically, the proposed revisions: (1) amend Article 1 (Definitions) to include the FERC definition of ERIS; (2) amend Article 3.2 (Type of Service) to allow the QF to be studied for NRIS or both NRIS and ERIS, but require the QF to select either ERIS or NRIS when the Interconnection Facility Study Agreement is executed (consistent with FERC’s pro forma LGIP); and (3) amend the Interconnection Request form (Appendix 1 to the QF-LGIP) to allow the QF to request to be studied for NRIS or both NRIS and ERIS.

In addition, the Joint Utilities propose revisions to Article 8.1, which addresses the Interconnection Facilities Study Agreement, to require a QF selecting ERIS to submit a formal attestation making the ERIS selection clear and acknowledging that by selecting ERIS, the QF understands that it is required to negotiate a non-standard QF PPA. The added language states:

If Interconnection Customer chooses to be studied for Energy Resource Interconnection Service, then Interconnection Customer must provide to Transmission Provider a signed attestation that the

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<sup>7</sup> Order No. 10-132 at 1.

<sup>8</sup> See *In re. PacifiCorp, dba Pac. Power Application for an Order Approving Queue Reform Proposal*, Docket No. UM 2108, Order No. 20-268 (Aug. 19, 2020).

Interconnection Customer intends to negotiate and sign a non-standard Qualifying Facility contract for the sale of electric energy or capacity from the Large Generating Facility.

The Joint Utilities also revised Article 11.3, which governs the Execution and Filing of the QF-LGIA, to require a QF selecting ERIS to provide an attestation that it has negotiated and signed a non-standard PPA before executing the QF-LGIA:

If Interconnection Customer selected Energy Resource Interconnection Service, Interconnection Customer shall provide an attestation that it has executed a non-standard Qualifying Facility contract for the sale of electric energy or capacity from the Large Generating Facility. The attestation must be signed by the Interconnection Customer and the counterparty to the non-standard Qualifying Facility contract. Notwithstanding Article 11.2, if Interconnection Customer selecting Energy Resource Interconnection Service has not executed the QF-LGIA, or initiated Dispute Resolution procedures pursuant to Article 13.5 within sixty (60) Calendar Days of tender of the final QF-LGIA, it shall be deemed to have withdrawn its Interconnection Request.

This language modifies the development milestone requirement already included in the QF-LGIP. Under the existing QF-LGIP, QFs are currently required to submit reasonable evidence that the facility has reached certain development milestones before executing an interconnection agreement. One of the milestones the QF can provide is evidence it has executed a PPA.<sup>9</sup> The proposed revision modifies the milestone requirements already in the QF-LGIP to require a QF selecting ERIS to have signed a non-standard PPA, rather than meeting one of the other milestone options under Article 11.3.

Requiring an executed non-standard PPA before signing the ERIS QF-LGIA is not unduly burdensome for the interconnection customer. QFs must select ERIS when executing the

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<sup>9</sup> In lieu of an executed PPA, under the current QF-LGIP, the QF can also provide one of the following: (i) the execution of a contract for the supply or transportation of fuel to the Large Generating Facility; (ii) the execution of a contract for the supply of cooling water to the Large Generating Facility; (iii) execution of a contract for the engineering for, procurement of major equipment for, or construction of, the Large Generating Facility; or (iv) application for an air, water, or land use permit.

Interconnection Facilities Study Agreement. Even if the QF waits to begin the non-standard PPA process until signing the Interconnection Facilities Study Agreement, the QF will still have potentially up to a year to negotiate its PPA under the maximum timelines set forth in the QF-LGIP.<sup>10</sup> If the QF cannot successfully negotiate a non-standard PPA in that timeframe, it is unlikely that the QF will ever successfully negotiate a non-standard PPA.

Requiring an executed non-standard PPA in order to execute an ERIS QF-LGIA directly implements the Commission requirement that only QFs negotiating non-standard PPAs are eligible for ERIS. Moreover, requiring a non-standard PPA before signing an ERIS QF-LGIA ensures an orderly interconnection study process, prevents interconnection queue congestion, and better ensures more efficient use of the existing transmission system. As the Commission is aware, interconnection studies necessarily require numerous assumptions. One of the most important assumptions is what other interconnection customers are assumed to have already interconnected to the system. Under both a serial queue and cluster study process, the utility must assume that all interconnection customers with executed interconnection agreements are in-service. Therefore, once a QF executes an interconnection agreement, the utility must assume that QF is in-service in all subsequent interconnection studies. Requiring evidence the QF has executed a PPA ensures that the Joint Utilities are not signing interconnection agreements for QFs that will never be

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<sup>10</sup> Under the existing QF-LGIPs applicable to all three Joint Utilities, a QF would have roughly 210 to 300 days (or seven to 10 months) from signing the Facilities Study agreement to the deadline to execute the QF-LGIA. To complete the Facilities Study, the Transmission Provider has 90 Calendar Days, with no more than a +/- 20 percent cost estimate contained in the report; or 180 Calendar Days, if Interconnection Customer requests a +/- 10 percent cost estimate. QF-LGIP, Article 8.3. Thereafter, the Interconnection Customer has thirty Calendar Days to submit comments once the draft Facilities Study report is issued. QF-LGIP, Article 8.3. Within 30 Calendar Days of the Interconnection Customer submitting comments, the Transmission Provider must provide a draft QF-LGIA. QF-LGIP, Article 11.1. Unless otherwise agreed to, the Interconnection Customer and Transmission Provider then have 60 Calendar Days to negotiate and execute a QF-LGIA. QF-LGIP, Article 11.2. Under the proposed revisions here, the QF would have an additional 60 days from tendering the final QF-LGIA to execution.

developed because the QF is unable to execute a non-standard PPA. This, in turn, will ensure that subsequent interconnection studies are not bogged down by assumed interconnections that may never come to fruition. The Commission permitted limited use of ERIS to allow more efficient optimization of the existing transmission system.<sup>11</sup> Clogging the interconnection queue with speculatively executed interconnection agreements—which are extremely difficult to terminate and can be suspended for up to three years—creates burdensome study assumptions for lower priority interconnection customers, including Oregon QFs, and runs directly counter to the Commission’s goal.

## **2. Proposed Revisions to QF-LGIA**

The Joint Utilities propose to revise the Commission-approved QF-LGIA, Appendix 6 to the QF-LGIP, to (1) include a definition of ERIS in Article 1, Definitions; and (2) amend Article 4, Scope of Service, to include ERIS as an option. These changes conform the QF-LGIA to FERC’s pro forma LGIA and are consistent with the changes to the QF-LGIP discussed above.

### **B. Revisions to Small Generator Interconnection Documents**

Small generator interconnections for PGE and Idaho Power are governed by Division 82 of the Commission’s rules, while PacifiCorp’s cluster study process is governed by its unique small generator interconnection procedures (SGIP) adopted in Order No. 20-268. Because the existing Division 82 rules and PacifiCorp’s SGIP are silent with respect to interconnection service type, there are no changes necessary to implement the Commission’s decision in Order No. 23-005 *except* the Joint Utilities propose to amend the small generator Tier 4 Interconnection Request form to allow the QF to elect to be studied for NRIS or both NRIS and ERIS (consistent with the

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<sup>11</sup> Order No. 23-005 at 2.

large generator Interconnection Request form). The Joint Utilities also propose to modify the small generator Facilities Study Agreement so that the QF's selection of NRIS or ERIS is clear.

Finally, as discussed below, the Joint Utilities propose to amend their QF Schedules applicable to small QFs to apply the requirement that small QFs have an executed non-standard PPA before executing an ERIS interconnection agreement.

### **C. QF Schedules**

Each utility proposes to amend its Commission-approved QF Schedule(s) to clarify that only QFs receiving NRIS are eligible for standard QF PPAs. In addition, the QF Schedules make clear that all QFs, regardless of size, are required to provide an attestation that the QF has negotiated and signed a non-standard PPA before the utility is required to execute an ERIS interconnection agreement. The additional language in the QF Schedules also makes clear that the QF, regardless of size, must provide the required attestation within 60 days of receiving the final interconnection agreement or the QF will be deemed withdrawn from the interconnection queue:

To be eligible for a Standard Contract, a QF must receive Network Resource Interconnection Service. To be studied for Energy Resource Interconnection Service, the QF shall provide an attestation to the Company that it intends to negotiate a Non-Standard Contract and the attestation shall be provided to the interconnecting utility's transmission function before the QF executes an interconnection facilities study agreement. To receive Energy Resource Interconnection Service, the QF shall provide an attestation to the interconnecting utility's transmission function that the QF has executed a Non-Standard Contract. The attestation must be signed by the QF and the purchasing utility and delivered to the interconnecting utility's transmission function before the execution of an interconnection agreement. The attestation must be provided by the QF within 60 days of the QF receiving a final interconnection agreement or the interconnection application will be deemed withdrawn.<sup>12</sup>

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<sup>12</sup> Each utility's proposed language differs slightly to conform to the terminology and format of their individual Schedule(s).

Even though the Commission's small generator interconnection rules have fewer prescribed timelines, from execution of a small generator Facilities Study agreement to provision of a final small generator interconnection agreement is typically 120 days; with the additional 60 days to provide the attestation, a small QF would have roughly 180 days to negotiate its PPA.<sup>13</sup> This timeline should be sufficient for small QFs to meet the executed PPA requirement.

Finally, to the extent that Joint Utilities' proposal here requires a waiver of the timelines in OAR 860-082-0060(8)(h)<sup>14</sup> or any other Division 82 rule, the Joint Utilities request that the Commission grant a temporary waiver until the Division 82 rules can be formally amended in docket UM 2111.<sup>15</sup>

### III. CONCLUSION

The Joint Utilities recommend that the Commission approve the proposed revisions to: (1) the QF-LGIPs applicable to PGE/Idaho Power and PacifiCorp; (2) the small generator Interconnection Request form and Facilities Study agreement; and (3) the Joint Utilities' QF Schedules. As required by Order No. 23-005, the proposed revisions explicitly allow a QF to be

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<sup>13</sup> OAR 860-082-0060(8) governs small generator facilities studies. Subsection (8)(a) states: "the facilities study agreement must include a detailed scope for the facilities study, a reasonable schedule for completion of the study, and a good-faith, non-binding estimate of the costs to perform the study." Assuming the Transmission Provider can complete the facilities study in roughly 60 days, subsection (8)(h) requires approval of the interconnection application with 15 business days of the interconnection customer's agreement to pay for the interconnection facilities and system upgrades identified in the facilities study. With an additional 60 days provided here, the small QF would have roughly 140 days (60 + 21 + 60 = 141 days). PacifiCorp's small generator interconnection procedures approved in Order No. 20-268 include the same relevant language as the Division 82 rules.

<sup>14</sup> OAR 860-082-0060(8)(h) states that after the completion of the Facilities Study, "[i]f the applicant agrees to pay for the interconnection facilities and system upgrades identified in the facilities study, then the public utility must approve the application within 15 business days of the applicant's agreement." This timeline would not apply if the small QF is seeking ERIS.

<sup>15</sup> OAR 860-082-0010(1) (authorizing waiver for good cause); *see also* OAR 860-082-0010(2) (allowing reasonable extensions of the timelines included in the rules without requesting a waiver from the Commission).

studied for both ERIS and NRIS and, based on the results of the studies, to select ERIS if the QF has negotiated a non-standard PPA.

Dated September 12, 2023.

**MCDOWELL RACKNER GIBSON PC**



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**Docket UM 2032**

**Attachment 1**

**to**

**JOINT UTILITIES' APPLICATION  
FOR APPROVAL OF COMPLIANCE FILING**

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*PGE's and Idaho Power's Standard Oregon Qualifying Facility  
Large Generator Interconnection Procedures*

## **Article 1. Definitions**

**Adverse System Impact** shall mean the negative effects due to technical or operational limits on conductors or equipment being exceeded that may compromise the safety and reliability of the electric system.

**Affected System** shall mean an electric system other than the Transmission Provider's Transmission System that may be affected by the proposed interconnection.

**Affected System Operator** shall mean the entity that operates an Affected System.

**Affiliate** shall mean, with respect to a corporation, partnership or other entity, each such other corporation, partnership or other entity that directly or indirectly, through one or more intermediaries, controls, is controlled by, or is under common control with, such corporation, partnership or other entity.

**Ancillary Services** shall mean those services that are necessary to support the transmission of capacity and energy from resources to loads while maintaining reliable operation of the Transmission Provider's Transmission System in accordance with Good Utility Practice.

**Applicable Laws and Regulations** shall mean all duly promulgated applicable federal, state and local laws, regulations, rules, ordinances, codes, decrees, judgments, directives, or judicial or administrative orders, permits and other duly authorized actions of any Governmental Authority.

**Applicable Reliability Council** shall mean the reliability council applicable to the Transmission System to which the Generating Facility is directly interconnected.

**Applicable Reliability Standards** shall mean the requirements and guidelines of NERC, the Applicable Reliability Council, and the Control Area of the Transmission System to which the Generating Facility is directly interconnected.

**Base Case** shall mean the base case power flow, short circuit, and stability data bases used for the Interconnection Studies by the Transmission Provider or Interconnection Customer.

**Breach** shall mean the failure of a Party to perform or observe any material term or condition of the QF-LGIA.

**Breaching Party** shall mean a Party that is in Breach of the QF-LGIA.

**Business Day** shall mean Monday through Friday, excluding Federal Holidays.

**Calendar Day** shall mean any day including Saturday, Sunday or a Federal Holiday.

**Clustering** shall mean the process whereby a group of Interconnection Requests is studied together, instead of serially, for the purpose of conducting the Interconnection System Impact Study.

**Commercial Operation** shall mean the status of a Generating Facility that has commenced generating electricity for sale, excluding electricity generated during Trial Operation.

**Commercial Operation Date** of a unit shall Mean the date on which the Generating Facility commences Commercial Operation as agreed to by the Parties pursuant to Appendix E to the QF-LGIA.

**Confidential Information** shall mean any confidential, proprietary or trade secret information of a plan, specification, pattern, procedure, design, device, list, concept, policy or compilation relating to the present or planned business of a Party, which is designated as confidential by the Party supplying the information, whether conveyed orally, electronically, in writing, through inspection, or otherwise.

**Control Area** shall mean an electrical system or systems bounded by interconnection metering and telemetry, capable of controlling generation to maintain its interchange schedule with other Control Areas and contributing to frequency regulation of the interconnection. A Control Area must be certified by an Applicable Reliability Council.

**Default** shall mean the failure of a Breaching Party to cure its Breach in accordance with Article 17 of the QF-LGIA.

**Dispute Resolution** shall mean the procedure for resolution of a dispute between the Parties in which they will first attempt to resolve the dispute on an informal basis.

**Distribution System** shall mean the Transmission Provider's facilities and equipment used to transmit electricity to ultimate usage points such as homes and industries directly from nearby generators or from interchanges with higher voltage transmission networks which transport bulk power over longer distances. The voltage levels at which distribution systems operate differ among areas.

**Distribution Upgrades** shall mean the additions, modifications, and upgrades to the Transmission Provider's Distribution System at or beyond the Point of Interconnection to facilitate interconnection of the Generating Facility. Distribution Upgrades do not include Interconnection Facilities.

**Effective Date** shall mean the date on which the QF-LGIA becomes effective upon execution by the Parties.

**Emergency Condition** shall mean a condition or situation: (1) that in the judgment of the Party making the claim is imminently likely to endanger life or property; or (2) that, in the case of a Transmission Provider, is imminently likely (as determined in a non-discriminatory manner) to cause a material adverse effect on the security of, or damage to Transmission

Provider's Transmission System, Transmission Provider's Interconnection Facilities or the electric systems of others to which the Transmission Provider's Transmission System is directly connected; or (3) that, in the case of Interconnection Customer, is imminently likely (as determined in a non-discriminatory manner) to cause a material adverse effect on the security of, or damage to, the Generating Facility or Interconnection Customer's Interconnection Facilities. System restoration and black start shall be considered Emergency Conditions; provided that Interconnection Customer is not obligated by the QF-LGIA to possess black start capability.

Energy Resource Interconnection Service shall mean an Interconnection Service that allows the Interconnection Customer to connect its Generating Facility to the Transmission Provider's Transmission System to be eligible to deliver the Generating Facility's electric output using the existing firm or nonfirm capacity of the Transmission Provider's Transmission System on an as available basis. Energy Resource Interconnection Service in and of itself does not convey transmission service.

**Engineering & Procurement (E&P) Agreement** shall mean an agreement that authorizes the Transmission Provider to begin engineering and procurement of long lead-time items necessary for the establishment of the interconnection in order to advance the implementation of the Interconnection Request.

**Environmental Law** shall mean Applicable Laws or Regulations relating to pollution or protection of the environment or natural resources.

**Federal Power Act** shall mean the Federal Power Act, as amended, 16 U.S.C. §§ 791a *et seq.*

**FERC** shall mean the Federal Energy Regulatory Commission (FERC) or its successor.

**Force Majeure** shall mean any act of God, labor disturbance, act of the public enemy, war, insurrection, riot, fire, storm or flood, explosion, breakage or accident to machinery or equipment, 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 acts of negligence or intentional wrongdoing by the Party claiming Force Majeure.

**Generating Facility** shall mean Interconnection Customer's device or devices for the production of electricity identified in the Interconnection Request, but shall not include the Interconnection Customer's Interconnection Facilities. The Generating Facility is and shall remain a Qualifying Facility.

**Generating Facility Capacity** shall mean the net capacity of the Generating Facility and the aggregate net capacity of the Generating Facility where it includes multiple energy production devices.

**Good Utility Practice** shall mean any of the practices, methods and acts engaged in or approved by a significant portion of the electric industry during the relevant time period, or any of the practices, methods and acts which, in the exercise of reasonable judgment in light of the facts known at the time the decision was made, could have been expected to accomplish the desired result at a reasonable cost consistent with good business practices, reliability, safety and expedition. Good Utility Practice is not intended to be limited to the optimum practice, method, or act to the exclusion of all others, but rather to be acceptable practices, methods, or acts generally accepted in the region.

**Governmental Authority** shall mean any federal, state, local or other governmental regulatory or administrative agency, court, commission, department, board, or other governmental subdivision, legislature, rulemaking board, tribunal, or other governmental authority having jurisdiction over the Parties, their respective facilities, or the respective services they provide, and exercising or entitled to exercise any administrative, executive, police, or taxing authority or power; provided, however, that such term does not include Interconnection Customer, Transmission Provider, or any Affiliate thereof.

**Hazardous Substances** shall mean any chemicals, materials or substances defined as or included in the definition of "hazardous substances," "hazardous wastes," "hazardous materials," "hazardous constituents," "restricted hazardous materials," "extremely hazardous substances," "toxic substances," "radioactive substances," "contaminants," "pollutants," "toxic pollutants" or words of similar meaning and regulatory effect under any applicable Environmental Law, or any other chemical, material or substance, exposure to which is prohibited, limited or regulated by any applicable Environmental Law.

**Initial Synchronization Date** shall mean the date upon which the Generating Facility is initially synchronized and upon Which Trial Operation begins.

**In-Service Date** shall mean the date upon which the Interconnection Customer reasonably expects it will be ready to begin use of the Transmission Provider's Interconnection Facilities to obtain back feed power.

**Interconnection Customer** shall mean the entity identified in the first paragraph of the QF-LGIA that proposes to interconnect its Generating Facility with the Transmission Provider's Transmission System.

**Interconnection Customer's Interconnection Facilities** or ICIF shall mean all facilities and equipment, as identified in Appendix A of the QF-LGIA, that are located between the Generating Facility and the Point of Change of Ownership, including any modification, addition, or upgrades to such facilities and equipment necessary to physically and electrically interconnect the Generating Facility to the Transmission Provider's Transmission System. Interconnection Customer's Interconnection Facilities are sole use facilities.

**Interconnection Facilities** shall mean the Transmission Provider's Interconnection Facilities and the Interconnection Customer's Interconnection Facilities. Collectively, Interconnection Facilities include all facilities and equipment between the Generating Facility and the Point

of Interconnection, including any modification, additions or upgrades that are necessary to physically and electrically interconnect the Generating Facility to the Transmission Provider's Transmission System. Interconnection Facilities are sole use facilities and shall not include Distribution Upgrades, Stand Alone Network Upgrades or Network Upgrades.

**Interconnection Facilities Study** shall mean a study conducted by the Transmission Provider or a third party consultant for the Interconnection Customer to determine a list of facilities (including Transmission Provider's Interconnection Facilities, Distribution Upgrades and Network Upgrades as identified in the Interconnection System Impact Study), the cost of those facilities, and the time required to interconnect the Generating Facility with the Transmission Provider's Transmission System. The scope of the study is defined in Article 8 of the QF-LGIP.

**Interconnection Facilities Study Agreement** shall mean the form of agreement contained in Appendix 4 of the QF-LGIP for conducting the Interconnection Facilities Study.

**Interconnection Feasibility Study** shall mean a preliminary evaluation of the system impact and cost of interconnecting the Generating Facility to the Transmission Provider's Transmission System, the scope of which is described in Article 6 of the QF-LGIP.

**Interconnection Feasibility Study Agreement** shall mean the form of agreement contained in Appendix 2 of the QF-LGIP for conducting the Interconnection Feasibility Study.

**Interconnection Request** shall mean an Interconnection Customer's request, in the form of Appendix 1 to the QF-LGIP, to interconnect a new Generating Facility, or to increase the capacity of, or make a Material Modification to the operating characteristics of, an existing Generating Facility that is interconnected with the Transmission Provider's Transmission System.

**Interconnection Service** shall mean the service provided by the Transmission Provider associated with interconnecting the Interconnection Customer's Generating Facility to the Transmission Provider's Transmission System and enabling it to receive electric energy and capacity from the Generating Facility at the Point of Interconnection, pursuant to the terms of the QF-LGIA and, if applicable, the Transmission Provider's OATT.

**Interconnection Study** shall mean any of the following studies: the Interconnection Feasibility Study, the Interconnection System Impact Study, and the Interconnection Facilities Study described in the QF-LGIP.

**Interconnection System Impact Study** shall mean an engineering study that evaluates the impact of the proposed interconnection on the safety and reliability of Transmission Provider's Transmission System and, if applicable, an Affected System, The study shall identify and detail the system impacts that would result if the Generating Facility were interconnected without project modifications or system modifications, focusing on the Adverse System Impacts identified in the Interconnection Feasibility Study, or to study

potential impacts, including but not limited to those identified in the Scoping Meeting as described in the QF-LGIP.

**Interconnection System Impact Study Agreement** shall mean the form of agreement contained in Appendix 3 of the QF-LGIP for conducting the Interconnection System Impact Study.

**IRS** shall mean the Internal Revenue Service.

**Large Generator Interconnection Agreement** or **LGIA** shall mean the form of interconnection agreement applicable to an Interconnection Request under the Transmission Provider's OATT pertaining to a Large Generating Facility that is not a Qualifying Facility.

**Large Generator Interconnection Procedures** or **LGIP** shall mean the interconnection procedures contained in the Transmission Provider's OATT that are applicable to an Interconnection Request pertaining to a Large Generating Facility.

**Large Generating Facility** shall mean a Generating Facility having a Generating Facility Capacity of more than 20 MW.

**Loss** shall mean any and all losses 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 performance, or non-performance of its obligations under the QF-LGIA on behalf of the indemnifying Party, except in cases of gross negligence or intentional wrongdoing by the indemnifying Party.

**Material Modification** shall mean those modifications that have a material impact on the cost or timing of any Interconnection Request with a later queue priority date.

**Metering Equipment** shall mean all metering equipment installed or to be installed at the Generating Facility pursuant to the QF-LGIA at the one or more metering points, including but not limited to instrument transformers, MWh-meters, data acquisition equipment, transducers, remote terminal unit, communications equipment, phone lines, other communications conductors, and fiber optics.

**NERC** shall mean the North American Electric Reliability Council or its successor organization.

**Net Output** shall mean all energy and capacity produced by the Generating Facility and delivered to the Point of Delivery, net of transformation, transmission, or other losses, if any, and less Station Power.

**Network Resource** shall mean any designated generating resource owned, purchased, or leased by a Network Customer under the Network Integration Transmission Service Tariff. Network Resources do not include any resource, or any portion thereof, that is committed for

sale to third parties or otherwise cannot be called upon to meet the Network Customer's Network Load on a non-interruptible basis.

**Network Resource Interconnection Service** shall mean an Interconnection Service that allows the Interconnection Customer to integrate its Large Generating Facility with the Transmission Provider's Transmission System (1) in a manner comparable to that in which the Transmission Provider integrates its generating facilities to serve native load customers; or (2) in an RTO or ISO with market based congestion management, in the same manner as all other Network Resources. Network Resource Interconnection Service in and of itself does not convey transmission service.

**Network Upgrades** shall mean the additions, modifications, and upgrades to the Transmission Provider's Transmission System required at or beyond the point at which the Interconnection Facilities connect to the Transmission Provider's Transmission System to accommodate the interconnection of the Large Generating Facility to the Transmission Provider's Transmission System.

**Notice of Dispute** shall mean a written notice of a dispute or claim that arises out of or in connection with the QF-LGIA or its performance.

**Obligated Entity** shall mean the entity with a contractual obligation to construct Network Upgrades.

**OATT** shall mean the Transmission Provider's Open Access Transmission Tariff on file with the Federal Energy Regulatory Commission ("FERC").

**OPUC** shall mean the Public Utility Commission of Oregon.

**Optional Interconnection Study** shall mean a sensitivity analysis based on assumptions specified by the Interconnection Customer in the Optional Interconnection Study Agreement.

**Optional Interconnection Study Agreement** shall mean the form of agreement contained in Appendix 5 of the QF-LGIP for conducting the Optional Interconnection Study.

**Party or Parties** shall mean Transmission Provider, Transmission Owner, Interconnection Customer or any combination of the above.

**Point of Change of Ownership** shall mean the point, as set forth in Appendix A to the QF-LGIA, where the Interconnection Customer's Interconnection Facilities connect to the Transmission Provider's Interconnection Facilities.

**Point of Delivery** shall mean the point on the Transmission Provider's Transmission System where capacity and energy will be made available to the Transmission Provider.

**Point of Interconnection** shall mean the point, as set forth in Appendix A to the QF-LGIA, where the Interconnection Facilities connect to the Transmission Provider's Transmission System.

**Power System Stabilizers** shall have the meaning designated in the guidelines and procedures established by the applicable Reliability Council.

**Power Purchase Agreement ("PPA")** shall mean a separate agreement between the Transmission Provider and Interconnection Customer, the terms of which govern the sale by the Interconnection Customer and the purchase by the Transmission Provider of the Net Output of the Interconnection Customer's Qualifying Facility, pursuant to the Public Utility Regulatory Policies Act of 1978 (PURPA), 16 U.S.C. 796 and 824a-3.

**QF-LGIA** shall mean the Qualifying Facility Large Generator Interconnection Agreement.

**QF-LGIP** shall mean the Qualifying Facility Large Generator Interconnection Procedures applicable to any large Generating Facility that is also a Qualifying Facility and which seeks to interconnect to the Transmission Provider's Transmission System or Distribution system in Oregon.

**Qualifying Facility** or **QF** shall mean a qualifying cogeneration facility or qualifying small power production facility within the meaning of Articles 201 and 210 of the Public Utility Regulatory Policies Act of 1978 (PURPA), 16 U.S.C. 796 and 824a-3.

**Queue Position** shall mean the order of a valid Interconnection Request, relative to all other pending valid Interconnection Requests, that is established based upon the date and time of receipt of the valid Interconnection Request by the Transmission Provider.

**Reasonable Efforts** shall mean, with respect to an action required to be attempted or taken by a Party under the QF-LGIA, efforts that are timely and consistent with Good Utility Practice and are otherwise substantially equivalent to those a Party would use to protect its own interests.

**Scoping Meeting** shall mean the meeting between representatives of the Interconnection Customer and Transmission Provider conducted for the purpose of discussing alternative interconnection options, to exchange information including any transmission data and earlier study evaluations that would be reasonably expected to impact such interconnection options, to analyze such information, and to determine the potential feasible Points of Interconnection.

**Site Control** shall mean documentation reasonably demonstrating: (1) ownership of, a leasehold interest in, or a right to develop a site for the purpose of constructing the Generating Facility; (2) an option to purchase or acquire a leasehold site for such purpose; or (3) an exclusivity or other business relationship between Interconnection Customer and the entity having the right to sell, lease or grant Interconnection Customer the right to possess or occupy a site for such purpose.

**Small Generating Facility** shall mean a Generating Facility that has a Generating Facility Capacity of no more than 10 MW.

**Stand Alone Network Upgrades** shall mean Network Upgrades that an Interconnection Customer may construct without affecting day-to-day operations of the Transmission System during their construction. Both the Transmission Provider and the Interconnection Customer must agree as to what constitutes Stand Alone Network Upgrades and identify them in Appendix A to the QF-LGIA.

**Station Power** shall mean electric power used in the process of producing power at Interconnection Customer's Generating Facility, including but not limited to the electric power necessary for auxiliary equipment such as pumps, blowers, fans, fuel transportation systems, similar auxiliary systems that are a necessary and integral part of the power production process, and other parasitic loads involved in the generating process.

**System Protection Facilities** shall mean the equipment, including necessary protection signal communications equipment, required to protect (1) the Transmission Provider's Transmission System from faults or other electrical disturbances occurring at the Generating Facility and (2) the Generating Facility from faults or other electrical system disturbances occurring on the Transmission Provider's Transmission System or on other delivery systems or other generating systems to which the Transmission Provider's Transmission System is directly connected.

**Transmission Owner** shall mean an entity that owns, leases or otherwise possesses an interest in the portion of the Transmission System at the Point of Interconnection and may be a Party to the QF-LGIA to the extent necessary.

**Transmission Provider** shall mean the applicable Utility.

**Transmission Provider's Interconnection Facilities** shall mean all facilities and equipment owned, controlled, or operated by the Transmission Provider from the Point of Change of Ownership to the Point of Interconnection as identified in Appendix A to the QF-LGIA, including any modifications, additions or upgrades to such facilities and equipment. Transmission Provider's Interconnection Facilities are sole use facilities and shall not include Distribution Upgrades, Stand Alone Network Upgrades or Network Upgrades.

**Transmission System** shall mean the facilities owned, controlled or operated by the Transmission Provider or Transmission Owner that are used to provide transmission service under the OATT.

**Trial Operation** shall mean the period during which Interconnection Customer is engaged in on-site test operations and commissioning of the Generating Facility prior to Commercial Operation.

## **Article 2. Scope and Application**

### **2.1 Application of Standard Large Generator Interconnection Procedures.**

This QF-LGIP applies to processing an Interconnection Request pertaining to a Qualifying Facility Large Generating Facility for a point of Interconnection in Oregon.

### **2.2 Comparability.**

Transmission Provider shall receive, process and analyze all Interconnection Requests in a timely manner as set forth in this QF-LGIP. Transmission Provider will use the same Reasonable Efforts in processing and analyzing Interconnection Requests from all Interconnection Customers, whether the Generating Facilities are owned by Transmission Provider, its subsidiaries or Affiliates or others.

### **2.3 Base Case Data.**

In accordance with the Applicable Reliability Council policies, Transmission Provider shall provide base power flow, short circuit and stability databases, including all underlying assumptions, and contingency list upon request subject to confidentiality provisions in QF-LGIP Article 13,1. Transmission Provider is permitted to require that Interconnection Customer sign a confidentiality agreement before the release of commercially sensitive information or Critical Energy Infrastructure Information in the Base Case data. Such databases and lists, hereinafter referred to as Base Cases, shall include all (i) generation projects and (ii) transmission projects, including merchant transmission projects that are proposed for the Transmission System for which a transmission expansion plan has been submitted and approved by the applicable authority.

### **2.4 No Applicability to Transmission Service.**

Nothing in this QF-LGIP shall constitute a request for transmission service or confer upon an Interconnection Customer any right to receive transmission service.

## **Article 3. Interconnection Requests**

### **3.1 General.**

An Interconnection Customer shall submit to Transmission Provider an Interconnection Request in the form of Appendix I to this QF-LGIP and a refundable deposit of \$ 10,000. And evidence that Interconnection customer has initiated the certification process for the Large Generating Facility as a Qualifying Facility established by 18 C.F.R. § 292.207. Transmission Provider shall apply the deposit toward the cost of an Interconnection Feasibility Study. Interconnection Customer shall submit a separate Interconnection Request for each site and may submit multiple Interconnection Requests for a single site. Interconnection Customer must submit a deposit with each Interconnection Request even when more than one request is

submitted for a single site. An Interconnection Request to evaluate one site at two different voltage levels shall be treated as two Interconnection Requests.

At Interconnection Customer's option, Transmission Provider and Interconnection Customer will identify alternative Point(s) of Interconnection and configurations at the Scoping Meeting to evaluate in this process and attempt to eliminate alternatives in a reasonable fashion given resources and information available. Interconnection Customer will select the definitive Point(s) of Interconnection to be studied no later than the execution of the Interconnection Feasibility Study Agreement.

## **3.2 Type of Interconnection Services.**

At the time the Interconnection Request is submitted, Interconnection Customer's ~~will be processed for Network Resource Interconnection Service, as described below. must request either Network Resource Interconnection Service or request that it be concurrently studied for Energy Resource Interconnection Service, up to the point when an Interconnection Facility Study Agreement is executed. Interconnection Customer may then elect to proceed with Network Resource Interconnection Service or to proceed under a lower level of interconnection service to the extent that only certain upgrades will be completed.~~

### **3.2.1 Energy Resource Interconnection Service.**

**3.2.1.1 The Product.** Energy Resource Interconnection Service allows Interconnection Customer to connect the Large Generating Facility to the Transmission System and be eligible to deliver the Large Generating Facility's output using the existing firm or non-firm capacity of the Transmission System on an "as available" basis. Energy Resource Interconnection Service does not in and of itself convey any right to deliver electricity to any specific customer or Point of Delivery.

**3.2.1.2 The Study.** The study consists of short circuit/fault duty, steady state (thermal and voltage) and stability analyses. The short circuit/fault duty analysis would identify direct Interconnection Facilities required and the Network Upgrades necessary to address short circuit issues associated with the Interconnection Facilities. The stability and steady state studies would identify necessary upgrades to allow full output of the proposed Large Generating Facility and would also identify the maximum allowed output, at the time the study is performed, of the interconnecting Large Generating Facility without requiring additional Network Upgrades.

### **3.2.21 Network Resource Interconnection Service.**

**3.2.21.1 The Product.** Transmission Provider must conduct the necessary studies and construct the Network Upgrades needed to integrate the Large Generating Facility in a manner comparable to that in which Transmission Provider integrates its generating facilities to serve native load customers

in the same manner as all other Network Resources. Network Resource Interconnection Service Allows Interconnection Customer's Large Generating Facility to be designated as a Network Resource, up to the Large Generating Facility's full output, on the same basis as existing Network Resources interconnected to Transmission Provider's Transmission System, and to be studied as a Network Resource on the assumption that such a designation will occur.

**3.2.21.2 The Study.** The Interconnection Study for Network Resource Interconnection Service shall assure that Interconnection Customer's Large Generating Facility meets the requirements for Network Resource Interconnection Service and as a general matter, that such Large Generating Facility's interconnection is also studied with Transmission Provider's Transmission System at peak load, under a variety of severely stressed conditions, to determine whether, with the Large Generating Facility at full output, the aggregate of generation in the local area can be delivered to the aggregate of load on Transmission Provider's Transmission System, consistent with Transmission Provider's reliability criteria and procedures. This approach assumes that some portion of existing Network Resources are displaced by the output of Interconnection Customer's Large Generating Facility. Network Resource Interconnection Service in and of itself does not convey any right to deliver electricity to any specific customer or Point of Delivery. The Transmission Provider may also study the Transmission System under non-peak load conditions. However, upon request by the Interconnection Customer, the Transmission Provider must explain in writing to the Interconnection Customer why the study of non-peak load conditions is required for reliability purposes.

### **3.3 Valid Interconnection Request.**

#### **3.3.1 Initiating an Interconnection Request.**

To initiate an Interconnection Request, Interconnection Customer must submit all of the following: (i) a \$ 10,000 deposit, (ii) a completed application in the form of Appendix 1, and (iii) demonstration of Site Control or a posting of an additional deposit of \$ 10,000. Such deposits shall be applied toward any Interconnection Studies pursuant to the Interconnection Request. If Interconnection Customer demonstrates Site Control within the cure period specified in Article 3.3.3 after submitting its Interconnection Request, the additional deposit shall be refundable; otherwise, all such deposit (s), additional and initial, become non-refundable.

The expected In-Service Date of the new Large Generating Facility or increase in capacity of the existing Generating Facility shall be no more than the process window for the regional expansion planning period (or in the absence of a regional planning process, the process window for Transmission Provider's

expansion planning period) not to exceed seven years from the date the Interconnection Request is received by Transmission Provider, unless Interconnection Customer demonstrates that engineering, permitting and construction of the new Large Generating Facility or increase in capacity of the existing Generating Facility will take longer than the regional expansion planning period. The In-Service Date may succeed the date the Interconnection Request is received by Transmission Provider by a period up to ten years, or longer where Interconnection Customer and Transmission Provider agree, such agreement not to be unreasonably withheld.

### **3.3.2 Acknowledgment of Interconnection Request.**

Transmission Provider shall acknowledge receipt of the Interconnection Request within five (5) Business Days of receipt of the request and attach a copy of the received Interconnection Request to the acknowledgement.

### **3.3.3 Deficiencies in Interconnection Request.**

An Interconnection Request will not be considered to be a valid request until all items in Article 3.3.1 have been received by Transmission Provider. If an Interconnection Request fails to meet the requirements set forth in Article 3.3.1, Transmission Provider shall notify Interconnection Customer within five (5) Business Days of receipt of the initial Interconnection Request of the reasons for such failure and that the Interconnection Request does not constitute a valid request. Interconnection Customer shall provide Transmission Provider the additional requested information needed to constitute a valid request within ten (10) Business Days after receipt of such notice. Failure by Interconnection Customer to comply with this Article 3.3.3 shall be treated in accordance with Article 3.6.

### **3.3.4 Scoping Meeting.**

Within ten (10) Business Days after receipt of a valid Interconnection Request, Transmission Provider shall establish a date agreeable to Interconnection Customer for the Scoping Meeting, and such date shall be no later than thirty (30) Calendar Days from receipt of the valid Interconnection Request, unless otherwise mutually agreed upon by the Parties.

The purpose of the Scoping Meeting shall be to discuss alternative interconnection options, to exchange information including any transmission data that would reasonably be expected to impact such interconnection options, to analyze such information and to determine the potential feasible Points of Interconnection. Transmission Provider and Interconnection Customer will bring to the meeting such technical data, including, but not limited to: (i) general facility loadings, (ii) general instability issues, (iii) general short circuit issues, (iv) general voltage issues, and (v) general reliability issues as may be reasonably required to accomplish the purpose of the meeting. Transmission

Provider and Interconnection Customer will also bring to the meeting personnel and other resources as may be reasonably required to accomplish the purpose of the meeting in the time allocated for the meeting. On the basis of the meeting, Interconnection Customer shall designate its Point of Interconnection, pursuant to Article 6.1, and one or more available alternative Point(s) of Interconnection. The duration of the meeting shall be sufficient to accomplish its purpose.

### **3.4 OASIS Posting.**

In addition to the Interconnection Requests that Transmission Provider is required to maintain on its OASIS under the requirements of the Transmission Provider's OATT, Transmission Provider will maintain on its same OASIS a list of all Interconnection Requests under this QF-LGIP. Interconnection Requests received under the QF-LGIP and the LGIP under the Transmission Provider's OATT shall be assigned Queue Positions in the same queue. The list will identify, for each Interconnection Request: (i) the maximum summer and winter megawatt electrical output; (ii) the location by county and state; (iii) the station or transmission line or lines where the interconnection will be made; (iv) the projected In-Service Date; (v) the status of the Interconnection Request, including Queue Position; (vi) the type of Interconnection Service being requested; and (vii) the availability of any studies related to the Interconnection Request; (viii) the date of the Interconnection Request; (ix) the type of Generating Facility to be constructed (combined cycle, base load or combustion turbine and fuel type); and (x) for Interconnection Requests that have not resulted in a completed interconnection, an explanation as to why it was not completed. Except in the case of an Affiliate, the list will not disclose the identity of Interconnection Customer until Interconnection Customer executes a QF-LGIA. Before holding a Scoping Meeting with its Affiliate, Transmission Provider shall post on OASIS an advance notice of its intent to do so. Transmission Provider shall post to its OASIS site any deviations from the study timelines set forth herein. Interconnection Study reports and Optional Interconnection Study reports shall be posted to Transmission Provider's OASIS site subsequent to the meeting between Interconnection Customer and Transmission Provider to discuss the applicable study results. Transmission Provider shall also post any known deviations in the Large Generating Facility's In-Service Date.

### **3.5 Coordination with Affected Systems.**

Transmission Provider will coordinate the conduct of any studies required to determine the impact of the Interconnection Request on Affected Systems with Affected System Operators and, if possible, include those results (if available) in its applicable Interconnection Study within the time frame specified in this QF-LGIP. Transmission Provider will include such Affected System Operators in all meetings held with Interconnection Customer as required by this QF-LGIP. Interconnection Customer will cooperate with Transmission Provider in all matters related to the conduct of studies and the determination of modifications to Affected Systems. A Transmission Provider which may be an Affected System shall cooperate with Transmission Provider with whom interconnection has been requested in all matters

related to the conduct of studies and the determination of modifications to Affected Systems.

### **3.6 Withdrawal.**

Interconnection Customer may withdraw its Interconnection Request at any time by written notice of such withdrawal to Transmission Provider. In addition, if Interconnection Customer fails to adhere to all requirements of this QF-LGIP, except as provided in Article 13.5 (Disputes), Transmission Provider shall deem the Interconnection Request to be withdrawn and shall provide written notice to Interconnection Customer of the deemed withdrawal and an explanation of the reasons for such deemed withdrawal. Upon receipt of such written notice, Interconnection Customer shall have fifteen (15) Business Days in which to either respond with information or actions that cures the deficiency or to notify Transmission Provider of its intent to pursue Dispute Resolution.

Withdrawal shall result in the loss of Interconnection Customer's Queue Position. If an Interconnection Customer disputes the withdrawal and loss of its Queue Position, then during Dispute Resolution, Interconnection Customer's Interconnection Request is eliminated from the queue until such time that the outcome of Dispute Resolution would restore its Queue Position. An Interconnection Customer that withdraws or is deemed to have withdrawn its Interconnection Request shall pay to Transmission Provider all costs that Transmission Provider prudently incurs with respect to that Interconnection Request prior to Transmission Provider's receipt of notice described above. Interconnection Customer must pay all monies due to Transmission Provider before it is allowed to obtain any Interconnection Study data or results.

Transmission Provider shall (i) update the OASIS Queue Position posting and (ii) refund to Interconnection Customer any portion of Interconnection Customer's deposit or study payments that exceeds the costs that Transmission Provider has incurred, including interest calculated in accordance with Article 35.19a(a)(2) of FERC's regulations. In the event of such withdrawal, Transmission Provider, subject to the confidentiality provisions of Article 13.1, shall provide, at Interconnection Customer's request, all information that Transmission Provider developed for any completed study conducted up to the date of withdrawal of the Interconnection Request.

## **Article 4. Queue Position**

### **4.1 General.**

Transmission Provider shall assign a Queue Position based upon the date and time of receipt of the valid Interconnection Request; provided that, if the sole reason an Interconnection Request is not valid is the lack of required information on the application form, and Interconnection Customer provides such information in accordance with Article 3.3.3, then Transmission Provider shall assign Interconnection Customer a Queue Position based on the date the application form was originally filed,

Moving a Point of Interconnection shall result in a lowering of Queue Position if it is deemed a Material Modification under Article 4.4.3.

The Queue Position of each Interconnection Request will be used to determine the order of performing the Interconnection Studies and determination of cost responsibility for the facilities necessary to accommodate the Interconnection Request. A higher queued Interconnection Request is one that has been placed "earlier" in the queue in relation to another Interconnection Request that is lower queued.

Transmission Provider may allocate the cost of the common upgrades for clustered Interconnection Requests without regard to Queue Position.

#### **4.2 Clustering.**

At Transmission Provider's option, Interconnection Requests may be studied serially or in clusters for the purpose of the Interconnection System Impact Study.

Clustering shall be implemented on the basis of Queue Position. If Transmission Provider elects to study Interconnection Requests using Clustering, all Interconnection Requests received within a period not to exceed one hundred and eighty (180) Calendar Days, hereinafter referred to as the "Queue Cluster Window" shall be studied together, without regard to the nature of the underlying Interconnection Service, whether Energy Resource Interconnection Service or Network Resource Interconnection Service. The deadline for completing all Interconnection System Impact Studies for which an Interconnection System Impact Study Agreement has been executed during a Queue Cluster Window shall be in accordance with Article 7.4, for all Interconnection Requests assigned to the same Queue Cluster Window. Transmission Provider may study an Interconnection Request separately to the extent warranted by Good Utility Practice based upon the electrical remoteness of the proposed Large Generating Facility.

Clustering Interconnection System Impact Studies shall be conducted in such a manner to ensure the efficient implementation of the applicable regional transmission expansion plan in light of the Transmission System's capabilities at the time of each study.

The Queue Cluster Window shall have a fixed time interval based on fixed annual opening and closing dates. Any changes to the established Queue Cluster Window interval and opening or closing dates shall be announced with a posting on Transmission Provider's OASIS beginning at least one hundred and eighty (180) Calendar Days in advance of the change and continuing thereafter through the end date of the first Queue Cluster Window that is to be modified.

### **4.3 Transferability of Queue Position.**

An Interconnection Customer may transfer its Queue Position to another entity only if such entity acquires the specific Generating Facility identified in the Interconnection Request and the Point of Interconnection does not change.

### **4.4 Modifications.**

Interconnection Customer shall submit to Transmission Provider, in writing, modifications to any information provided in the Interconnection Request. Interconnection Customer shall retain its Queue Position if the modifications are in accordance with Articles 4.4.1, 4.4.2 or 4.4.5, or are determined not to be Material Modifications pursuant to Article 4.4.3.

Notwithstanding the above, during the course of the Interconnection Studies, either Interconnection Customer or Transmission Provider may identify changes to the planned interconnection that may improve the costs and benefits (including reliability) of the interconnection, and the ability of the proposed change to accommodate the Interconnection Request. To the extent the identified changes are acceptable to Transmission Provider and Interconnection Customer, such acceptance not to be unreasonably withheld, Transmission Provider shall modify the Point of Interconnection and/or configuration in accordance with such changes and proceed with any re-studies necessary to do so in accordance with Article 6.4, Article 7.6 and Article 8.5 as applicable and Interconnection Customer shall retain its Queue Position.

**4.4.1** Prior to the return of the executed Interconnection System Impact Study Agreement to Transmission Provider, modifications permitted under this Article shall include specifically: (a) a decrease of up to 60 percent of electrical output (MW) of the proposed project; (b) modifying the technical parameters associated with the Large Generating Facility technology or the Large Generating Facility step-up transformer impedance characteristics; and (c) modifying the interconnection configuration. For plant increases, the incremental increase in plant output will go to the end of the queue for the purposes of cost allocation and study analysis.

**4.4.2** Prior to the return of the executed Interconnection Facility Study Agreement to Transmission Provider, the modifications permitted under this Article shall include specifically: (a) additional 15 percent decrease of electrical output (MW), and (b) Large Generating Facility technical parameters associated with modifications to Large Generating Facility technology and transformer impedances; provided, however, the incremental costs associated with those modifications are the responsibility of the requesting Interconnection Customer.

**4.4.3** Prior to making any modification other than those specifically permitted by Articles 4.4.1, 4.4.2, and 4.4.5, Interconnection Customer may first request that Transmission Provider evaluate whether such modification is a Material Modification. In response to Interconnection Customer's request, Transmission

Provider shall evaluate the proposed modifications prior to making them and inform Interconnection Customer in writing of whether the modifications would constitute a Material Modification. Any change to the Point of Interconnection, except those deemed acceptable under Articles 4.4.1, 6.1, 7.2 or so allowed elsewhere, shall constitute a Material Modification. Interconnection Customer may then withdraw the proposed modification or proceed with a new Interconnection Request for such modification.

**4.4.4** Upon receipt of Interconnection Customer's request for modification permitted under this Article 4.4, Transmission Provider shall commence and perform any necessary additional studies as soon as practicable, but in no event shall Transmission Provider commence such studies later than thirty (30) Calendar Days after receiving notice of Interconnection Customer's request. Any additional studies resulting from such modification shall be done at Interconnection Customer's cost.

**4.4.5** Extensions of less than three (3) cumulative years in the Commercial Operation Date of the Large Generating Facility to which the Interconnection Request relates are not material and should be handled through construction sequencing; provided, however, that extensions may necessitate a determination of whether additional studies are required pursuant to Applicable Laws and Regulations and Applicable Reliability Standards.

## **Article 5. Procedures for Interconnection Requests Submitted Prior to Effective Date of Qualifying Facility Standard Large Generator Interconnection Procedures**

### **5.1 Queue Position for Pending Requests.**

**5.1.1** Any Interconnection Customer assigned a Queue Position prior to the effective date of this QF-LGIP shall retain that Queue Position.

**5.1.1.1** If an Interconnection Study Agreement has not been executed as of the effective date of this QF-LGIP, then such Interconnection Study, and any subsequent Interconnection Studies, shall be processed in accordance with this QF-LGIP.

**5.1.1.2** If an Interconnection Study Agreement has been executed prior to the effective date of this QF-LGIP, such Interconnection Study shall be completed in accordance with the terms of such agreement. With respect to any remaining studies for which an Interconnection Customer has not signed an Interconnection Study Agreement prior to the effective date of the QF-LGIP, Transmission Provider must offer Interconnection Customer the option of either continuing under Transmission Provider's existing interconnection study process or going forward with the completion of the necessary Interconnection Studies (for which it does not have a signed Interconnection Studies Agreement) in accordance with this QF-LGIP.

**5.1.1.3** If a QF-LGIA has been executed before the effective date of the QF-LGIP, then the QF-LGIA would be grandfathered.

### **5.1.2 Transition Period.**

To the extent necessary, Transmission Provider and Interconnection Customers with an outstanding request (i.e., an Interconnection Request for which a QF-LGIA has not been executed as of the effective date of this QF-LGIP) shall transition to this QF-LGIP within a reasonable period of time not to exceed sixty (60) Calendar Days. The use of the term "outstanding request" herein shall mean any Interconnection Request, on the effective date of this QF-LGIP: (i) that has been submitted but not yet accepted by Transmission Provider; (ii) where the related interconnection agreement has not yet been executed by both parties, (iii) where the relevant Interconnection Study Agreements have not yet been executed, or (iv) where any of the relevant Interconnection Studies are in process but not yet completed. Any Interconnection Customer with an outstanding request as of the effective date of this QF-LGIP may request a reasonable extension of any deadline, otherwise applicable, if necessary to avoid undue hardship or prejudice to its Interconnection Request. A reasonable extension shall be granted by Transmission Provider to the extent consistent with the intent and process provided for under this QF-LGIP.

### **5.2 New Transmission Provider.**

If Transmission Provider transfers control of its Transmission System to a successor Transmission Provider during the period when an Interconnection Request is pending, the original Transmission Provider shall transfer to the successor Transmission Provider any amount of the deposit or payment with interest thereon that exceeds the cost that it incurred to evaluate the request for interconnection. Any difference between such net amount and the deposit or payment required by this QF-LGIP shall be paid by or refunded to the Interconnection Provider, as appropriate. The original Transmission Provider shall coordinate with the successor Transmission Provider to complete any Interconnection Study, as appropriate, that the original Transmission Provider has begun but has not completed. If Transmission Provider has tendered a draft QF-LGIA to Interconnection Customer but Interconnection Customer has not executed the QF-LGIA, unless otherwise provided, Interconnection Customer must complete negotiations with the successor Transmission Provider.

## **Article 6. Interconnection Feasibility Study**

### **6.1 Interconnection Feasibility Study Agreement.**

Simultaneously with the acknowledgement of a valid Interconnection Request Transmission Provider shall provide to Interconnection Customer an Interconnection Feasibility Study Agreement in the form of Appendix 2. The Interconnection Feasibility Study Agreement shall specify that Interconnection Customer is responsible for the actual cost of the Interconnection Feasibility Study. Within five (5)

Business Days following the Scoping Meeting Interconnection Customer shall specify for inclusion in the attachment to the Interconnection Feasibility Study. Agreement the Point(s) of Interconnection and any reasonable alternative Point(s) of Interconnection. Within five (5) Business Days following Transmission Provider's receipt of such designation, Transmission Provider shall tender to Interconnection Customer the Interconnection Feasibility Study Agreement signed by Transmission Provider, which includes a good faith estimate of the cost for completing the Interconnection Feasibility Study. Interconnection Customer shall execute and deliver to Transmission Provider the Interconnection Feasibility Study Agreement along with a \$ 10,000 deposit for the Feasibility Study no later than thirty (30) Calendar Days after its receipt.

On or before the return of the executed Interconnection Feasibility Study Agreement to Transmission Provider, Interconnection Customer shall provide the technical data called for in Appendix 1, Attachment A.

If the Interconnection Feasibility Study uncovers any unexpected result(s) not contemplated during the Scoping Meeting, a substitute Point of Interconnection identified by either Interconnection Customer or Transmission Provider, and acceptable to the other, such acceptance not to be unreasonably withheld, will be substituted for the designated Point of Interconnection specified above without loss of Queue Position, and Re-studies shall be completed pursuant to Article 6.4 as applicable. For the purpose of this Article 6.1, if Transmission Provider and Interconnection Customer cannot agree on the substituted Point of Interconnection, then Interconnection Customer may direct that one of the alternatives as specified in the Interconnection Feasibility Study Agreement, as specified pursuant to Article 3.3.4, shall be the substitute.

If Interconnection Customer and Transmission Provider agree to forgo the Interconnection Feasibility Study, Transmission Provider will initiate an Interconnection System Impact Study under Article 7 of this QF-LGIP and apply the \$ 10,000 deposit towards the Interconnection System Impact Study.

## **6.2 Scope of Interconnection Feasibility Study.**

The Interconnection Feasibility Study shall preliminarily evaluate the feasibility of the proposed interconnection to the Transmission System.

The Interconnection Feasibility Study will consider the Base Case as well as all generating facilities (and with respect to (iii), any identified Network Upgrades) that, on the date the Interconnection Feasibility Study is commenced: (i) are directly interconnected to the Transmission System; (ii) are interconnected to Affected Systems and may have an impact on the Interconnection Request; (iii) have a pending higher queued Interconnection Request to interconnect to the Transmission System; and (iv) have no Queue Position but have executed a QF-LGIA or, pursuant to the Transmission Provider's OATT, have executed an LGIA or requested that an unexecuted LGIA be filed with FERC. The Interconnection Feasibility Study will

consist of a power flow and short circuit analysis. The Interconnection Feasibility Study will provide a list of facilities and a non-binding good faith estimate of cost responsibility and a non-binding good faith estimated time to construct.

### **6.3 Interconnection Feasibility Study Procedures.**

Transmission Provider shall utilize existing studies to the extent practicable when it performs the study. Transmission Provider shall use Reasonable Efforts to complete the Interconnection Feasibility Study no later than forty-five (45) Calendar Days after Transmission Provider receives the fully executed Interconnection Feasibility Study Agreement. At the request of Interconnection Customer or at any time Transmission Provider determines that it will not meet the required time frame for completing the Interconnection Feasibility Study, Transmission Provider shall notify Interconnection Customer as to the schedule status of the Interconnection Feasibility Study. If Transmission Provider is unable to complete the Interconnection Feasibility Study within that time period, it shall notify Interconnection Customer and provide an estimated completion date with an explanation of the reasons why additional time is required. Upon request, Transmission Provider shall provide Interconnection Customer supporting documentation, workpapers and relevant power flow, short circuit and stability databases for the Interconnection Feasibility Study, subject to confidentiality arrangements consistent with Article 13.1.

#### **6.3.1 Meeting with Transmission Provider.**

Within ten (10) Business Days of providing an Interconnection Feasibility Study report to Interconnection Customer, Transmission Provider and Interconnection Customer shall meet to discuss the results of the Interconnection Feasibility Study.

### **6.4 Re-Study.**

If Re-Study of the Interconnection Feasibility Study is required due to a higher queued project dropping out of the queue, or a modification of a higher queued project subject to Article 4.4, or re-designation of the Point of Interconnection pursuant to Article 6.1 Transmission Provider shall notify Interconnection Customer in writing. Such Re-Study shall take not longer than forty-five (45) Calendar Days from the date of the notice. Any cost of Re-Study shall be borne by the Interconnection Customer being re-studied.

## **Article 7. Interconnection System Impact Study**

### **7.1 Interconnection System Impact Study Agreement.**

Unless otherwise agreed, pursuant to the Scoping Meeting provided in Article 3.3.4, simultaneously with the delivery of the Interconnection Feasibility Study to Interconnection Customer, Transmission Provider shall provide to Interconnection Customer an Interconnection System Impact Study Agreement in the form of Appendix 3 to this QF-LGIP. The Interconnection System Impact Study Agreement

shall provide that Interconnection Customer shall compensate Transmission Provider for the actual cost of the Interconnection System Impact Study. Within three (3) Business Days following the interconnection Feasibility Study results meeting, Transmission Provider shall provide to Interconnection Customer a non-binding good faith estimate of the cost and timeframe for completing the Interconnection System Impact Study.

## **7.2 Execution of Interconnection System Impact Study Agreement.**

Interconnection Customer shall execute the Interconnection System impact Study Agreement and deliver the executed Interconnection System Impact Study Agreement to Transmission Provider no later than thirty (30) Calendar Days after its receipt along with demonstration of Site Control, and a \$ 50,000 deposit.

If Interconnection Customer does not provide all such technical data when it delivers the Interconnection System Impact Study Agreement, Transmission Provider shall notify Interconnection Customer of the deficiency within five (5) Business Days of the receipt of the executed interconnection System Impact Study Agreement and Interconnection Customer shall cure the deficiency within ten (10) Business Days of receipt of the notice, provided, however, such deficiency does not include failure to deliver the executed Interconnection System Impact Study Agreement or deposit.

If the interconnection System Impact Study uncovers any unexpected result(s) not contemplated during the Soaping Meeting and the Interconnection Feasibility Study, a substitute Point of Interconnection identified by either Interconnection Customer or Transmission Provider, and acceptable to the other, such acceptance not to be unreasonably withheld, will be substituted for the designated Point of Interconnection specified above without loss of Queue Position, and restudies shall be completed pursuant to Article 7.6 as applicable. For the purpose of this Article 7.2, if Transmission Provider and Interconnection Customer cannot agree on the substituted Point of Interconnection, then Interconnection Customer may direct that one of the alternatives as specified in the Interconnection Feasibility Study Agreement, as specified pursuant to Article 3.3.4, shall be the substitute.

## **7.3 Scope of Interconnection System Impact Study.**

The Interconnection System Impact Study shall evaluate the impact of the proposed interconnection on the reliability of the Transmission System. The Interconnection System Impact Study will consider the Base Case as well as all generating facilities (and with respect to (iii) below, any identified Network Upgrades associated with such higher queued interconnection) that, on the date the Interconnection System Impact Study is commenced: (i) are directly interconnected to the Transmission System; (ii) are interconnected to Affected Systems and may have an impact on the Interconnection Request; (iii) have a pending higher queued Interconnection Request to interconnect to the Transmission System; and (iv) have no Queue Position but have executed a QF-LGIA, or pursuant to the transmission provider's OATT, have executed a LGIA or have requested that an unexecuted LGIA be filed with FERC.

The Interconnection System Impact Study will consist of a short circuit analysis, a stability analysis, and a power flow analysis. The Interconnection System Impact Study will state the assumptions upon which it is based; state the results or the analyses; and provide the requirements or potential impediments to providing the requested interconnection service, including a preliminary indication of the cost and length of time that would be necessary to correct any problems identified in those analyses and implement the interconnection. The Interconnection System Impact Study will provide a list of facilities that are required as a result of the Interconnection Request and a non-binding good faith estimate of cost responsibility and a non-binding good faith estimated time to construct.

#### **7.4 Interconnection System Impact Study Procedures.**

Transmission Provider shall coordinate the Interconnection System Impact Study with any Affected System that is affected by the Interconnection Request pursuant to Article 3.5 above. Transmission Provider shall utilize existing studies to the extent practicable when it performs the study. Transmission Provider shall use Reasonable Efforts to complete the Interconnection System Impact Study within ninety (90) Calendar Days after the receipt of the Interconnection System Impact Study Agreement or notification to proceed, study payment, and technical data. If Transmission Provider uses Clustering, Transmission Provider shall use Reasonable Efforts to deliver a completed Interconnection System Impact Study within ninety (90) Calendar Days after the close of the Queue Cluster Window.

At the request of Interconnection Customer or at any time Transmission Provider determines that it will not meet the required time frame for completing the Interconnection System Impact Study, Transmission Provider shall notify Interconnection Customer as to the schedule status of the Interconnection System Impact Study. If Transmission Provider is unable to complete the Interconnection System Impact Study within the time period, it shall notify Interconnection Customer and provide an estimated completion date with an explanation of the reasons why additional time is required. Upon request, Transmission Provider shall provide Interconnection Customer all supporting documentation, workpapers and relevant pre-Interconnection Request and post-Interconnection Request power flow, short circuit and stability databases for the Interconnection System Impact Study, subject to confidentiality arrangements consistent with Article 13.1.

#### **7.5 Meeting with Transmission Provider.**

Within ten (10) Business Days of providing an Interconnection System Impact Study report to Interconnection Customer, Transmission Provider and Interconnection Customer shall meet to discuss the results of the Interconnection System Impact Study.

## **7.6 Re-Study.**

If Re-Study of the Interconnection System Impact Study is required due to a higher queued project dropping out of the queue, or a modification of a higher queued project subject to Article 4.4, or re-designation of the Point of Interconnection pursuant to Article 7.2 Transmission Provider shall notify Interconnection Customer in writing. Such Re-Study shall take no longer than sixty (60) Calendar Days from the date of notice. Any cost of Re-Study shall be borne by the Interconnection Customer being re-studied.

## **Article 8. Interconnection Facilities Study**

### **8.1 Interconnection Facilities Study Agreement.**

Simultaneously with the delivery of the Interconnection System Impact Study to Interconnection Customer, Transmission Provider shall provide to Interconnection Customer an Interconnection Facilities Study Agreement in the form of Appendix 4 to this QF-LGIP. The Interconnection Facilities Study Agreement shall provide that Interconnection Customer shall compensate Transmission Provider for the actual cost of the Interconnection Facilities Study. Within three (3) Business Days following the Interconnection System Impact Study results meeting, Transmission Provider shall provide to Interconnection Customer a non-binding good faith estimate of the cost and timeframe for completing the Interconnection Facilities Study. Interconnection Customer shall execute the Interconnection Facilities Study Agreement and deliver the executed Interconnection Facilities Study Agreement to Transmission Provider within thirty (30) Calendar Days after its receipt, together with the required technical data and the greater of \$ 100,000 or Interconnection Customer's portion of the estimated monthly cost of conducting the Interconnection Facilities Study. If Interconnection Customer chooses to be studied for Energy Resource Interconnection Service, then Interconnection Customer must provide to Transmission Provider a signed attestation that the Interconnection Customer intends to enter into a non-standard Qualifying Facility contract for the sale of electric energy or capacity from the Large Generating Facility.

**8.1.1** Transmission Provider shall invoice Interconnection Customer on a monthly basis for the work to be conducted on the Interconnection Facilities Study each month. Interconnection Customer shall pay invoiced amounts within thirty (30) Calendar Days of receipt of invoice. Transmission Provider shall continue to hold the amounts on deposit until settlement of the final invoice.

### **8.2 Scope of Interconnection Facilities Study.**

The Interconnection Facilities Study shall 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 Interconnection Facility to the Transmission System. The Interconnection Facilities Study shall also identify the

electrical switching configuration of the connection equipment, including, without limitation: the transformer, switchgear, meters, and other station equipment; the nature and estimated cost of any Transmission Provider's Interconnection Facilities, Network Upgrades, and Distribution Upgrades necessary to accomplish the interconnection; and an estimate of the time required to complete the construction and installation of such facilities.

### **8.3 Interconnection Facilities Study Procedures.**

Transmission Provider shall coordinate the Interconnection Facilities Study with any Affected System pursuant to Article 3.5 above. Transmission Provider shall utilize existing studies to the extent practicable in performing the Interconnection Facilities Study. Transmission Provider shall use Reasonable Efforts to complete the study and issue a draft Interconnection Facilities Study report to Interconnection Customer within the following number of days after receipt of an executed Interconnection Facilities Study Agreement: ninety (90) Calendar Days, with no more than a +/- 20 percent cost estimate contained in the report; or one hundred eighty (180) Calendar Days, if Interconnection Customer requests a +/- 10 percent cost estimate.

At the request of Interconnection Customer or at any time Transmission Provider determines that it will not meet the required time frame for completing the Interconnection Facilities Study, Transmission Provider shall notify Interconnection Customer as to the schedule status of the Interconnection Facilities Study. If Transmission Provider is unable to complete the Interconnection Facilities Study and issue a draft Interconnection Facilities Study report within the time required, it shall notify Interconnection Customer and provide an estimated completion date and an explanation of the reasons why additional time is required.

Interconnection Customer may, within thirty (30) Calendar Days after receipt of the draft report, provide written comments to Transmission Provider, which Transmission Provider shall include in the final report. Transmission Provider shall issue the final Interconnection Facilities Study report within fifteen (15) Business Days of receiving Interconnection Customer's comments or promptly upon receiving Interconnection Customer's statement that it will not provide comments. Transmission Provider may reasonably extend such fifteen-day period upon notice to Interconnection Customer if Interconnection Customer's comments require Transmission Provider to perform additional analyses or make other significant modifications prior to the issuance of the final Interconnection Facilities Report. Upon request, Transmission Provider shall provide Interconnection Customer supporting documentation, workpapers, and databases or data developed in the preparation of the Interconnection Facilities Study, subject to confidentiality arrangements consistent with Article 13.1.

### **8.4 Meeting with Transmission Provider.**

Within ten (10) Business Days of providing a draft Interconnection Facilities Study report to Interconnection Customer, Transmission Provider and Interconnection Customer shall meet to discuss the results of the Interconnection Facilities Study.

## **8.5 Re-Study.**

If Re-Study of the Interconnection Facilities Study is required due to a higher queued project dropping out of the queue or a modification of a higher queued project pursuant to Article 4.4, Transmission Provider shall so notify Interconnection Customer in writing. Such Re-Study shall take no longer than sixty (60) Calendar Days from the date of notice. Any cost of Re-Study shall be borne by the Interconnection Customer being re-studied.

Article 9. Engineering & Procurement ('E&P') Agreement.

Prior to executing a QF-LGIA, an Interconnection Customer may, in order to advance the implementation of its interconnection, request and Transmission Provider shall offer the Interconnection Customer, an E&P Agreement that authorizes Transmission Provider to begin engineering and procurement of long lead-time items necessary for the establishment of the interconnection. However, Transmission Provider shall not be obligated to offer an E&P Agreement if Interconnection Customer is in Dispute Resolution as a result of an allegation that Interconnection Customer has failed to meet any milestones or comply with any prerequisites specified in other parts of the QF-LGIP. The E&P Agreement is an optional procedure and it will not alter the Interconnection Customer's Queue Position or In-Service Date. The E&P Agreement shall provide for Interconnection Customer to pay the cost of all activities authorized by Interconnection Customer and to make advance payments or provide other satisfactory security for such costs.

Interconnection Customer shall pay the cost of such authorized activities and any cancellation costs for equipment that is already ordered for its interconnection, which cannot be mitigated as hereafter described, whether or not such items or equipment later become unnecessary. If Interconnection Customer withdraws its application for interconnection or either Party terminates the E&P Agreement, to the extent the equipment ordered can be canceled under reasonable terms, Interconnection Customer shall be obligated to pay the associated cancellation costs. To the extent that the equipment cannot be reasonably canceled, Transmission Provider may elect: (i) to take title to the equipment, in which event Transmission Provider shall refund Interconnection Customer any amounts paid by Interconnection Customer for such equipment and shall pay the cost of delivery of such equipment, or (ii) to transfer title to and deliver such equipment to Interconnection Customer, in which event Interconnection Customer shall pay any unpaid balance and cost of delivery of such equipment.

## **Article 10. Optional Interconnection Study**

### **10.1 Optional Interconnection Study Agreement.**

On or after the date when Interconnection Customer receives Interconnection System Impact Study results, Interconnection Customer may request, and Transmission Provider shall perform a reasonable number of Optional Studies. The request shall describe the assumptions that Interconnection Customer wishes Transmission Provider

to study within the scope described in Article 10.2. Within five (5) Business Days after receipt of a request for an Optional Interconnection Study, Transmission Provider shall provide to Interconnection Customer an Optional Interconnection Study Agreement in the form of Appendix 5.

The Optional Interconnection Study Agreement shall: (i) specify the technical data that Interconnection Customer must provide for each phase of the Optional Interconnection Study, (ii) specify Interconnection Customer's assumptions as to which Interconnection Requests with earlier queue priority dates will be excluded from the Optional Interconnection Study case and assumptions as to the type of interconnection service for Interconnection Requests remaining in the Optional Interconnection Study case, and (iii) Transmission Provider's estimate of the cost of the Optional Interconnection Study. To the extent known by Transmission Provider, such estimate shall include any costs expected to be incurred by any Affected System whose participation is necessary to complete the Optional Interconnection Study. Notwithstanding the above, Transmission Provider shall not be required as a result of an Optional Interconnection Study request to conduct any additional Interconnection Studies with respect to any other Interconnection Request.

Interconnection Customer shall execute the Optional Interconnection Study Agreement within ten (10) Business Days of receipt and deliver the Optional Interconnection Study Agreement, the technical data and a \$ 10,000 deposit to Transmission Provider.

### **10.2 Scope of Optional Interconnection Study.**

The Optional Interconnection Study will consist of a sensitivity analysis based on the assumptions specified by Interconnection Customer in the Optional Interconnection Study Agreement. The Optional Interconnection Study will also identify Transmission Provider's Interconnection Facilities, Distribution Upgrades, and the Network Upgrades, and the estimated cost thereof, that may be required to provide transmission service or Interconnection Service based upon the results of the Optional Interconnection Study. The Optional Interconnection Study shall be performed solely for informational purposes. Transmission Provider shall use Reasonable Efforts to coordinate the study with any Affected Systems that may be affected by the types of Interconnection Services that are being studied. Transmission Provider shall utilize existing studies to the extent practicable in conducting the Optional Interconnection Study.

### **10.3 Optional Interconnection Study Procedures.**

The executed Optional Interconnection Study Agreement, the prepayment, and technical and other data called for therein must be provided to Transmission Provider within ten (10) Business Days of Interconnection Customer receipt of the Optional Interconnection Study Agreement. Transmission Provider shall use Reasonable Efforts to complete the Optional Interconnection Study within a mutually agreed upon time period specified within the Optional Interconnection Study Agreement. If

Transmission Provider is unable to complete the Optional Interconnection Study within such time period, it shall notify Interconnection Customer and provide an estimated completion date and an explanation of the reasons why additional time is required. Any difference between the study payment and the actual cost of the study shall be paid to Transmission Provider or refunded to Interconnection Customer, as appropriate. Upon request, Transmission Provider shall provide Interconnection Customer supporting documentation and workpapers and databases or data developed in the preparation of the Optional Interconnection Study, subject to confidentiality arrangements consistent with Article 13.1.

## **Article 11. Standard Oregon Qualifying Facility Large Generator Interconnection Agreement (QF-LGIA)**

### **11.1 Tender.**

As provided in Article 8.3, Interconnection Customer shall tender comments on the draft Interconnection Facilities Study Report within thirty (30) Calendar Days of receipt of the report. Within thirty (30) Calendar Days after the Interconnection Customer's comments are submitted, Transmission Provider shall tender a draft QF-LGIA, together with draft appendices completed to the extent practicable. The draft QF-LGIA shall be in the form of Transmission Provider's OPUC-approved standard form QF-LGIA, which is in Appendix 6. Interconnection Customer shall execute and return, the completed draft appendices within thirty (30) Calendar Days, or upon a later date agreed upon between the Parties.

### **11.2 Negotiation.**

Notwithstanding Article 11.1, at the request of Interconnection Customer Transmission Provider shall begin negotiations with Interconnection Customer concerning the appendices to the QF-LGIA at any time after Interconnection Customer executes the Interconnection Facilities Study Agreement. Transmission Provider and Interconnection Customer shall negotiate concerning any disputed provisions of the appendices to the draft QF-LGIA for not more than sixty (60) Calendar Days after tender of the final Interconnection Facilities Study Report. If Interconnection Customer determines that negotiations are at an impasse, it may request termination of the negotiations at any time after tender of the draft QF-LGIA pursuant to Article 11.1 and initiate Dispute Resolution procedures pursuant to Article 13.5. If Interconnection Customer requests termination of the negotiations, but within sixty (60) Calendar Days thereafter fails to initiate Dispute Resolution, it shall be deemed to have withdrawn its Interconnection Request. Unless otherwise agreed by the Parties, if Interconnection Customer has not executed the QF-LGIA, or initiated Dispute Resolution procedures pursuant to Article 13.5 within sixty (60) Calendar Days of tender of draft QF-LGIA, it shall be deemed to have withdrawn its Interconnection Request. Transmission Provider shall provide to Interconnection Customer a final QF-LGIA within fifteen (15) Business Days after the completion of the negotiation process.

### 11.3 Execution and Filing.

Within fifteen (15) Business Days after receipt of the final QF-LGIA, and prior to execution of the final QF-LGIA, Interconnection Customer shall provide Transmission Provider (A) reasonable evidence of continued Site Control or (B) posting of \$250,000, non-refundable additional security, which shall be applied toward future construction costs. At the same time, Interconnection Customer also shall provide reasonable evidence that one or more of the following milestones in the development of the Large Generating Facility, at Interconnection Customer election if Interconnection Customer selected Network Resource Interconnection Service, has been achieved:

- (i) the execution of a contract for the supply or transportation of fuel to the Large Generating Facility;
- (ii) the execution of a contract for the supply of cooling water to the Large Generating Facility;
- (iii) execution of a contract for the engineering for, procurement of major equipment for, or construction of, the Large Generating Facility;
- (iv) execution of a contract for the sale of electric energy or capacity from the Large Generating Facility; or
- (v) application for an air, water, or land use permit. ~~At the same time, Interconnection customer also shall provide reasonable evidence that it has obtained certification as a Qualifying Facility pursuant to 18 C.F.R. § 292.207.~~

If Interconnection Customer selected Energy Resource Interconnection Service, Interconnection Customer shall provide an attestation that it has executed a non-standard Qualifying Facility contract for the sale of electric energy or capacity from the Large Generating Facility. The attestation must be signed by the Interconnection Customer and the counterparty to the non-standard Qualifying Facility contract. Notwithstanding Article 11.2, if Interconnection Customer selecting Energy Resource Interconnection Service has not executed the QF-LGIA, or initiated Dispute Resolution procedures pursuant to Article 13.5 within sixty (60) Calendar Days of tender of the final QF-LGIA, it shall be deemed to have withdrawn its Interconnection Request.

At the same time, Interconnection customer also shall provide reasonable evidence that it has obtained certification as a Qualifying Facility pursuant to 18 C.F.R. § 292.207.

Interconnection Customer shall execute two originals ~~or of~~ the tendered QF-LGIA and return them to Transmission Provider. ~~Interconnection Customer shall also file an executed original of the tendered QF-LGIA with the OPUC.~~

#### **11.4 Commencement of Interconnection Activities.**

If Interconnection Customer executes the final QF-LGIA, Transmission Provider and Interconnection Customer shall perform their respective obligations in accordance with the terms of the QF-LGIA, subject to modification by OPUC.

### **Article 12. Construction of Transmission Provider's Interconnection Facilities, Distribution Upgrades, and Network Upgrades**

#### **12.1 Schedule.**

Transmission Provider and Interconnection Customer shall negotiate in good faith concerning a schedule for the construction of Transmission Provider's Interconnection Facilities, Distribution Upgrades, and the Network Upgrades.

#### **12.2 Construction Sequencing.**

##### **12.2.1 General.**

In general, the In-Service Date of an Interconnection Customers seeking interconnection to the Transmission System will determine the sequence of construction of Distribution Upgrades and Network Upgrades.

##### **12.2.2 Advance Construction of Network Upgrades that are an Obligation of an Entity other than Interconnection Customer.**

An Interconnection Customer with a QF-LGIA, in order to maintain its In-Service Date, may request that Transmission Provider advance to the extent necessary the completion of Network Upgrades that: (i) were assumed in the Interconnection Studies for such Interconnection Customer, (ii) are necessary to support such In-Service Date, and (iii) would otherwise not be completed, pursuant to a contractual obligation of an entity other than Interconnection Customer that is seeking interconnection to the Transmission System, in time to support such In-Service Date. Upon such request, Transmission Provider will use Reasonable Efforts to advance the construction of such Network Upgrades to accommodate such request; provided that Interconnection Customer commits to pay Transmission Provider: (i) any associated expediting costs and (ii) the cost of such Network Upgrades. The entity with a contractual obligation to construct such Network Upgrades ("Obligated Entity") shall be obligated to pay Transmission Provider for such Network Upgrades. Payment by the Obligated Entity shall be due on the date that it's payment would have been due had there been no request for advance construction. Transmission Provider shall forward to Interconnection Customer the amount paid by the Obligated Entity. If Transmission Provider's interconnection agreement, if any, with the Obligated Entity requires Transmission Provider to refund the Obligated Entity for amounts paid for Network Upgrades, Transmission Provider then shall refund to the Obligated Entity the amount that it paid for the Network Upgrades, in accordance with said interconnection agreement.

### **12.2.3 Advancing Construction of Network Upgrades that are Part of an Expansion Plan of the Transmission Provider.**

An Interconnection Customer with an QF-LGIA, in order to maintain its In-Service Date, may request that Transmission Provider advance to the extent necessary the completion of Network Upgrades that: (i) are necessary to support such In-Service Date and (ii) would otherwise not be completed, pursuant to an expansion plan of Transmission Provider, in time to support such In-Service Date. Upon such request, Transmission Provider will use Reasonable Efforts to advance the construction of such Network Upgrades to accommodate such request; provided that Interconnection Customer commits to pay Transmission Provider any associated expediting costs.

### **12.2.4 Amended Interconnection System Impact Study.**

An Interconnection System Impact Study will be amended to determine the facilities necessary to support the requested In-Service Date. This amended study will include those transmission and Large Generating Facilities that are expected to be in service on or before the requested In-Service Date.

## **Article 13. Miscellaneous**

### **13.1 Confidentiality.**

Confidential Information shall include, without limitation, all information relating to a Party's technology, research and development, business affairs, and pricing, and any information supplied by either of the Parties to the other prior to the execution of an QF-LGIA.

Information is Confidential Information only if it is clearly designated or marked in writing as confidential on the face of the document, or, if the information is conveyed orally or by inspection, if the Party providing the information orally informs the Party receiving the information that the information is confidential.

If requested by either Party, the other Party shall provide in writing, the basis for asserting that the information referred to in this Article warrants confidential treatment, and the requesting Party may disclose such writing to the appropriate Governmental Authority. Each Party shall be responsible for the costs associated with affording confidential treatment of its information. The release of Confidential Information shall be subject to Applicable Laws and Regulations and Applicable Reliability Standards.

#### **13.1.1 Scope.**

Confidential Information shall not include information that the receiving Party can demonstrate: (1) is generally available to the public other than as a result of a disclosure by the receiving Party; (2) was in the lawful possession of the receiving Party on a non-confidential basis before receiving it from the

disclosing Party; (3) was supplied to the receiving Party without restriction by a third party, who, to the knowledge of the receiving Party after due inquiry, was under no obligation to the disclosing Party to keep such information confidential; (4) was independently developed by the receiving Party without reference to Confidential Information of the disclosing Party; (5) is, or becomes, publicly known, through no wrongful act or omission of the receiving Party or Breach of the QF-LGIA; or (6) is required, in accordance with Article 13.1.6, Order of Disclosure, to be disclosed by any Governmental Authority or is otherwise required to be disclosed by law or subpoena, or is necessary in any legal proceeding establishing rights and obligations under the QF-LGIA. Information designated as Confidential Information will no longer be deemed confidential if the Party that designated the information as confidential notifies the other Party that it no longer is confidential.

### **13.1.2 Release of Confidential Information.**

Neither Party shall release or disclose Confidential Information to any other person, except to its Affiliates (limited by the Standards of Conduct requirements), employees, consultants, or to parties who may be or considering providing financing to or equity participation with Interconnection Customer, or to potential purchasers or assignees of Interconnection Customer, on a need-to-know basis in connection with these procedures, unless such person has first been advised of the confidentiality provisions of this Article 13.1 and has agreed to comply with such provisions. Notwithstanding the foregoing, a Party providing Confidential Information to any person shall remain primarily responsible for any release of Confidential Information in contravention of this Article 13.1.

### **13.1.3 Rights.**

Each Party retains all rights, title, and interest in the Confidential Information that each Party discloses to the other Party. The disclosure by each Party to the other Party of Confidential Information shall not be deemed a waiver by either Party or any other person or entity of the right to protect the Confidential Information from public disclosure.

### **13.1.4 No Warranties.**

By providing Confidential Information, neither Party makes any warranties or representations as to its accuracy or completeness. In addition, by supplying Confidential Information, neither Party obligates itself to provide any particular information or Confidential Information to the other Party nor to enter into any further agreements or proceed with any other relationship or joint venture.

### **13.1.5 Standard of Care.**

Each Party shall use at least the same standard of care to protect Confidential Information it receives as it uses to protect its own Confidential Information

from unauthorized disclosure, publication or dissemination. Each Party may use Confidential Information solely to fulfill its obligations to the other Party under these procedures or its regulatory requirements.

#### **13.1.6 Order of Disclosure.**

If a court or a Government Authority or entity with the right, power, and apparent authority to do so requests or requires either Party, by subpoena, oral deposition, interrogatories, requests for production of documents, administrative order, or otherwise, to disclose Confidential Information, that Party shall provide the other Party with prompt notice of such request(s) or requirement(s) so that the other Party may seek an appropriate protective order or waive compliance with the terms of the QF-LGIA. Notwithstanding the absence of a protective order or waiver, the Party may disclose such Confidential Information which, in the opinion of its counsel, the Party is legally compelled to disclose. Each Party will use Reasonable Efforts to obtain reliable assurance that confidential treatment will be accorded any Confidential Information so furnished.

#### **13.1.7 Remedies.**

The Parties agree that monetary damages would be inadequate to compensate a Party for the other Party's Breach of its obligations under this Article 13.1. Each Party accordingly agrees that the other Party shall be entitled to equitable relief, by way of injunction or otherwise, if the first Party Breaches or threatens to Breach its obligations under this Article 13.1, which equitable relief shall be granted without bond or proof of damages, and the receiving Party shall not plead in defense that there would be an adequate remedy at law. Such remedy shall not be deemed an exclusive remedy for the Breach of this Article 13.1, but shall be in addition to all other remedies available at law or in equity. The Parties further acknowledge and agree that the covenants contained herein are necessary for the protection of legitimate business interests and are reasonable in scope. No Party, however, shall be liable for indirect, incidental, or consequential or punitive damages of any nature or kind resulting from or arising in connection with this Article 13.1.

#### **13.1.8 Disclosure to OPUC or its Staff.**

Notwithstanding anything in this Article 13.1 to the contrary, if the OPUC or its staff, during the course of an investigation or otherwise, requests information from one of the Parties that is otherwise required to be maintained in confidence pursuant to the QF-LGIP, the Party shall provide the requested information to the OPUC or its staff, within the time provided for in the request for information. In providing the information to the OPUC or its staff, the Party must, consistent with 18 OAR 860-011-0080, request that the information be treated as confidential and non-public by the OPUC and its staff and that the information be withheld from public disclosure. Parties must notify the other Party prior to the release of the Confidential Information to the OPUC or its staff. The Party

shall notify the other Party to the QF-LGIA when its is notified by the OPUC or its staff that a request to release Confidential Information has been received by the OPUC, at which time either of the Parties may respond before such information would be made public, pursuant to OAR 860-011-0080. Requests from FERC, in the course of conducting an investigation, shall be treated in a similar manner, consistent with applicable federal rules and regulations.

**13.1.9** Subject to the exception in Article 13.1.8, any information that a Party claims is competitively sensitive, commercial or financial information ("Confidential Information") shall not be disclosed by the other Party to any person not employed or retained by the other Party, except to the extent disclosure is (i) required by law; (ii) reasonably deemed by the disclosing Party to be required to be disclosed in connection with a dispute between or among the Parties, or the defense of litigation or dispute; (iii) otherwise permitted by consent of the other Party, such consent not to be unreasonably withheld; or (iv) necessary to fulfill its obligations under this QF-LGIP or as a transmission service provider or a Control Area operator including disclosing the Confidential Information to an RTO or ISO or to a subregional, regional or national reliability organization or planning group. The Party asserting confidentiality shall notify the other Party in writing of the information it claims is confidential. Prior to any disclosures of the other Party's Confidential Information under this subparagraph, or if any third party or Governmental Authority makes any request or demand for any of the information described in this subparagraph, the disclosing Party agrees to promptly notify the other Party in writing and agrees to assert confidentiality and cooperate with the other Party in seeking to protect the Confidential Information from public disclosure by confidentiality agreement, protective order or other reasonable measures.

**13.1.10** This provision shall not apply to any information that was or is hereafter in the public domain (except as a result of a Breach of this provision).

**13.1.11** Transmission Provider shall, at Interconnection Customer's election, destroy, in a confidential manner, or return the Confidential Information provided at the time of Confidential Information is no longer needed.

## **13.2 Delegation of Responsibility.**

Transmission Provider may use the services of subcontractors as it deems appropriate to perform its obligations under this QF-LGIP. Transmission Provider shall remain primarily liable to Interconnection Customer for the performance of such subcontractors and compliance with its obligations of this QF-LGIP. The subcontractor shall keep all information provided confidential and shall use such information solely for the performance of such obligation for which it was provided and no other purpose.

### **13.3 Obligation for Study Costs.**

Transmission Provider shall charge and Interconnection Customer shall pay the actual costs of the Interconnection Studies. Any difference between the study deposit and the actual cost of the applicable Interconnection Study shall be paid by or refunded, except as otherwise provided herein, to Interconnection Customer or offset against the cost of any future Interconnection Studies associated with the applicable Interconnection Request prior to beginning of any such future Interconnection Studies. Any invoices for Interconnection Studies shall include a detailed and itemized accounting of the cost of each Interconnection Study. Interconnection Customer shall pay any such undisputed costs within thirty (30) Calendar Days of receipt of an invoice therefore. Transmission Provider shall not be obligated to perform or continue to perform any studies unless Interconnection Customer has paid all undisputed amounts in compliance herewith.

### **13.4 Third Parties Conducting Studies.**

If (i) at the time of the signing of an Interconnection Study Agreement there is disagreement as to the estimated time to complete an Interconnection Study, (ii) Interconnection Customer receives notice pursuant to Articles 6.3, 7.4 or 8.3 that Transmission Provider will not complete an Interconnection Study within the applicable timeframe for such Interconnection Study, or (iii) Interconnection Customer receives neither the Interconnection Study nor a notice under Articles 6.3, 7.4 or 8.3 within the applicable timeframe for such Interconnection Study, then Interconnection Customer may require Transmission Provider to utilize a third party consultant reasonably acceptable to Interconnection Customer and Transmission Provider to perform such Interconnection Study under the direction of Transmission Provider. At other times, Transmission Provider may also utilize a third party consultant to perform such Interconnection Study, either in response to a general request of Interconnection Customer, or on its own volition.

In all cases, use of a third party consultant shall be in accord with Article 26 of the QF-LGIA (Subcontractors) and limited to situations where Transmission Provider determines that doing so will help maintain or accelerate the study process for Interconnection Customer's pending Interconnection Request and not interfere with Transmission Provider's progress on Interconnection Studies for other pending Interconnection Requests. In cases where Interconnection Customer requests use of a third party consultant to perform such Interconnection Study, Interconnection Customer and Transmission Provider shall negotiate all of the pertinent terms and conditions, including reimbursement arrangements and the estimated study completion date and study review deadline. Transmission Provider shall convey all workpapers, data bases, study results and all other supporting documentation prepared to date with respect to the Interconnection Request as soon as soon as practicable upon Interconnection Customer's request subject to the confidentiality provision in Article 13.1. In any case, such third party contract may be entered into with either Interconnection Customer or Transmission Provider at Transmission Provider's discretion. In the ease of (iii) Interconnection Customer maintains its right to submit a

claim to Dispute Resolution to recover the costs of such third party study. Such third party consultant shall be required to comply with this QF-LGIP, Article 26 of the QF-LGIA (Subcontractors), and the relevant procedures and protocols as would apply if Transmission Provider were to conduct the Interconnection Study and shall use the information provided to it solely for purposes of performing such services and for no other purposes. Transmission Provider shall cooperate with such third party consultant and Interconnection Customer to complete and issue the Interconnection Study in the shortest reasonable time.

### **13.5 Disputes.**

#### **13.5.1 Submission.**

In the event either Party has a dispute, or asserts a claim, that arises out of or in connection with the QF-LGIA, the QF-LGIP, or their performance, such Party (the "disputing Party") shall provide the other Party with written notice of the dispute or claim ("Notice of Dispute"). Such dispute or claim shall be referred to a designated senior representative of each Party for resolution on an informal basis as promptly as practicable after receipt of the Notice of Dispute by the other Party. In the event the designated representatives are unable to resolve the claim or dispute through unassisted or assisted negotiations within thirty (30) Calendar Days of the other Party's receipt of the Notice of Dispute, such claim or dispute may, upon mutual agreement of the parties, be submitted to arbitration and resolved in accordance with the arbitration procedures set forth below. In the event the Parties do not agree to submit such claim or dispute to arbitration, each Party may exercise whatever rights and remedies it may have in equity or at law consistent with the terms of this QF-LGIA.

#### **13.5.2 Arbitration of Disputes.**

1) An interconnecting public utility or an interconnection applicant may petition the Commission for arbitration of disputes arising during review of an application to interconnect a large generator facility or during negotiation of an interconnection agreement. If the public utility or the applicant petitions the Commission to arbitrate their dispute, then the Commission will use an administrative law judge (ALJ) as arbitrator unless workload constraints necessitate the use of an outside arbitrator.

(2) A petition for arbitration of an interconnection agreement must contain: (a) A statement of all unresolved issues; (b) A description of each party's position on the unresolved issues; and (c) A proposed agreement addressing all issues, including those on which the parties have reached agreement and those that are in dispute.

(3) A petition for arbitration of a dispute arising during review of an application to interconnect a large generator facility must contain: (a) A statement of all

unresolved issues; (b) A description of each party's position on the unresolved issues; and (c) A proposed resolution for each unresolved issue.

(4) Respondent may file a response within 25 calendar days of the petition for arbitration. In the response, the respondent must address each issue listed in the petition, describe the respondent's position on those issues, and present any additional issues for which the respondent seeks resolution.

(5) The filing of a petition for arbitration of a dispute arising during review of an application to interconnect a large generator facility does not affect the application's queue position.

(6) The arbitration is conducted in a manner similar to a contested case proceeding, and the arbitrator has the same authority to conduct the arbitration process as an AU has in conducting hearings under the Commission's rules, but the arbitration process is streamlined. The arbitrator holds an early conference to discuss processing of the case. The arbitrator establishes the schedule and decides whether an oral hearing is necessary. After the oral hearing or other procedures (for example, rounds of comments), each party submits its final proposed interconnection agreement or resolution of disputed issues. The arbitrator chooses between the two final offers. If neither offer is consistent with applicable statutes, Commission rules, and Commission policies, then the arbitrator will make a decision that meets those requirements.

(7) The arbitrator may allow formal discovery only to the extent deemed necessary. Parties are required to make good faith attempts to exchange information relevant to any disputed issue in an informal, voluntary, and prompt manner. Unresolved discovery disputes are resolved by the arbitrator upon request of a party. The arbitrator will order a party to provide information if the arbitrator determines the requesting party has a reasonable need for the requested information and that the request is not overly burdensome.

(8) Only the two negotiating parties have full party status. The arbitrator may confer with Commission staff for assistance throughout the arbitration process.

(9) To keep the process moving forward, appeals to the Commission are not allowed during the arbitration process. An arbitrator may certify a question to the Commission if the arbitrator believes it is necessary.

(10) To accommodate the need for flexibility, the arbitrator may use different procedures so long as the procedures are fair, treat the parties equitably, and substantially comply with the procedures listed here.

(11) The arbitrator must serve the arbitration decision on the interconnecting public utility and the interconnection applicant. The parties may file comments

on the arbitration decision with the Commission within 10 calendar days after service.

(12) The Commission must accept, reject, or modify an arbitration decision within 30 calendar days after service of the decision.

(13) Within 14 calendar days after the Commission issues an order on a petition for arbitration of an interconnection agreement, the petitioner must prepare an interconnection agreement complying with the terms of the decision and serve it on respondent. Respondent must either sign and file the interconnection agreement or file objections to it within 10 calendar days of service of the agreement. If objections are filed, respondent must state how the interconnection agreement fails to comply with the Commission order and offer substitute language complying with the decision. The Commission must approve or reject a filed interconnection agreement within 20 calendar days of its filing or the agreement is deemed approved.

(14) If petitioner, without respondent's consent, fails to timely prepare and serve an interconnection agreement on respondent, respondent may file a motion requesting the Commission dismiss the petition for arbitration with prejudice. The Commission may grant such motion if the petitioner's failure to timely prepare and serve the interconnection agreement was the result of inexcusable neglect on the part of petitioner.

(15) The public utility and the applicant may agree to hire an outside arbitrator rather than file a petition with the Commission pursuant to article 13.5.3.

### **13.5.3 External Arbitration Procedures.**

An external arbitration initiated under these procedures shall be conducted before a single neutral arbitrator appointed by the Parties. If the Parties fail to agree upon a single arbitrator within ten (10) Calendar Days of the submission of the dispute to arbitration, each Party shall choose one arbitrator who shall sit on a three-member arbitration panel. The two arbitrators so chosen shall within twenty (20) Calendar Days select a third arbitrator to chair the arbitration panel. In either case, the arbitrators shall be knowledgeable in electric utility matters, including electric transmission and bulk power issues, and shall not have any current or past substantial business or financial relationships with any party to the arbitration (except prior arbitration). The arbitrator (s) shall provide each of the Parties an opportunity to be heard and, except as otherwise provided herein, shall conduct the arbitration in accordance with the Commercial Arbitration Rules of the American Arbitration Association ("Arbitration Rules"); provided, however, in the event of a conflict between the Arbitration Rules and the terms of this Article 13, the terms of this Article 13 shall prevail.

#### **13.5.4 Arbitration Decisions.**

Unless otherwise agreed by the Parties, the arbitrator (s) shall render a decision within ninety (90) Calendar Days of appointment and shall notify the Parties in writing of such decision and the reasons therefore. The arbitrator (s) shall be authorized only to interpret and apply the provisions of the QF-LGIA and QF-LGIP and shall have no power to modify or change any provision of the QF-LGIA and QF-LGIP in any manner. The decision of the arbitrator (s) shall be final and binding upon the Parties, and judgment on the award may be entered in any court having jurisdiction. The decision of the arbitrator (s) may be appealed solely on the grounds that the conduct of the arbitrator (s), or the decision itself, violated the standards set forth in the ORS 36.600 to ORS 36.740.

#### **13.5.5 Costs.**

Each Party shall be responsible for its own costs incurred during the arbitration process and for the following costs, if applicable: (1) the cost of the arbitrator chosen by the Party to sit on the three member panel and one half of the cost of the third arbitrator chosen; or (2) one half the cost of the single arbitrator jointly chosen by the Parties.

### **13.6 Local Furnishing Bonds.**

#### **13.6.1 Transmission Providers That Own Facilities Financed by Local Furnishing Bonds.**

This provision is applicable only to a Transmission Provider that has financed facilities for the local furnishing of electric energy with tax-exempt bonds, as described in Article 142(f) of the Internal Revenue Code ("local furnishing bonds"). Notwithstanding any other provision of this QF-LGIA and QF-LGIP, Transmission Provider shall not be required to provide Interconnection Service to Interconnection Customer pursuant to this QF-LGIA and QF-LGIP if the provision of such Interconnection Service would jeopardize the tax-exempt status of any local furnishing bond(s) used to finance Transmission Provider's facilities that would be used in providing such Interconnection Service.

#### **13.6.2 Alternative Procedures for Requesting Interconnection Service.**

If Transmission Provider determines that the provision of Interconnection Service requested by Interconnection Customer would jeopardize the tax-exempt status of any local furnishing bond(s) used to finance its facilities that would be used in providing such Interconnection Service, it shall advise the Interconnection Customer within thirty (30) Calendar Days of receipt of the Interconnection Request.

Interconnection Customer thereafter may renew its request for interconnection using the process specified in Article 5.2(ii) of the Transmission Provider's OATT.

**APPENDIX 1 to QF-LGIP  
INTERCONNECTION REQUEST FOR A  
QF LARGE GENERATING FACILITY**

1. The undersigned Interconnection Customer submits this request to interconnect its Large Generating Facility which is a Qualifying Facility with Transmission Provider's Transmission System pursuant to Transmission Provider's QF-LGIP.

2. This Interconnection Request is for (check one):

A proposed new Large Generating Facility that is a Qualifying Facility.

An increase in the generating capacity or a Material Modification of an existing Generating Facility that is a Qualifying Facility.

3. The type of interconnection service requested (check one) ~~is~~

Network Resource Interconnection Service.

Check here only if Interconnection Customer requesting Network Resource Interconnection Service also seeks to have its Generating Facility studied for Energy Resource Interconnection Service

3-4.  Check here if Interconnection Customer has initiated the process of certifying the Large Generating Facility as a Qualifying Facility as provided in 18 C.F.R. 292.207.

4-5.  Interconnection Customer provides the following information:

- a. Address or location of the proposed new Large Generating Facility site (to the extent known) or, in the case of an existing Generating Facility, the name and specific location of the existing Generating Facility;
- b. Maximum summer at \_\_\_ degrees C and winter at \_\_\_ degrees C megawatt electrical output of the proposed new Large Generating Facility or the amount of megawatt increase in the generating capacity of an existing Generating Facility;
- c. General description of the equipment configuration;
- d. Commercial Operation Date (Day, Month, and Year);
- e. Name, address, telephone number, and e-mail address of Interconnection Customer's contact person;
- f. Approximate location of the proposed Point of Interconnection (optional); and
- g. Interconnection Customer Data (set forth in Attachment A)

~~5.6.~~ \_\_\_\_\_ Applicable deposit amount as specified in the QF-LGIP.

~~6.7.~~ Evidence of Site Control as specified in the QF-LGIP (check one)

\_\_\_\_\_ Is attached to this Interconnection Request

\_\_\_\_\_ Will be provided at a later date in accordance with this QF-LGIP

~~7.8.~~ This Interconnection Request shall be submitted to the representative indicated below:

[To be completed by Transmission Provider]

9. Representative of Interconnection Customer to contact:

[To be completed by Interconnection Customer]

10. This Interconnection Request is submitted by:

Name of Interconnection Customer: \_\_\_\_\_

By (signature): \_\_\_\_\_

Name (type or print): \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

**QF LARGE GENERATING FACILITY DATA**

**UNIT RATINGS**

kVA \_\_\_\_\_ °F \_\_\_\_\_ Voltage \_\_\_\_\_  
 Power Factor \_\_\_\_\_  
 Speed (RPM) \_\_\_\_\_ Connection (e.g. Wye) \_\_\_\_\_  
 Short Circuit Ratio \_\_\_\_\_ Frequency, Hertz \_\_\_\_\_  
 Stator Amperes at Rated kVA \_\_\_\_\_ Field Volts \_\_\_\_\_  
 Max Turbine MW \_\_\_\_\_ °F \_\_\_\_\_

**COMBINED TURBINE-GENERATOR-EXCITER INERTIA DATA**

Inertia Constant, H = \_\_\_\_\_ kW sec/kVA  
 Moment-of-Inertia, WR<sup>2</sup> = \_\_\_\_\_ lb. ft.<sup>2</sup>

**REACTANCE DATA (PER UNIT-RATED KVA)**

	DIRECT AXIS	QUADRATURE AXIS
Synchronous -- saturated	X <sub>dv</sub> _____	X <sub>qv</sub> _____
Synchronous -- unsaturated	X <sub>di</sub> _____	X <sub>qi</sub> _____
Transient saturated	X' <sub>dv</sub> _____	X' <sub>qv</sub> _____
Transient -- unsaturated	X' <sub>di</sub> _____	X' <sub>qi</sub> _____
Subtransient -- saturated	X" <sub>dv</sub> _____	X" <sub>qv</sub> _____
Subtransient -- unsaturated	X" <sub>di</sub> _____	X" <sub>qi</sub> _____
Negative Sequence -- saturated	X <sub>2v</sub> _____	
Negative Sequence -- unsaturated	X <sub>2i</sub> _____	
Zero Sequence -- saturated	X <sub>0v</sub> _____	
Zero Sequence unsaturated	X <sub>0i</sub> _____	
Leakage Reactance	X <sub>lm</sub> _____	

**FIELD TIME CONSTANT DATA (SEC)**

Open Circuit	T' <sub>do</sub> _____	T' <sub>qo</sub> _____
Three-Phase Short Circuit Transient	T' <sub>d3</sub> _____	T' <sub>q</sub> _____
Line to Line Short Circuit Transient	T' <sub>d2</sub> _____	
Line to Neutral Short Circuit Transient	T' <sub>d1</sub> _____	
Short Circuit Subtransient	T" <sub>d</sub> _____	T" <sub>q</sub> _____
Open Circuit Subtransient	T" <sub>do</sub> _____	T" <sub>qo</sub> _____

### ARMATURE TIME CONSTANT DATA (SEC)

Three Phase Short Circuit  $T_{a3}$  \_\_\_\_\_  
Line to Line Short Circuit  $T_{a2}$  \_\_\_\_\_  
Line to Neutral Short Circuit  $T_{a1}$  \_\_\_\_\_

NOTE: If requested information is not applicable, indicate by marking "N/A."

### MW CAPABILITY AND PLANT CONFIGURATION LARGE GENERATING FACILITY DATA

#### ARMATURE WINDING RESISTANCE DATA (PER UNIT)

Positive  $R_1$  \_\_\_\_\_  
Negative  $R_2$  \_\_\_\_\_  
Zero  $R_0$  \_\_\_\_\_

Rotor Short Time Thermal Capacity  $I_2^2t =$  \_\_\_\_\_  
Field Current at Rated kVA, Armature Voltage and PF = \_\_\_\_\_ amps  
Field Current at Rated kVA and Armature Voltage, 0 PF = \_\_\_\_\_ amps  
Three Phase Armature Winding Capacitance = \_\_\_\_\_ microfarad  
Field Winding Resistance = \_\_\_\_\_ ohms \_\_\_\_\_ °C  
Armature Winding Resistance (Per Phase) = \_\_\_\_\_ ohms \_\_\_\_\_ °C

#### CURVES

Provide Saturation, Vee, Reactive Capability, Capacity Temperature Correction curves.  
Designate normal and emergency Hydrogen Pressure operating range for multiple curves.

#### GENERATOR STEP-UP TRANSFORMER DATA RATINGS

Capacity Self-cooled/ Maximum Nameplate  
\_\_\_\_\_ / \_\_\_\_\_ / kVA

Voltage Ratio(Generator Side/System side/Tertiary)  
\_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_ kV

Winding Connections (Low V/High V/Tertiary V (Delta or Wye))  
\_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_

Fixed Taps Available \_\_\_\_\_

Present Tap Setting \_\_\_\_\_

## IMPEDANCE

Positive  $Z_1$  (on self-cooled kVA rating) \_\_\_\_\_ % \_\_\_\_\_ X/R  
Zero  $Z_0$  (on self-cooled kVA rating) \_\_\_\_\_ % \_\_\_\_\_ X/R

## EXCITATION SYSTEM DATA

Identify appropriate IEEE model block diagram of excitation system and power system stabilizer (PSS) for computer representation in power system stability simulations and the corresponding excitation system and PSS constants for use in the model.

## GOVERNOR SYSTEM DATA

Identify appropriate IEEE model block diagram of governor system for computer representation in power system stability simulations and the corresponding governor system constants for use in the model.

## WIND GENERATORS

Number of generators to be interconnected pursuant to this Interconnection Request:

\_\_\_\_\_

Elevation: \_\_\_\_\_ Single Phase \_\_\_\_\_ Three Phase \_\_\_\_\_

Inverter manufacturer, model name, number, and version:

\_\_\_\_\_

List of adjustable setpoints for the protective equipment or software:

\_\_\_\_\_

Note: A completed General Electric Company Power Systems Load Flow (PSLF) data sheet or other compatible formats, such as IEEE and PTI power flow models, must be supplied with the Interconnection Request. If other data sheets are more appropriate to the proposed device, then they shall be provided and discussed at Scoping Meeting.

## INDUCTION GENERATORS

- (\*) Field Volts: \_\_\_\_\_
- (\*) Field Amperes: \_\_\_\_\_
- (\*) Motoring Power (kW): \_\_\_\_\_
- (\*) Neutral Grounding Resistor (If Applicable): \_\_\_\_\_
- (\*)  $I_2^2t$  or K (Heating Time Constant): \_\_\_\_\_
- (\*) Rotor Resistance: \_\_\_\_\_
- (\*) Stator Resistance: \_\_\_\_\_
- (\*) Stator Reactance: \_\_\_\_\_
- (\*) Rotor Reactance: \_\_\_\_\_
- (\*) Magnetizing Reactance: \_\_\_\_\_
- (\*) Short Circuit Reactance: \_\_\_\_\_
- (\*) Exciting Current: \_\_\_\_\_
- (\*) Temperature Rise: \_\_\_\_\_
- (\*) Frame Size: \_\_\_\_\_
- (\*) Design Letter: \_\_\_\_\_
- (\*) Reactive Power Required In Vars (No Load): \_\_\_\_\_
- (\*) Reactive Power Required In Vars (Full Load): \_\_\_\_\_
- (\*) Total Rotating Inertia, H: \_\_\_\_\_ Per Unit on KVA Base \_\_\_\_\_

Note: Please consult Transmission Provider prior to submitting the Interconnection Request to determine if the information designated by (\*) is required.

**APPENDIX 2 to QF-LGIP  
INTERCONNECTION FEASIBILITY STUDY AGREEMENT**

**THIS AGREEMENT** is made and entered into this day of , 20 by and between \_\_\_\_\_, a \_\_\_\_\_ organized and existing under the laws of the State of \_\_\_\_\_, ("Interconnection Customer,") and \_\_\_\_\_, existing under the laws of the State of \_\_\_\_\_, ("Transmission Provider "). Interconnection Customer and Transmission Provider each may be referred to as a "Party," or collectively as the "Parties."

**RECITALS**

**WHEREAS**, Interconnection Customer is proposing to develop a Large Generating Facility or generating capacity addition to an existing Generating Facility consistent with the Interconnection Request submitted by Interconnection Customer dated; and

**WHEREAS**, Interconnection Customer desires to interconnect the Large Generating Facility with the Transmission System; and

**WHEREAS**, Interconnection Customer has requested Transmission Provider to perform an Interconnection Feasibility Study to assess the feasibility of interconnecting the proposed Large Generating Facility to the Transmission System, and of any Affected Systems;

**NOW, THEREFORE**, in consideration of and subject to the mutual covenants contained herein the Parties agreed as follows:

- 1.0 When used in this Agreement, with initial capitalization, the terms specified shall have the meanings indicated in Transmission Provider's OPUC-approved QF-LGIP.
- 2.0 Interconnection Customer elects and Transmission Provider shall cause to be performed an Interconnection Feasibility Study consistent with Article 6.0 of this QF-LGIP.
- 3.0 The scope of the Interconnection Feasibility Study shall be subject to the assumptions set forth in Attachment A to this Agreement.
- 4.0 The Interconnection Feasibility Study shall be based on the technical information provided by Interconnection Customer in the Interconnection Request, as may be modified as the result of the Scoping Meeting. Transmission Provider 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 and as designated in accordance with Article 3.3.4 of the QF-LGIP. If, after the designation of the Point of Interconnection pursuant to Article 3.3.4 of the QF-LGIP, Interconnection Customer modifies its

Interconnection Request pursuant to Article 4.4, the time to complete the Interconnection Feasibility Study may be extended.

5.0 The Interconnection Feasibility Study report shall provide the following information:

- preliminary identification of any circuit breaker short circuit capability limits exceeded as a result of the interconnection;
- preliminary identification of any thermal overload or voltage limit violations resulting from the interconnection; and
- preliminary description and non-bonding estimated cost of facilities required to interconnect the Large Generating Facility to the Transmission System and to address the identified short circuit and power flow issues.

6.0 Interconnection Customer shall provide a deposit of \$ 10,000 for the performance of the Interconnection Feasibility Study.

Upon receipt of the Interconnection Feasibility Study Transmission Provider shall charge and Interconnection Customer shall pay the actual costs of the Interconnection Feasibility Study.

Any difference between the deposit and the actual cost of the study shall be paid by or refunded to Interconnection Customer, as appropriate.

7.0 Miscellaneous. The Interconnection Feasibility Study Agreement shall include standard miscellaneous terms including, but not limited to, indemnities, representations, disclaimers, warranties, governing law, amendment, execution, waiver, enforceability and assignment, that reflect best practices in the electric industry, and that are consistent with regional practices, Applicable Laws and Regulations, and the organizational nature of each Party. All of these provisions, to the extent practicable, shall be consistent with the provisions of the QF-LGIP and the QF-LGIA.

**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 Transmission Provider or Transmission Owner, if applicable]**

By: \_\_\_\_\_

By: \_\_\_\_\_

Title: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

Date: \_\_\_\_\_

**[Insert name of Interconnection Customer]**

By: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

**Attachment A to Appendix 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 Interconnection Request and agreed upon in the Scoping Meeting held on \_\_\_\_\_ :

Designation of Point of Interconnection and configuration to be studied.  
Designation of alternative Point(s) of Interconnection and configuration.

[Above assumptions to be completed by Interconnection Customer and other assumptions to be provided by Interconnection Customer and Transmission Provider]

**APPENDIX 3 to QF-LGIP  
INTERCONNECTION SYSTEM IMPACT STUDY AGREEMENT**

**THIS AGREEMENT** is made and entered into this day of , 20 by and between, a organized and existing under the laws of the State of , ("Interconnection Customer,") and a existing under the laws of the State of , ("Transmission Provider"). Interconnection Customer and Transmission Provider each may be referred to as a "Party," or collectively as the "Parties."

**RECITALS**

**WHEREAS**, Interconnection Customer is proposing to develop a Large Generating Facility or generating capacity addition to an existing Generating Facility consistent with the Interconnection Request submitted by Interconnection Customer dated \_\_\_\_\_; and

**WHEREAS**, Interconnection Customer desires to interconnect the Large Generating Facility with the Transmission System;

**WHEREAS**, Transmission Provider has completed an Interconnection Feasibility Study (the "Feasibility Study") and provided the results of said study to Interconnection Customer (This recital to be omitted if Transmission Provider does not require the Interconnection Feasibility Study.); and

**WHEREAS**, Interconnection Customer has requested Transmission Provider to perform an Interconnection System Impact Study to assess the impact of interconnecting the Large Generating Facility to the Transmission System, and of any Affected Systems;

**NOW, THEREFORE**, in consideration of and subject to the mutual covenants contained herein the Parties agreed as follows:

- 1.0 When used in this Agreement, with initial capitalization, the terms specified shall have the meanings indicated in Transmission Provider's OPUC-approved QF-LGIP.
- 2.0 Interconnection Customer elects and Transmission Provider shall cause to be performed an Interconnection System Impact Study consistent with Article 7.0 of this QF-LGIP in accordance with the Tariff.
- 3.0 The scope of the Interconnection System Impact Study shall be subject to the assumptions set forth in Attachment A to this Agreement.
- 4.0 The Interconnection System Impact Study will be based upon the results of the Interconnection Feasibility Study and the technical information provided by Interconnection Customer in the Interconnection Request, subject to any modifications in accordance with Article 4.4 of the QF-LGIP. Transmission

Provider 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 Customer System Impact Study. If Interconnection Customer modifies its designated Point of Interconnection, Interconnection Request, or the technical information provided therein is modified, the time to complete the Interconnection System Impact Study may be extended.

5.0 The Interconnection System Impact Study report shall provide the following information:

- identification of any circuit breaker short circuit capability limits exceeded as a result of the interconnection;
- identification of any thermal overload or voltage limit violations resulting from the interconnection;
- identification of any instability or inadequately damped response to system disturbances resulting from the interconnection and
- description and non-binding, good faith estimated cost of facilities required to interconnect the Large Generating Facility to the Transmission System and to address the identified short circuit, instability, and power flow issues.

6.0 Interconnection Customer shall provide a deposit of \$ 50,000 for the performance of the Interconnection System Impact Study. Transmission Provider's good faith estimate for the time of completion of the Interconnection System Impact Study is [insert date].

Upon receipt of the Interconnection System Impact Study, Transmission Provider shall charge and Interconnection Customer shall pay the actual costs of the Interconnection System Impact Study.

Any difference between the deposit and the actual cost of the study shall be paid by or refunded to Interconnection Customer, as appropriate.

7.0 Miscellaneous. The Interconnection System Impact Study Agreement shall include standard miscellaneous terms including, but not limited to, indemnities, representations, disclaimers, warranties, governing law, amendment, execution, waiver, enforceability and assignment, that reflect best practices in the electric industry, that are consistent with regional practices, Applicable Laws and Regulations and the organizational nature of each Party. All of these provisions, to the extent practicable, shall be consistent with the provisions of the QF-LGIP and the QF-LGIA.

**IN WITNESS THEREOF**, 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 Transmission Provider or Transmission Owner, if applicable]**

By: \_\_\_\_\_

By: \_\_\_\_\_

Title: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

Date: \_\_\_\_\_

**[Insert name of Interconnection Customer]**

By: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

**Attachment A To Appendix 3  
Interconnection System Impact  
Study Agreement**

**ASSUMPTIONS USED IN CONDUCTING THE INTERCONNECTION SYSTEM  
IMPACT STUDY**

The Interconnection System Impact Study will be based upon the results of the Interconnection Feasibility Study, subject to any modifications in accordance with Article 4.4 of the QF-LGIP, and the following assumptions:

Designation of Point of Interconnection and configuration to be studied.  
Designation of alternative Point(s) of Interconnection and configuration.

[Above assumptions to be completed by Interconnection Customer and other assumptions to be provided by Interconnection Customer and Transmission Provider]

**APPENDIX 4 to QF-LGIP  
INTERCONNECTION FACILITIES STUDY AGREEMENT**

**THIS AGREEMENT** is made and entered into this day of , 20 by and between , a organized and existing under the laws of the State of , ("Interconnection Customer,") and a existing under the laws of the State of, ("Transmission Provider"). Interconnection Customer and Transmission Provider each may be referred to as a "Party," or collectively as the "Parties."

**RECITALS**

**WHEREAS**, Interconnection Customer is proposing to develop a Large Generating Facility or generating capacity addition to an existing Generating Facility consistent with the Interconnection Request submitted by Interconnection Customer dated \_\_\_\_\_; and

**WHEREAS**, Interconnection Customer desires to interconnect the Large Generating Facility with the Transmission System;

**WHEREAS**, Transmission Provider has completed an Interconnection System Impact Study (the "System Impact Study") and provided the results of said study to Interconnection Customer; and

**WHEREAS**, Interconnection Customer has requested Transmission Provider 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 Large Generating Facility to the Transmission System.

**NOW, THEREFORE**, in consideration of and subject to the mutual covenants contained herein the Parties agreed as follows:

- 1.0 When used in this Agreement, with initial capitalization, the terms specified shall have the meanings indicated in Transmission Provider's OPUC-approved QF-LGIP.
- 2.0 Interconnection Customer elects and Transmission Provider shall cause an Interconnection Facilities Study consistent with Article 8.0 of this QF-LGIP.
- 3.0 The scope of the Interconnection Facilities Study shall be subject to the assumptions set forth in Attachment A and the data provided in Attachment B to this Agreement.
- 4.0 The Interconnection Facilities Study report (i) shall provide a description, estimated cost of (consistent with Attachment A), schedule for required facilities

to interconnect the Large Generating Facility to the Transmission System and (ii) shall address the short circuit, instability, and power flow issues identified in the Interconnection System Impact Study.

5.0 Interconnection Customer shall provide a deposit of \$ 100,000 for the performance of the Interconnection Facilities Study. The time for completion of the Interconnection Facilities Study is specified in Attachment A.

Transmission Provider shall invoice Interconnection Customer on a monthly basis for the work to be conducted on the Interconnection Facilities Study each month. Interconnection Customer shall pay invoiced amounts within thirty (30) Calendar Days of receipt of invoice. Transmission Provider shall continue to hold the amounts on deposit until settlement of the final invoice for the study.

6.0 Miscellaneous. The Interconnection Facility Study Agreement shall include standard miscellaneous terms including, but not limited to, indemnities, representations, disclaimers, warranties, governing law, amendment, execution, waiver, enforceability and assignment, that reflect best practices in the electric industry, and that are consistent with regional practices, Applicable Laws and Regulations, and the organizational nature of each Party. All of these provisions, to the extent practicable, shall be consistent with the provisions of the QF-LGIP and the QF-LGIA.

**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 Transmission Provider or Transmission Owner, if applicable]**

By: \_\_\_\_\_

By: \_\_\_\_\_

Title: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

Date: \_\_\_\_\_

**[Insert name of Interconnection Customer]**

By: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

**Attachment A to Appendix 4  
Interconnection Facilities  
Study Agreement**

**INTERCONNECTION CUSTOMER SCHEDULE ELECTION FOR CONDUCTING  
THE INTERCONNECTION FACILITIES STUDY**

Transmission Provider shall use Reasonable Efforts to complete the study and issue a draft Interconnection Facilities Study report to Interconnection Customer within the following number of days after of receipt of an executed copy of this Interconnection Facilities Study Agreement:

- ninety (90) Calendar Days with no more than a +/- 20 percent cost estimate contained in the report, or
- one hundred eighty (180) Calendar Days with no more than a +/- 10 percent cost estimate contained in the report.

**Attachment B to Appendix 4  
Interconnection Facilities  
Study Agreement**

**DATA FORM TO BE PROVIDED BY INTERCONNECTION CUSTOMER WITH  
THE INTERCONNECTION FACILITIES STUDY AGREEMENT**

Type of Interconnection Service Requested:

Network Resource Interconnection Service

Energy Resource Interconnection Service

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

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

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

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 one line diagram).

What type of control system or PLC will be located at Interconnection Customer's Large Generating Facility?

---

What protocol does the control system or PLC use?

---

Please provide a 7.5-minute quadrangle of the site. Sketch the plant, station, transmission line, and property line.

---

Physical dimensions of the proposed interconnection station:

---

Bus length from generation to interconnection station:

\_\_\_\_\_

Line length from interconnection station to Transmission Provider's transmission line.

\_\_\_\_\_

Tower number observed in the field. (Painted on tower leg)\* \_\_\_\_\_

Number of third party easements required for transmission lines\*: \_\_\_\_\_

\* To be completed in coordination with Transmission Provider.

Is the Large Generating Facility in the Transmission Provider's service area?  
\_\_\_\_\_ Yes \_\_\_\_\_ No Local provider: \_\_\_\_\_

Please provide proposed schedule dates:

Begin Construction Date: \_\_\_\_\_

Generator step-up transformer  
receives back feed power Date: \_\_\_\_\_

Generation Testing Date: \_\_\_\_\_

Commercial Operation Date: \_\_\_\_\_

**APPENDIX 5 to QF-LGIP  
OPTIONAL INTERCONNECTION STUDY AGREEMENT**

**THIS AGREEMENT** is made and entered into this day of , 20 by and between , a organized and existing under the laws of the State of , ("Interconnection Customer,") and a existing under the laws of the State of , ("Transmission Provider"). Interconnection Customer and Transmission Provider each may be referred to as a "Party," or collectively as the "Parties."

**RECITALS**

**WHEREAS**, Interconnection Customer is proposing to develop a Large Generating Facility or generating capacity addition to an existing Generating Facility consistent with the Interconnection Request submitted by Interconnection Customer dated \_\_\_\_\_ ;

**WHEREAS**, Interconnection Customer is proposing to establish an interconnection with the Transmission System; and

**WHEREAS**, Interconnection Customer has submitted to Transmission Provider an Interconnection Request; and

**WHEREAS**, on or after the date when Interconnection Customer receives the Interconnection System Impact Study results, Interconnection Customer has further requested that Transmission Provider prepare an Optional Interconnection Study;

**NOW, THEREFORE**, in consideration of and subject to the mutual covenants contained herein the Parties agree as follows:

- 1.0 When used in this Agreement, with initial capitalization, the terms specified shall have the meanings indicated in Transmission Provider's OPUC-approved QF-LGIP.
- 2.0 Interconnection Customer elects and Transmission Provider shall cause an Optional Interconnection Study consistent with Article 10.0 of this QF-LGIP.
- 3.0 The scope of the Optional Interconnection Study shall be subject to the assumptions set forth in Attachment A to this Agreement.
- 4.0 The Optional Interconnection Study shall be performed solely for informational purposes.
- 5.0 The Optional Interconnection Study report shall provide a sensitivity analysis based on the assumptions specified by Interconnection Customer in Attachment A to this Agreement. The Optional Interconnection Study will identify Transmission Provider's Interconnection Facilities and the Network Upgrades, and the estimated

cost thereof, that may be required to provide transmission service or interconnection service based upon the assumptions specified by Interconnection Customer in Attachment A.

6.0 Interconnection Customer shall provide a deposit of \$ 10,000 for the performance of the Optional Interconnection Study. Transmission Provider's good faith estimate for the time of completion of the Optional Interconnection Study is [insert date].

Upon receipt of the Optional Interconnection Study, Transmission Provider shall charge and Interconnection Customer shall pay the actual costs of the Optional Study.

Any difference between the initial payment and the actual cost of the study shall be paid by or refunded to Interconnection Customer, as appropriate.

7.0 Miscellaneous. The Optional Interconnection Study Agreement shall include standard miscellaneous terms including, but not limited to, indemnities, representations, disclaimers, warranties, governing law, amendment, execution, waiver, enforceability and assignment, that reflect best practices in the electric industry, and that are consistent with regional practices, Applicable Laws and Regulations, and the organizational nature of each Party. All of these provisions, to the extent practicable, shall be consistent with the provisions of the QF-LGIP and the QF-LGIA.

**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 Transmission Provider or Transmission Owner, if applicable]**

By: \_\_\_\_\_

By: \_\_\_\_\_

Title: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

Date: \_\_\_\_\_

**[Insert name of Interconnection Customer]**

By:

Title:

Date:

**APPENDIX 6 to QF-LGIP  
QF Large Generator Interconnection Agreement**

**Is in a separate file.**

**APPENDIX 7 to QF-LGIP  
INTERCONNECTION PROCEDURES FOR A  
WIND GENERATING PLANT**

Appendix 7 sets forth procedures specific to a wind generating plant. All other requirements of the QF-LGIP continue to apply to wind generating plant interconnections.

**A. Special Procedures Applicable to Wind Generators**

The wind plant Interconnection Customer, in completing the Interconnection Request required by Article 3.3 of the QF-LGIP, may provide to the Transmission Provider a set of preliminary electrical design specification depicting the wind plant as a single equivalent generator. Upon satisfying these and other applicable Interconnection Request conditions, the wind plant may enter the queue and receive the base case data as provided for in the QF-LGIP.

No later than six months after submitting an Interconnection Request completed in this manner, the wind plant Interconnection Customer must submit completed detailed electrical design specifications and other data (including collector system layout data) needed to allow the Transmission Provider to complete the System Impact Study.

**Docket UM 2032**

**Attachment 2**

**to**

**JOINT UTILITIES' APPLICATION  
FOR APPROVAL OF COMPLIANCE FILING**

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*PGE's and Idaho Power's Standard Oregon Qualifying Facility  
Large Generator Interconnection Agreement*

**Appendix 6 to the Qualifying Facility Large Generator Interconnection Procedures**

**STANDARD QUALIFYING FACILITY LARGE GENERATOR  
INTERCONNECTION AGREEMENT**

**THIS STANDARD QUALIFYING FACILITY LARGE GENERATOR INTERCONNECTION AGREEMENT** ("Agreement" or "QF-LGIA") is made and entered into this \_\_\_ day of 20\_\_\_, by and between \_\_\_\_\_, a \_\_\_\_\_ organized and existing under the laws of the State/Commonwealth of \_\_\_\_\_ ("Interconnection Customer" with a Large Generating Facility), and \_\_\_\_\_, a \_\_\_\_\_ organized and existing under the laws of the State/Commonwealth of \_\_\_\_\_ ("Transmission Provider and/or Transmission Owner"). Interconnection Customer and Transmission Provider each may be referred to singly as a "Party" or collectively as the "Parties."

**Recitals**

**WHEREAS**, Transmission Provider operates the Transmission System; and

**WHEREAS**, Interconnection Customer intends to own, lease and/or control and operate the Generating Facility identified as a Large Generating Facility in Appendix C to this Agreement; and,

**WHEREAS**, Interconnection Customer has completed the certification process for the Generating Facility as a qualifying cogeneration facility or qualifying small power production facility ("Qualifying Facility" or "QF") within the meaning of sections 201 and 210 of the Public Utility Regulatory Policies Act of 1978 (PURPA), 16 U.S.C. 796 and 824a-3; and

**WHEREAS**, the Oregon Public Utility Commission has jurisdiction to establish minimum criteria that a qualifying cogeneration facility or qualifying small power production facility must meet in order to operate in Oregon; and

**WHEREAS**, Interconnection Customer and Transmission Provider have agreed to enter into this QF-LGIA for the purpose of interconnecting the Large Generating Facility with the Transmission System;

**NOW, THEREFORE**, in consideration of and subject to the mutual covenants contained herein, it is agreed:

When used in this QF-LGIA, terms with initial capitalization that are not defined in Article I shall have the meanings specified in the Article in which they are used.

## **Article 1. Definitions**

**Adverse System Impact** shall mean the negative effects due to technical or operational limits on conductors or equipment being exceeded that may compromise the safety and reliability of the electric system.

**Affected System** shall mean an electric system other than the Transmission Provider's Transmission System that may be affected by the proposed interconnection.

**Affected System Operator** shall mean the entity that operates an Affected System.

**Affiliate** shall mean, with respect to a corporation, partnership or other entity, each such other corporation, partnership or other entity that directly or indirectly, through one or more intermediaries, controls, is controlled by, or is under common control with, such corporation, partnership or other entity.

**Agreement** shall mean this QF-LGIA entered into by and between Interconnection Customer and Transmission Provider.

**Ancillary Services** shall mean those services that are necessary to support the transmission of capacity and energy from resources to loads while maintaining reliable operation of the Transmission Provider's Transmission System in accordance with Good Utility Practice.

**Applicable Laws and Regulations** shall mean all duly promulgated applicable federal, state and local laws, regulations, rules, ordinances, codes, decrees, judgments, directives, or judicial or administrative orders, permits and other duly authorized actions of any Governmental Authority.

**Applicable Reliability Council** shall mean the reliability council applicable to the Transmission System to which the Generating Facility is directly interconnected.

**Applicable Reliability Standards** shall mean the requirements and guidelines of NERC, the Applicable Reliability Council, and the Control Area of the Transmission System to which the Generating Facility is directly interconnected.

**Base Case** shall mean the base case power flow, short circuit, and stability data bases used for the Interconnection Studies by the Transmission Provider or Interconnection Customer.

**Breach** shall mean the failure of a Party to perform or observe any material term or condition of the QF-LGIA,

**Breaching Party** shall mean a Party that is in Breach of the QF-LGIA.

**Business Day** shall mean Monday through Friday, excluding Federal Holidays.

**Calendar Day** shall mean any day including Saturday, Sunday or a Federal Holiday.

**Clustering** shall mean the process whereby a group of Interconnection Requests is studied together, instead of serially, for the purpose of conducting the Interconnection System Impact Study.

**Commercial Operation** shall mean the status of a Generating Facility that has commenced generating electricity for sale, excluding electricity generated during Trial Operation.

**Commercial Operation Date** of a unit shall mean the date on which the Generating Facility commences Commercial Operation as agreed to by the Parties pursuant to Appendix E to the QF-LGIA.

**Confidential Information** shall mean any confidential, proprietary or trade secret information of a plan, specification, pattern, procedure, design, device, list, concept, policy or compilation relating to the present or planned business of a Party, which is designated as confidential by the Party supplying the information, whether conveyed orally, electronically, in writing, through inspection, or otherwise.

**Control Area** shall mean an electrical system or systems bounded by interconnection metering and telemetry, capable of controlling generation to maintain its interchange schedule with other Control Areas and contributing to frequency regulation of the interconnection. A Control Area must be certified by an Applicable Reliability Council.

**Default** shall mean the failure of a Breaching Party to cure its Breach in accordance with Article 17 of the QF-LGIA.

**Dispute Resolution** shall mean the procedure for resolution of a dispute between the Parties in which they will first attempt to resolve the dispute on an informal basis.

**Distribution System** shall mean the Transmission Provider's facilities and equipment used to transmit electricity to ultimate usage points such as homes and industries directly from nearby generators or from interchanges with higher voltage transmission networks which transport bulk power over longer distances. The voltage levels at which distribution systems operate differ among areas.

**Distribution Upgrades** shall mean the additions, modifications, and upgrades to the Transmission Provider's Distribution System at or beyond the Point of Interconnection to facilitate interconnection of the Generating Facility. Distribution Upgrades do not include Interconnection Facilities.

**Effective Date** shall mean the date on which the QF-LGIA becomes effective upon execution by the Parties.

**Emergency Condition** shall mean a condition or situation: (1) that in the judgment of the Party making the claim is imminently likely to endanger life or property; or (2) that, in the case of a Transmission Provider, is imminently likely (as determined in a non-discriminatory manner) to cause a material adverse effect on the security of, or damage to Transmission

Provider's Transmission System, Transmission Provider's Interconnection Facilities or the electric systems of others to which the Transmission Provider's Transmission System is directly connected; or (3) that, in the case of Interconnection Customer, is imminently likely (as determined in a non-discriminatory manner) to cause a material adverse effect on the security of, or damage to, the Generating Facility or Interconnection Customer's Interconnection Facilities. System restoration and black start shall be considered Emergency Conditions; provided that Interconnection Customer is not obligated by the QF-LGIA to possess black start capability.

Energy Resource Interconnection Service shall mean an Interconnection Service that allows the Interconnection Customer to connect its Generating Facility to the Transmission Provider's Transmission System to be eligible to deliver the Generating Facility's electric output using the existing firm or nonfirm capacity of the Transmission Provider's Transmission System on an as available basis. Energy Resource Interconnection Service in and of itself does not convey transmission service.

**Engineering & Procurement (E&P) Agreement** shall mean an agreement that authorizes the Transmission Provider to begin engineering and procurement of long lead-time items necessary for the establishment of the interconnection in order to advance the implementation of the Interconnection Request.

**Environmental Law** shall mean Applicable Laws or Regulations relating to pollution or protection of the environment or natural resources.

**Federal Power Act** shall mean the Federal Power Act, as amended, 16 U.S.C. §§ 791a *et seq.*

**FERC** shall mean the Federal Energy Regulatory Commission (FERC) or its successor.

**Force Majeure** shall mean any act of God, labor disturbance, act of the public enemy, war, insurrection, riot, fire, storm or flood, explosion, breakage or accident to machinery or equipment, 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 acts of negligence or intentional wrongdoing by the Party claiming Force Majeure.

**Generating Facility** shall mean Interconnection Customer's device or devices for the production of electricity identified in the Interconnection Request, but shall not include the Interconnection Customer's Interconnection Facilities. The Generating Facility is and shall remain a Qualifying Facility.

**Generating Facility Capacity** shall mean the net capacity of the Generating Facility and the aggregate net capacity of the Generating Facility where it includes multiple energy production devices.

**Good Utility Practice** shall mean any of the practices, methods and acts engaged in or approved by a significant portion of the electric industry during the relevant time period, or

any of the practices, methods and acts which, in the exercise of reasonable judgment in light of the facts known at the time the decision was made, could have been expected to accomplish the desired result at a reasonable cost consistent with good business practices, reliability, safety and expedition, Good Utility Practice is not intended to be limited to the optimum practice, method, or act to the exclusion of all others, but rather to be acceptable practices, methods, or acts generally accepted in the region.

**Governmental Authority** shall mean any federal, state, local or other governmental regulatory or administrative agency, court, commission, department, board, or other governmental subdivision, legislature, rulemaking board, tribunal, or other governmental authority having jurisdiction over the Parties, their respective facilities, or the respective services they provide, and exercising or entitled to exercise any administrative, executive, police, or taxing authority or power; provided, however, that such term does not include Interconnection Customer, Transmission Provider, or any Affiliate thereof.

**Hazardous Substances** shall mean any chemicals, materials or substances defined as or included in the definition of "hazardous substances," "hazardous wastes," "hazardous materials," "hazardous constituents," "restricted hazardous materials," "extremely hazardous substances," "toxic substances," "radioactive substances," "contaminants," "pollutants," "toxic pollutants" or words of similar meaning and regulatory effect under any applicable Environmental Law, or any other chemical, material or substance, exposure to which is prohibited, limited or regulated by any applicable Environmental Law.

**Initial Synchronization Date** shall mean the date upon which the Generating Facility is initially synchronized and upon which Trial Operation begins.

**In-Service Date** shall mean the date upon which the Interconnection Customer reasonably expects it will be ready to begin use of the Transmission Provider's Interconnection Facilities to obtain back feed power.

**Interconnection Customer** shall mean the entity identified in the first paragraph of this QF-LGIA that proposes to interconnect its Generating Facility with the Transmission Provider's Transmission System.

**Interconnection Customer's Interconnection Facilities** or ICIF shall mean all facilities and equipment, as identified in Appendix A of the QF-LGIA, that are located between the Generating Facility and the Point of Change of Ownership, including any modification, addition, or upgrades to such facilities and equipment necessary to physically and electrically interconnect the Generating Facility to the Transmission Provider's Transmission System. Interconnection Customer's Interconnection Facilities are sole use facilities.

**Interconnection Facilities** shall mean the Transmission Provider's Interconnection Facilities and the Interconnection Customer's Interconnection Facilities. Collectively, Interconnection Facilities include all facilities and equipment between the Generating Facility and the Point of Interconnection, including any modification, additions or upgrades that are necessary to physically and electrically interconnect the Generating Facility to the Transmission Provider's

Transmission System. Interconnection Facilities are sole use facilities and shall not include Distribution Upgrades, Stand Alone Network Upgrades or Network Upgrades.

**Interconnection Facilities Study** shall mean a study conducted by the Transmission Provider or a third party consultant for the Interconnection Customer to determine a list of facilities (including Transmission Provider's Interconnection Facilities, Distribution Upgrades and Network Upgrades as identified in the Interconnection System Impact Study), the cost of those facilities, and the time required to interconnect the Generating Facility with the Transmission Provider's Transmission System. The scope of the study is defined in Article 8 of the QF-LGIP.

**Interconnection Facilities Study Agreement** shall mean the form of agreement contained in Appendix 4 of the QF-LGIP for conducting the Interconnection Facilities Study.

**Interconnection Feasibility Study** shall mean a preliminary evaluation of the system impact and cost of interconnecting the Generating Facility to the Transmission Provider's Transmission System, the scope of which is described in Section 6 of the QF-LGIP.

**Interconnection Feasibility Study Agreement** shall mean the form of agreement contained in Appendix 2 of the QF-LGIP for conducting the Interconnection Feasibility Study.

**Interconnection Request** shall mean an Interconnection Customer's request, in the form of Appendix 1 to the QF-LGIP, to interconnect a new Generating Facility, or to increase the capacity of, or make a Material Modification to the operating characteristics of, an existing Generating Facility that is interconnected with the Transmission Provider's Transmission System.

**Interconnection Service** shall mean the service provided by the Transmission Provider associated with interconnecting the Interconnection Customer's Generating Facility to the Transmission Provider's Transmission System and enabling it to receive electric energy and capacity from the Generating Facility at the Point of Interconnection, pursuant to the terms of the QF-LGIA and, if applicable, the Transmission Provider's OATT.

**Interconnection Study** shall mean any of the following studies: the Interconnection Feasibility Study, the Interconnection System Impact Study, and the Interconnection Facilities Study described in the QF-LGIP.

**Interconnection System Impact Study** shall mean an engineering study that evaluates the impact of the proposed interconnection on the safety and reliability of Transmission Provider's Transmission System and, if applicable, an Affected System. The study shall identify and detail the system impacts that would result if the Generating Facility were interconnected without project modifications or system modifications, focusing on the Adverse System Impacts identified in the Interconnection Feasibility Study, or to study potential impacts, including but not limited to those identified in the Scoping Meeting as described in the QF-LGIP.

**Interconnection System Impact Study Agreement** shall mean the form of agreement contained in Appendix 3 of the QF-LGIP for conducting the Interconnection System Impact Study.

**IRS** shall mean the Internal Revenue Service.

**Large Generator Interconnection Agreement or LGIA** shall mean the form of interconnection agreement applicable to an Interconnection Request under the Transmission Provider's OATT pertaining to a Large Generating Facility that is not a Qualifying Facility.

**Large Generator Interconnection Procedures or LGIP** shall mean the interconnection procedures contained in the Transmission Provider's OATT that are applicable to an Interconnection Request pertaining to a Large Generating Facility.

**Large Generating Facility** shall mean a Generating Facility having a Generating Facility Capacity of more than 20 MW.

**Loss** shall mean any and all losses 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 performance, or non-performance of its obligations under the QF-LGIA on behalf of the indemnifying Party, except in cases of gross negligence or intentional wrongdoing by the indemnifying Party.

**Material Modification** shall mean those modifications that have a material impact on the cost or timing of any Interconnection Request with a later queue priority date.

**Metering Equipment** shall mean all metering equipment installed or to be installed at the Generating Facility pursuant to the QF-LGIA at the one or more metering points, including but not limited to instrument transformers, MWh-meters, data acquisition equipment, transducers, remote terminal unit, communications equipment, phone lines, other communications conductors, and fiber optics.

**NERC** shall mean the North American Electric Reliability Council or its successor organization.

**Net Output** shall mean all energy and capacity produced by the Generating Facility and delivered to the Point of Delivery, net of transformation, transmission, or other losses, if any, and less Station Power.

**Network Resource** shall mean any designated generating resource owned, purchased, or leased by a Network Customer under the Network Integration Transmission Service Tariff. Network Resources do not include any resource, or any portion thereof, that is committed for sale to third parties or otherwise cannot be called upon to meet the Network Customer's Network Load on a non-interruptible basis.

**Network Resource Interconnection Service** shall mean an Interconnection Service that allows the Interconnection Customer to integrate its Large Generating Facility with the Transmission Provider's Transmission System (1) in a manner comparable to that in which the Transmission Provider integrates its generating facilities to serve native load customers; or (2) in an RTO or ISO with market based congestion management, in the same manner as all other Network Resources. Network Resource Interconnection Service in and of itself does not convey transmission service.

**Network Upgrades** shall mean the additions, modifications, and upgrades to the Transmission Provider's Transmission System required at or beyond the point at which the Interconnection Facilities connect to the Transmission Provider's Transmission System to accommodate the interconnection of the Large Generating Facility to the Transmission Provider's Transmission System.

**Notice of Dispute** shall mean a written notice of a dispute or claim that arises out of or in connection with the QF-LGIA or its performance.

**Obligated Entity** shall mean the entity with a contractual obligation to construct Network Upgrades.

**OATT** shall mean the Transmission Provider's Open Access Transmission Tariff on file with the Federal Energy Regulatory Commission ("FERC").

**OPUC** shall mean the Public Utility Commission of Oregon.

**Optional Interconnection Study** shall mean a sensitivity analysis based on assumptions specified by the Interconnection Customer in the Optional Interconnection Study Agreement.

**Optional Interconnection Study Agreement** shall mean the form of agreement contained in Appendix 5 of the QF-LGIP for conducting the Optional Interconnection Study.

**Party or Parties** shall mean Transmission Provider, Transmission Owner, Interconnection Customer or any combination of the above.

**Point of Change of Ownership** shall mean the point, as set forth in Appendix A to the QF-LGIA, where the Interconnection Customer's Interconnection Facilities connect to the Transmission Provider's Interconnection Facilities.

**Point of Delivery** shall mean the point on the Transmission Provider's Transmission System where capacity and energy will be made available to the Transmission Provider.

**Point of Interconnection** shall mean the point, as set forth in Appendix A to the QF-LGIA, where the Interconnection Facilities connect to the Transmission Provider's Transmission System.

**Power System Stabilizers** shall have the meaning designated in the guidelines and procedures established by the applicable Reliability Council.

**Power Purchase Agreement ("PPA")** shall mean a separate agreement between the Transmission Provider and Interconnection Customer, the terms of which govern the sale by the Interconnection Customer and the purchase by the Transmission Provider of the Net Output of the Interconnection Customer's Qualifying Facility, pursuant to the Public Utility Regulatory Policies Act of 1978 (PURPA), 16 U.S.C. 796 and 824a-3.

**QF-LGIA** shall mean the Qualifying Facility Large Generator Interconnection Agreement.

**QF-LGIP** shall mean the Qualifying Facility Large Generator Interconnection Procedures applicable to any large Generating Facility that is also a Qualifying Facility and which seeks to interconnect to the Transmission Provider's Transmission System or Distribution system in Oregon.

**Qualifying Facility** or **QF** shall mean a qualifying cogeneration facility or qualifying small power production facility within the meaning of sections 201 and 210 of the Public Utility Regulatory Policies Act of 1978 (PURPA), 16 U.S.C. 796 and 824a-3.

**Queue Position** shall mean the order of a valid Interconnection Request, relative to all other pending valid Interconnection Requests, that is established based upon the date and time of receipt of the valid Interconnection Request by the Transmission Provider.

**Reasonable Efforts** shall mean, with respect to an action required to be attempted or taken by a Party under the QF-LGIA, efforts that are timely and consistent with Good Utility Practice and are otherwise substantially equivalent to those a Party would use to protect its own interests.

**Scoping Meeting** shall mean the meeting between representatives of the Interconnection Customer and Transmission Provider conducted for the purpose of discussing alternative interconnection options, to exchange information including any transmission data and earlier study evaluations that would be reasonably expected to impact such interconnection options, to analyze such information, and to determine the potential feasible Points of Interconnection.

**Site Control** shall mean documentation reasonably demonstrating: (1) ownership of a leasehold interest in, or a right to develop a site for the purpose of constructing the Generating Facility; (2) an option to purchase or acquire a leasehold site for such purpose; or (3) an exclusivity or other business relationship between Interconnection Customer and the entity having the right to sell, lease or grant Interconnection Customer the right to possess or occupy a site for such purpose.

**Small Generating Facility** shall mean a Generating Facility that has a Generating Facility Capacity of no more than 10 MW.

**Stand Alone Network Upgrades** shall mean Network Upgrades that an Interconnection Customer may construct without affecting day-to-day operations of the Transmission System during their construction. Both the Transmission Provider and the Interconnection Customer must agree as to what constitutes Stand Alone Network Upgrades and identify them in Appendix A to the QF-LGIA.

**Station Power** shall mean electric power used in the process of producing power at Interconnection Customer's Generating Facility, including but not limited to the electric power necessary for auxiliary equipment such as pumps, blowers, fans, fuel transportation systems, similar auxiliary systems that are a necessary and integral part of the power production process, and other parasitic loads involved in the generating process.

**System Protection Facilities** shall mean the equipment, including necessary protection signal communications equipment, required to protect (1) the Transmission Provider's Transmission System from faults or other electrical disturbances occurring at the Generating Facility and (2) the Generating Facility from faults or other electrical system disturbances occurring on the Transmission Provider's Transmission System or on other delivery systems or other generating systems to which the Transmission Provider's Transmission System is directly connected.

**Transmission Owner** shall mean an entity that owns, leases or otherwise possesses an interest in the portion of the Transmission System at the Point of Interconnection and may be a Party to the QF-LGIA to the extent necessary.

**Transmission Provider** shall mean the applicable Utility.

**Transmission Provider's Interconnection Facilities** shall mean all facilities and equipment owned, controlled, or operated by the Transmission Provider from the Point of Change of Ownership to the Point of Interconnection as identified in Appendix A to the QF-LGIA, including any modifications, additions or upgrades to such facilities and equipment. Transmission Provider's Interconnection Facilities are sole use facilities and shall not include Distribution Upgrades, Stand Alone Network Upgrades or Network Upgrades.

**Transmission System** shall mean the facilities owned, controlled or operated by the Transmission Provider or Transmission Owner that are used to provide transmission service under the OATT.

**Trial Operation** shall mean the period during which Interconnection Customer is engaged in on-site test operations and commissioning of the Generating Facility prior to Commercial Operation.

## **Article 2. Effective Date, Term, and Termination**

### **2.1 Effective Date.**

This QF-LGIA shall become effective upon execution by the Parties.

## **2.2 Term of Agreement.**

Subject to the provisions of Article 2.3, this QF-LGIA shall remain in effect for a period of ten (10) years from the Effective Date or such other longer period as agreed upon by the parties and shall be automatically renewed for each successive one-year period thereafter provided:

(1) Interconnection Customer gives Transmission Provider written notice no less than 90 calendar days in advance of the end of the initial ten year term and no less than 90 calendar days before the end of each successive one year renewal term of Interconnection Customer's desire to renew; and

(2) Transmission Provider reasonably determines that no material change has occurred to the specific circumstances surrounding the individual QF-LGIA, including government regulation of the subject matter of the QF-LGIA and Transmission Provider's interconnection standards. If Interconnection Customer gives notice of desire to renew in accordance with this Article 2.2, Transmission Provider shall give Interconnection Customer notice of Transmission Provider's determination regarding the existence of material change, made in accordance with this Article 2.2, no later than 60 calendar days after receipt of the Interconnection Customer's notice of desire to renew. If Transmission Provider reasonably determines that there has been a material change in the circumstances surrounding the QF-LGIA, then the Interconnection Customer must initiate a new interconnection request under the QF-LGIP in order to pursue a successor interconnection agreement to this QF-LGIA.

## **2.3 Termination Procedures.**

**2.3.1 Written Notice.** This QF-LGIA may be terminated by Interconnection Customer after giving Transmission Provider ninety (90) Calendar Days advance written notice, or by Transmission Provider notifying OPUC after the Generating Facility permanently ceases Commercial Operation.

**2.3.2 Default.** Either Party may terminate this QF-LGIA in accordance with Article 17.

**2.3.3** Notwithstanding Articles 2.3.1 and 2.3.2, no termination shall become effective until the Parties have complied with all Applicable Laws and Regulations applicable to such termination.

### **2.3.4 Change in Qualifying Facilities Status**

Interconnection Customer has represented that its Generating Facility is a Qualifying Facility. As a Qualifying Facility selling its Net Output exclusively to Transmission Provider, the OPUC has regulatory authority over the interconnection of the Generating Facility with Transmission Provider's Transmission System. If, at any time during the term of this QF-LGIA, all or a portion of the output of the Qualifying Facility is scheduled to be, or is, sold to someone other than Transmission Provider, then regulatory authority for this interconnection will fall under the jurisdiction of the FERC and this QF-LGIA shall terminate upon the date

such electric output from the Generating Facility is first produced for sale to such other party, and no later than sixty (60) days prior to such termination date, Interconnection Customer shall enter into a new Large Generator Interconnection Agreement with Transmission Provider pursuant to Transmission Provider's OATT. Interconnection Customer acknowledges and agrees that it may take substantially more than sixty (60) days to submit an interconnection request and complete any required portions of the interconnection process under the Transmission Provider's OATT before the Transmission Provider can offer the Interconnection Customer a new Large Generator Interconnection Agreement under the OATT. Interconnection Customer is responsible for initiating the interconnection process under the Transmission Provider's OATT early enough to allow for completion of the interconnection process before the Interconnection Customer requires a new Large Generator Interconnection Agreement under this Article 2.3.4.

**2.4 Termination Costs.** If a Party elects to terminate this QF-LGIA pursuant to Article 2.3 above, each Party shall pay all costs incurred on its behalf (including any cancellation costs relating to orders or contracts for Interconnection Facilities and equipment) or charges assessed by the other Party, as of the date of the other Party's receipt of such notice of termination, that are the responsibility of the Terminating Party under this QF-LGIA. In the event of termination by a Party, the Parties shall use commercially Reasonable Efforts to mitigate the costs, damages and charges arising as a consequence of termination. Upon termination of this QF-LGIA, unless otherwise ordered or approved by the OPUC:

**2.4.1** With respect to any portion of Transmission Provider's Interconnection Facilities that have not yet been constructed or installed, Transmission Provider shall to the extent possible and with Interconnection Customer's authorization cancel any pending orders of, or return, any materials or equipment for, or contracts for construction of, such facilities; provided that in the event Interconnection Customer elects not to authorize such cancellation, Interconnection Customer shall assume all payment obligations with respect to such materials, equipment, and contracts, and Transmission Provider shall deliver such material and equipment, and, if necessary, assign such contracts, to Interconnection Customer as soon as practicable, at Interconnection Customer's expense. To the extent that Interconnection Customer has already paid Transmission Provider for any or all such costs of materials or equipment not taken by Interconnection Customer, Transmission Provider shall promptly refund such amounts to Interconnection Customer, less any costs, including penalties incurred by Transmission Provider to cancel any pending orders of or return such materials, equipment, or contracts.

If an Interconnection Customer terminates this QF-LGIA, it shall be responsible for all costs incurred in association with that Interconnection Customer's interconnection, including any cancellation costs relating to orders or contracts for Interconnection Facilities and equipment, and other expenses including any Network Upgrades for which Transmission Provider has incurred expenses and has not been reimbursed by Interconnection Customer.

**2.4.2** Transmission Provider may, at its option, retain any portion of such materials, equipment, or facilities that Interconnection Customer chooses not to accept delivery of, in which case Transmission Provider shall be responsible for all costs associated with procuring such materials, equipment, or facilities.

**2.4.3** With respect to any portion of the Interconnection Facilities, and any other facilities already installed or constructed pursuant to the terms of this QF-LGIA, Interconnection Customer shall be responsible for all costs associated with the removal, relocation or other disposition or retirement of such materials, equipment, or facilities.

**2.5 Disconnection.** Upon termination of this QF-LGIA, the Parties will take all appropriate steps to disconnect the Large Generating Facility from the Transmission System. All costs required to effectuate such disconnection shall be borne by the terminating Party, unless such termination resulted from the non-terminating Party's Default of this QF-LGIA or such non-terminating Party otherwise is responsible for these costs under this QF-LGIA.

**2.6 Survival.** This QF-LGIA shall continue in effect after termination to the extent necessary to provide for final billings and payments and for costs incurred hereunder, including billings and payments pursuant to this QF-LGIA; to permit the determination and enforcement of liability and indemnification obligations arising from acts or events that occurred while this QF-LGIA was in effect; and to permit each Party to have access to the lands of the other Party pursuant to this QF-LGIA or other applicable agreements, to disconnect, remove or salvage its own facilities and equipment.

### **Article 3. Regulatory Filings**

**3.1 Filing.** Transmission Provider shall file this QF-LGIA (and any amendment hereto) with the OPUC. Interconnection Customer may request that any information so provided be subject to the confidentiality provisions of Article 22. If Interconnection Customer has executed this QF-LGIA, or any amendment thereto, Interconnection Customer shall reasonably cooperate with Transmission Provider with respect to such filing and to provide any information reasonably requested by Transmission Provider needed to comply with applicable regulatory requirements.

#### **3.2 Recordkeeping and Reporting Requirements.**

(1) The public utility must maintain a record of the following information for at least two years:(a) The number of complete large generator interconnection applications received;(b) The time required to complete the review process for each application; and (c) The reasons for the approval or denial of each application.

(2) For as long as an interconnection customer's large generator facility is interconnected to a public utility's transmission or distribution system, the interconnecting public utility must maintain copies of the interconnection application, interconnection agreement, and certificate of completion for the large generator facility. The public utility must provide

a copy of the interconnection customer's records to the interconnection customer within 15 business days after receipt of a written request.

(3) The public utility must submit an annual report to the Commission summarizing the public utility's interconnection activities for the previous calendar year. The annual report must be filed by May 30 and must include the following information:(a) The number of complete large generator interconnection applications received;(b) The number of large generator facility interconnections completed;(c) The types of large generator facilities applying for interconnection and the nameplate capacity of the facilities; (d) The interconnection facilities required to accommodate the interconnection of a large generator facility and the estimated costs of those facilities; and (e) The system upgrades required to accommodate the interconnection of a large generator facility and the estimated costs of those upgrades.

#### **Article 4. Scope of Service**

**4.1 Interconnection Product Options.** Interconnection Customer has selected the following (checked) type of Interconnection Service:

##### **4.1.1 Energy Resource Interconnection Service.**

**4.1.1.1 The Product.** Energy Resource Interconnection Service allows Interconnection Customer to connect the Large Generating Facility to the Transmission System and be eligible to deliver the Large Generating Facility's output using the existing firm or non-firm capacity of the Transmission System on an "as available" basis. To the extent Interconnection Customer wants to receive Energy Resource Interconnection Service, Transmission Provider shall construct facilities identified in Appendix A.

**4.1.1.2 Transmission Delivery Service Implications.** Under Energy Resource Interconnection Service, Interconnection Customer will be eligible to inject power from the Large Generating Facility into and deliver power across the interconnecting Transmission Provider's Transmission System on an "as available" basis up to the amount of megawatts identified in the applicable stability and steady state studies to the extent the upgrades initially required to qualify for Energy Resource Interconnection Service have been constructed. No transmission delivery service from the Large Generating Facility is assured, but Interconnection Customer may obtain Point-to-Point Transmission Service, Network Integration Transmission Service, or be used for secondary network transmission service, pursuant to Transmission Provider's OATT, up to the maximum output identified in the stability and steady state studies. In those instances, in order for Interconnection Customer to obtain the right to deliver or inject energy beyond the Large Generating Facility Point of Interconnection or to improve its ability to do so, transmission delivery service must be obtained pursuant to the provisions of Transmission Provider's OATT. The

Interconnection Customer's ability to inject its Large Generating Facility output beyond the Point of Interconnection, therefore, will depend on the existing capacity of Transmission Provider's Transmission System at such time as a transmission service request is made that would accommodate such delivery. The provision of firm Point-to-Point Transmission Service or Network Integration Transmission Service may require the construction of additional Network Upgrades.

#### **4.1.2 Network Resource Interconnection Service.**

**4.1.2.1 The Product.** Transmission Provider must conduct the necessary studies and construct the Network Upgrades needed to integrate the Large Generating Facility in a manner comparable to that in which Transmission Provider integrates its generating facilities to serve native load customers in the same manner as all other Network Resources. To the extent Interconnection Customer wants to receive Network Resource Interconnection Service, Transmission Provider shall construct the facilities identified in Appendix A.

**4.1.2.2 Transmission Delivery Service Implications.** Network Resource Interconnection Service allows Interconnection Customer's Large Generating Facility to be designated by any Network Customer under the OATT on Transmission Provider's Transmission System as a Network Resource, up to the Large Generating Facility's Net Output, on the same basis as existing Network Resources interconnected to Transmission Provider's Transmission System, and to be studied as a Network Resource on the assumption that such a designation will occur. Although Network Resource Interconnection Service does not convey a reservation of transmission service, any Network Customer under the OATT can utilize its network service under the OATT to obtain delivery of energy from the interconnected Interconnection Customer's Large Generating Facility in the same manner as it accesses Network Resources. A Large Generating Facility receiving Network Resource Interconnection Service may also be used to provide Ancillary Services after technical studies and/or periodic analyses are performed with respect to the Large Generating Facility's ability to provide any applicable Ancillary Services, provided that such studies and analyses have been or would be required in connection with the provision of such Ancillary Services by any existing Network Resource. However, if an Interconnection Customer's Large Generating Facility has not been designated as a Network Resource by any load, it cannot be required to provide Ancillary Services except to the extent such requirements extend to all generating facilities that are similarly situated. The provision of Network Integration Transmission Service or firm Point-to-Point Transmission Service may require additional studies and the construction of additional upgrades. Because such studies and upgrades would be associated with a request for delivery service under the OATT,

cost responsibility for the studies and upgrades would be in accordance with FERC's policy for pricing transmission delivery services.

Network Resource Interconnection Service does not necessarily provide Interconnection Customer with the capability to physically deliver the output of its Large Generating Facility to any particular load on Transmission Provider's Transmission System without incurring congestion costs. In the event of transmission constraints on Transmission Provider's Transmission System, Interconnection Customer's Large Generating Facility shall be subject to the applicable congestion management procedures in Transmission Provider's Transmission System in the same manner as Network Resources.

**4.2 Provision of Service.** Transmission Provider shall provide ~~Network Resource~~ Interconnection Service for the Large Generating Facility at the Point of Interconnection.

**4.3 Performance Standards.** Each Party shall perform all of its obligations under this QF-LGIA in accordance with Applicable Laws and Regulations, Applicable Reliability Standards, and Good Utility Practice, and to the extent a Party is required or prevented or limited in taking any action by such regulations and standards, such Party shall not be deemed to be in Breach of this QF-LGIA for its compliance therewith. If such Party is a Transmission Provider or Transmission Owner, then that Party shall amend the QF-LGIA and if required by the OPUC, submit the amendment to the OPUC for approval.

**4.4 No Transmission Delivery Service; No Agreement to Purchase Output.** The execution of this QF-LGIA does not constitute a request for, nor the provision of, any transmission delivery service under Transmission Provider's OATT, and does not convey any right to deliver electricity to any specific customer or Point of Delivery. Additionally, the execution of the QF-LGIA does not constitute an agreement to purchase the Net Output or any portion of the output of the Large Generating Facility

**4.5 Interconnection Customer Provided Services.** The services provided by Interconnection Customer under this QF-LGIA are set forth in Article 9.6 and Article 13.41 Interconnection Customer shall be paid for such services in accordance with Article 11.6.

## **Article 5. Interconnection Facilities Engineering, Procurement, and Construction**

**5.1 Options.** Unless otherwise mutually agreed to between the Parties, Interconnection Customer shall select the In-Service Date, Initial Synchronization Date, and Commercial Operation Date; and either Standard Option or Alternate Option set forth below, for completion of Transmission Provider's Interconnection Facilities and Network Upgrades as set forth in Appendix A, Interconnection Facilities and Network Upgrades, and such dates and selected option shall be set forth in Appendix B, Milestones.

**5.1.1 Standard Option.** Transmission Provider shall design, procure, and construct Transmission Provider's Interconnection Facilities and Network Upgrades, using Reasonable Efforts to complete Transmission Provider's Interconnection Facilities and Network Upgrades by the dates set forth in Appendix B, Milestones. Transmission Provider shall not be required to undertake any action which is inconsistent with its standard safety practices, its material and equipment specifications, its design criteria and construction procedures, its labor agreements, and Applicable Laws and Regulations. In the event Transmission Provider reasonably expects that it will not be able to complete Transmission Provider's Interconnection Facilities and Network Upgrades by the specified dates, Transmission Provider shall promptly provide written notice to Interconnection Customer and shall undertake Reasonable Efforts to meet the earliest dates thereafter.

**5.1.2 Alternate Option.** If the dates designated by Interconnection Customer are acceptable to Transmission Provider, Transmission Provider shall so notify Interconnection Customer within thirty (30) Calendar Days, and shall assume responsibility for the design, procurement and construction of Transmission Provider's Interconnection Facilities by the designated dates.

If Transmission Provider subsequently fails to complete Transmission Provider's Interconnection Facilities by the In-Service Date, to the extent necessary to provide back feed power; or fails to complete Network Upgrades by the Initial Synchronization Date to the extent necessary to allow for Trial Operation at full power output, unless other arrangements are made by the Parties for such Trial Operation; or fails to complete the Network Upgrades by the Commercial Operation Date, as such dates are reflected in Appendix B, Milestones; Transmission Provider shall pay Interconnection Customer liquidated damages in accordance with Article 5.3, Liquidated Damages, provided, however, the dates designated by Interconnection Customer shall be extended day for day for each day that the applicable RTO or ISO refuses to grant clearances to install equipment.

**5.1.3 Option to Build.** If the dates designated by Interconnection Customer are not acceptable to Transmission Provider, Transmission Provider shall so notify Interconnection Customer within thirty (30) Calendar Days, and unless the Parties agree otherwise, Interconnection Customer shall have the option to assume responsibility for the design, procurement and construction of Transmission Provider's Interconnection Facilities and Stand Alone Network Upgrades on the dates specified in Article 5.1.2. Transmission Provider and Interconnection Customer must agree as to what constitutes Stand Alone Network Upgrades and identify such Stand Alone Network Upgrades in Appendix A. Except for Stand Alone Network Upgrades, Interconnection Customer shall have no right to construct Network Upgrades under this option.

**5.1.4 Negotiated Option.** If Interconnection Customer elects not to exercise its option under Article 5.1.3, Option to Build, Interconnection Customer shall so notify Transmission Provider within thirty (30) Calendar Days, and the Parties shall

in good faith attempt to negotiate terms and conditions (including revision of the specified dates and liquidated damages, the provision of incentives or the procurement and construction of a portion of Transmission Provider's Interconnection Facilities and Stand Alone Network Upgrades by Interconnection Customer) pursuant to which Transmission Provider is responsible for the design, procurement and construction of Transmission Provider's Interconnection Facilities and Network Upgrades. If the Parties are unable to reach agreement on such terms and conditions, Transmission Provider shall assume responsibility for the design, procurement and construction of Transmission Provider's Interconnection Facilities and Network Upgrades pursuant to 5.1.1, Standard Option.

**5.2 General Conditions Applicable to Option to Build.** If Interconnection Customer assumes responsibility for the design, procurement and construction of Transmission Provider's Interconnection Facilities and Stand Alone Network Upgrades,

(1) Interconnection Customer shall engineer, procure equipment, and construct Transmission Provider's Interconnection Facilities and Stand Alone Network Upgrades (or portions thereof) using Good Utility Practice and using standards and specifications provided in advance by Transmission Provider;

(2) Interconnection Customer's engineering, procurement and construction of Transmission Provider's Interconnection Facilities and Stand Alone Network Upgrades shall comply with all requirements of law and Applicable Reliability Standards to which Transmission Provider would be subject in the engineering, procurement or construction of Transmission Provider's Interconnection Facilities and Stand Alone Network Upgrades;

(3) Transmission Provider shall review and approve the engineering design, equipment acceptance tests, and the construction of Transmission Provider's Interconnection Facilities and Stand Alone Network Upgrades;

(4) prior to commencement of construction, Interconnection Customer shall provide to Transmission Provider a schedule for construction of Transmission Provider's Interconnection Facilities and Stand Alone Network Upgrades, and shall promptly respond to requests for information from Transmission Provider;

(5) at any time during construction, Transmission Provider shall have the right to gain unrestricted access to Transmission Provider's Interconnection Facilities and Stand Alone Network Upgrades and to conduct inspections of the same;

(6) at any time during construction, should any phase of the engineering, equipment procurement, or construction of Transmission Provider's Interconnection Facilities and Stand Alone Network Upgrades not meet the standards and specifications provided by Transmission Provider, upon a rigorous showing of cause, Interconnection Customer shall be obligated to remedy deficiencies in that portion of Transmission Provider's Interconnection Facilities and Stand Alone Network Upgrades;

(7) Interconnection Customer shall indemnify Transmission Provider for claims arising from Interconnection Customer's construction of Transmission Provider's Interconnection Facilities and Stand Alone Network Upgrades under the terms and procedures applicable to Article 18.1 Indemnity;

(8) Interconnection Customer shall transfer control of Transmission Provider's Interconnection Facilities and Stand Alone Network Upgrades to Transmission Provider;

(9) Unless Parties otherwise agree, Interconnection Customer shall transfer ownership of Transmission Provider's Interconnection Facilities and Stand-Alone Network Upgrades to Transmission Provider;

(10) Transmission Provider shall approve and accept for operation and maintenance Transmission Provider's Interconnection Facilities and Stand Alone Network Upgrades to the extent engineered, procured, and constructed in accordance with this Article 5.2; and

(11) Interconnection Customer shall deliver to Transmission Provider "as-built" drawings, information, and any other documents that are reasonably required by Transmission Provider to assure that the Interconnection Facilities and Stand-Alone Network Upgrades are built to the standards and specifications required by Transmission Provider.

**5.3 Liquidated Damages.** The actual damages to Interconnection Customer, in the event Transmission Provider's Interconnection Facilities or Network Upgrades are not completed by the dates designated by Interconnection Customer and accepted by Transmission Provider pursuant to Article 5.1.2 or 5.1.4, above, may include Interconnection Customer's fixed operation and maintenance costs and lost opportunity costs. Such actual damages are uncertain and impossible to determine at this time. Because of such uncertainty, any liquidated damages paid by Transmission Provider to Interconnection Customer in the event that Transmission Provider does not complete any portion of Transmission Provider's Interconnection Facilities or Network Upgrades by the applicable dates, shall be an amount equal to 1/2 of 1 percent per day of the actual cost of Transmission Provider's Interconnection Facilities and Network Upgrades, in the aggregate, for which Transmission Provider has assumed responsibility to design, procure and construct.

However, in no event shall the total liquidated damages exceed 20 percent of the actual cost of Transmission Provider's Interconnection Facilities and Network Upgrades for which Transmission Provider has assumed responsibility to design, procure, and construct. The foregoing payments will be made by Transmission Provider to Interconnection Customer as just compensation for the damages caused to Interconnection Customer, which actual damages are uncertain and impossible to determine at this time, and as reasonable liquidated damages, but not as a penalty or a method to secure performance of this QF-LGIA. Liquidated damages, when the Parties

agree to them, are the exclusive remedy for the Transmission Provider's failure to meet its schedule.

No liquidated damages shall be paid to Interconnection Customer if: (1) Interconnection Customer is not ready to commence use of Transmission Provider's Interconnection Facilities or Network Upgrades to take the delivery of power for the Large Generating Facility's Trial Operation or to export power from the Large Generating Facility on the specified dates, unless Interconnection Customer would have been able to commence use of Transmission Provider's Interconnection Facilities or Network Upgrades to take the delivery of power for Large Generating Facility's Trial Operation or to export power from the Large Generating Facility, but for Transmission Provider's delay; (2) Transmission Provider's failure to meet the specified dates is the result of the action or inaction of Interconnection Customer or any other Interconnection Customer who has entered into an QF-LGIA or LGIA with Transmission Provider or any cause beyond Transmission Provider's reasonable control or reasonable ability to cure; (3) the Interconnection Customer has assumed responsibility for the design, procurement and construction of Transmission Provider's Interconnection Facilities and Stand Alone Network Upgrades; or (4) the Parties have otherwise agreed.

**5.4 Power System Stabilizers.** The Interconnection Customer shall procure, install, maintain and operate Power System Stabilizers in accordance with the guidelines and procedures established by the Applicable Reliability Council. Transmission Provider reserves the right to reasonably establish minimum acceptable settings for any installed Power System Stabilizers, subject to the design and operating limitations of the Large Generating Facility. If the Large Generating Facility's Power System Stabilizers are removed from service or not capable of automatic operation, Interconnection Customer shall immediately notify Transmission Provider's system operator, or its designated representative. The requirements of this paragraph shall not apply to wind generators.

**5.5 Equipment Procurement.** If responsibility for construction of Transmission Provider's Interconnection Facilities or Network Upgrades is to be borne by Transmission Provider, then Transmission Provider shall commence design of Transmission Provider's Interconnection Facilities or Network Upgrades and procure necessary equipment as soon as practicable after all of the following conditions are satisfied, unless the Parties otherwise agree in writing:

**5.5.1** Transmission Provider has completed the Facilities Study pursuant to the Facilities Study Agreement;

**5.5.2** Transmission Provider has received written authorization to proceed with design and procurement from Interconnection Customer by the date specified in Appendix B, Milestones; and

**5.5.3** Interconnection Customer has provided security to Transmission Provider in accordance with Article 11.5 by the dates specified in Appendix B, Milestones.

**5.6 Construction Commencement.** Transmission Provider shall commence construction of Transmission Provider's Interconnection Facilities and Network

Upgrades for which it is responsible as soon as practicable after the following additional conditions are satisfied:

**5.6.1** Approval of the appropriate Governmental Authority has been obtained for any facilities requiring regulatory approval;

**5.6.2** Necessary real property rights and rights-of-way have been obtained, to the extent required for the construction of a discrete aspect of Transmission Provider's Interconnection Facilities and Network Upgrades;

**5.6.3** Transmission Provider has received written authorization to proceed with construction from Interconnection Customer by the date specified in Appendix B, Milestones; and

**5.6.4** Interconnection Customer has provided security to Transmission Provider in accordance with Article 11.5 by the dates specified in Appendix B, Milestones.

**5.7 Work Progress.** The Parties will keep each other advised periodically as to the progress of their respective design, procurement and construction efforts. Either Party may, at any time, request a progress report from the other Party. If, at any time, Interconnection Customer determines that the completion of Transmission Provider's Interconnection Facilities will not be required until after the specified In-Service Date, Interconnection Customer will provide written notice to Transmission Provider of such later date upon which the completion of Transmission Provider's Interconnection Facilities will be required.

**5.8 Information Exchange.** As soon as reasonably practicable after the Effective Date, the Parties shall exchange information regarding the design and compatibility of the Parties' Interconnection Facilities and compatibility of the Interconnection Facilities with Transmission Provider's Transmission System, and shall work diligently and in good faith to make any necessary design changes.

**5.9 Limited Operation.** If any of Transmission Provider's Interconnection Facilities or Network Upgrades are not reasonably expected to be completed prior to the Commercial Operation Date of the Large Generating Facility, Transmission Provider shall, upon the request and at the expense of Interconnection Customer, perform operating studies on a timely basis to determine the extent to which the Large Generating Facility and Interconnection Customer's Interconnection Facilities may operate prior to the completion of Transmission Provider's Interconnection Facilities or Network Upgrades consistent with Applicable Laws and Regulations, Applicable Reliability Standards, Good Utility Practice, and this QF-LGIA. Transmission Provider shall permit Interconnection Customer to operate the Large Generating Facility and Interconnection Customer's Interconnection Facilities in accordance with the results of such studies.

**5.10 Interconnection Customer's Interconnection Facilities ('ICIF').** Interconnection Customer shall, at its expense, design, procure, construct, own and install the ICIF, as set forth in Appendix A, Interconnection Facilities, Network Upgrades and Distribution Upgrades.

**5.10.1 Interconnection Customer's Interconnection Facility Specifications.**

Interconnection Customer shall submit initial specifications for the ICIF, including System Protection Facilities, to Transmission Provider at least one hundred eighty (180) Calendar Days prior to the Initial Synchronization Date; and final specifications for review and comment at least ninety (90) Calendar Days prior to the Initial Synchronization Date. Transmission Provider shall review such specifications to ensure that the ICIF are compatible with the technical specifications, operational control, and safety requirements of Transmission Provider and comment on such specifications within thirty (30) Calendar Days of Interconnection Customer's submission. All specifications provided hereunder shall be deemed confidential.

**5.10.2 Transmission Provider's Review.** Transmission Provider's review of Interconnection Customer's final specifications shall not be construed as confirming, endorsing, or providing a warranty as to the design, fitness, safety, durability or reliability of the Large Generating Facility, or the ICIF. Interconnection Customer shall make such changes to the ICIF as may reasonably be required by Transmission Provider, in accordance with Good Utility Practice, to ensure that the ICIF are compatible with the technical specifications, operational control, and safety requirements of Transmission Provider,

**5.10.3 ICIF Construction.** The ICIF shall be designed and constructed in accordance with Good Utility Practice. Within one hundred twenty (120) Calendar Days after the Commercial Operation Date, unless the Parties agree on another mutually acceptable deadline, Interconnection Customer shall deliver to Transmission Provider "as-built" drawings, information and documents for the ICIF, such as: a one-line diagram, a site plan showing the Large Generating Facility and the ICIF, plan and elevation drawings showing the layout of the ICIF, a relay functional diagram, relaying AC and DC schematic wiring diagrams and relay settings for all facilities associated with Interconnection Customer's step-up transformers, the facilities connecting the Large Generating Facility to the step-up transformers and the ICIF, and the impedances (determined by factory tests) for the associated step-up transformers and the Large Generating Facility. The Interconnection Customer shall provide Transmission Provider specifications for the excitation system, automatic voltage regulator, Large Generating Facility control and protection settings, transformer tap settings, and communications, if applicable.

**5.11 Transmission Provider's Interconnection Facilities Construction.**

Transmission Provider's Interconnection Facilities shall be designed and constructed in accordance with Good Utility Practice. Upon request, within one hundred twenty (120) Calendar Days after the Commercial Operation Date, unless the Parties agree on another mutually acceptable deadline, Transmission Provider shall deliver to Interconnection Customer the "as-built" drawings, information and documents for Transmission Provider's Interconnection Facilities if requested by the Interconnection Customer.

Transmission Provider will obtain control of Transmission Provider's Interconnection Facilities and Stand Alone Network Upgrades upon completion of such facilities.

**5.12 Access Rights.** Upon reasonable notice and supervision by a Party, and subject to any required or necessary regulatory approvals, a Party ("Granting Party") shall furnish at no cost to the other Party ("Access Party") any rights of use, licenses, rights of way and easements with respect to lands owned or controlled by the Granting Party, its agents (if allowed under the applicable agency agreement), or any Affiliate, that are necessary to enable the Access Party to obtain ingress and egress to construct, operate, maintain, repair, test (or witness testing), inspect, replace or remove facilities and equipment to: (i) interconnect the Large Generating Facility with the Transmission System; (ii) operate and maintain the Large Generating Facility, the Interconnection Facilities and the Transmission System; and (iii) disconnect or remove the Access Party's facilities and equipment upon termination of this QF-LGIA. In exercising such licenses, rights of way and easements, the Access Party shall not unreasonably disrupt or interfere with normal operation of the Granting Party's business and shall adhere to the safety rules and procedures established in advance, as may be changed from time to time, by the Granting Party and provided to the Access Party.

**5.13 Lands of Other Property Owners.** If any part of Transmission Provider or Transmission Owner's Interconnection Facilities and/or Network Upgrades is to be installed on property owned by persons other than Interconnection Customer or Transmission Provider or Transmission Owner, Transmission Provider or Transmission Owner shall at Interconnection Customer's expense use efforts, similar in nature and extent to those that it typically undertakes on its own behalf or on behalf of its Affiliates, including use of its eminent domain authority, and to the extent consistent with state law, to procure from such persons any rights of use, licenses, rights of way and easements that are necessary to construct, operate, maintain, test, inspect, replace or remove Transmission Provider or Transmission Owner's Interconnection Facilities and/or Network Upgrades upon such property.

**5.14 Permits.** Transmission Provider or Transmission Owner and Interconnection Customer each shall be responsible for obtaining all permits, licenses and authorizations that are necessary to construct the Interconnection Facilities, Distribution Facilities, Stand Alone Network Upgrades, or Network Upgrades for which it has construction responsibility under this QF-LGIA in compliance with Applicable Laws and Regulations. Transmission Provider or Transmission Owner and Interconnection Customer shall cooperate with each other in good faith in obtaining any such permits, licenses and authorizations.

**5.15 Early Construction of Base Case Facilities.** Interconnection Customer may request Transmission Provider to construct, and Transmission Provider shall construct, using Reasonable Efforts to accommodate Interconnection Customer's In-Service Date, all or any portion of any Network Upgrades required for Interconnection Customer to be interconnected to the Transmission System which are included in the Base Case of the Facilities Study for Interconnection Customer, and which also are required to be constructed for another Interconnection Customer, but where such construction is not

scheduled to be completed in time to achieve Interconnection Customer's In-Service Date.

**5.16 Suspension.** Interconnection Customer reserves the right, upon written notice to Transmission Provider, to suspend at any time all work by Transmission Provider associated with the construction and installation of Transmission Provider's Interconnection Facilities and/or Network Upgrades required under this QF-LGIA with the condition that Transmission System shall be left in a safe and reliable condition in accordance with Good Utility Practice and Transmission Provider's safety and reliability criteria. In such event, Interconnection Customer shall be responsible for all reasonable and necessary costs which Transmission Provider (i) has incurred pursuant to this QF-LGIA prior to the suspension and (ii) incurs in suspending such work, including any costs incurred to perform such work as may be necessary to ensure the safety of persons and property and the integrity of the Transmission System during such suspension and, if applicable, any costs incurred in connection with the cancellation or suspension of material, equipment and labor contracts which Transmission Provider cannot reasonably avoid; provided, however, that prior to canceling or suspending any such material, equipment or labor contract, Transmission Provider shall obtain Interconnection Customer's authorization to do so.

Transmission Provider shall invoice Interconnection Customer for such costs pursuant to Article 12 and shall use due diligence to minimize its costs. In the event Interconnection Customer suspends work by Transmission Provider required under this QF-LGIA pursuant to this Article 5.16, and has not requested Transmission Provider to recommence the work required under this QF-LGIA on or before the expiration of three (3) years following commencement of such suspension, this QF-LGIA shall be deemed terminated. The three-year period shall begin on the date the suspension is requested, or the date of the written notice to Transmission Provider, if no effective date is specified.

## **5.17 Taxes.**

**5.17.1 Interconnection Customer Payments Not Taxable.** The Parties intend that all payments or property transfers made by Interconnection Customer to Transmission Provider for the installation of Transmission Provider's Interconnection Facilities and the Network Upgrades shall be non-taxable, either as contributions to capital, or as an advance, in accordance with the Internal Revenue Code and any applicable state income tax laws and shall not be taxable as contributions in aid of construction or otherwise under the Internal Revenue Code and any applicable state income tax laws.

**5.17.2 Representations and Covenants.** In accordance with IRS Notice 2001-82 and IRS Notice 88-129, Interconnection Customer represents and covenants that (i) ownership of the electricity generated at the Large Generating Facility will pass to another party prior to the transmission of the electricity on the Transmission System, (ii) for income tax purposes, the amount of any payments and the cost of any property transferred to Transmission Provider for Transmission Provider's Interconnection Facilities will be capitalized by Interconnection Customer as an

intangible asset and recovered using the straight-line method over a useful life of twenty (20) years, and (iii) any portion of Transmission Provider's Interconnection Facilities that is a "dual-use intertie," within the meaning of IRS Notice 88-129, is reasonably expected to carry only a de minimis amount of electricity in the direction of the Large Generating Facility. For this purpose, "de minimis amount" means no more than 5 percent of the total power flows in both directions, calculated in accordance with the "5 percent test" set forth in IRS Notice 88-129. This is not intended to be an exclusive list of the relevant conditions that must be met to conform to IRS requirements for non-taxable treatment.

At Transmission Provider's request, Interconnection Customer shall provide Transmission Provider with a report from an independent engineer confirming its representation in clause (iii), above. Transmission Provider represents and covenants that the cost of Transmission Provider's Interconnection Facilities paid for by Interconnection Customer will have no net effect on the base upon which rates are determined.

**5.17.3** Indemnification for the Cost Consequences of Current Tax Liability Imposed Upon the Transmission Provider. Notwithstanding Article 5.17.1, Interconnection Customer shall protect, indemnify and hold harmless Transmission Provider from the cost consequences of any current tax liability imposed against Transmission Provider as the result of payments or property transfers made by Interconnection Customer to Transmission Provider under this QF-LGIA for Interconnection Facilities, as well as any interest and penalties, other than interest and penalties attributable to any delay caused by Transmission Provider.

Transmission Provider shall not include a gross-up for the cost consequences of any current tax liability in the amounts it charges Interconnection Customer under this QF-LGIA unless (i) Transmission Provider has determined, in good faith, that the payments or property transfers made by Interconnection Customer to Transmission Provider should be reported as income subject to taxation or (ii) any Governmental Authority directs Transmission Provider to report payments or property as income subject to taxation; provided, however, that Transmission Provider may require Interconnection Customer to provide security for Interconnection Facilities, in a form reasonably acceptable to Transmission Provider (such as a parental guarantee or a letter of credit), in an amount equal to the cost consequences of any current tax liability under this Article 5.17. Interconnection Customer shall reimburse Transmission Provider for such costs on a fully grossed-up basis, in accordance with Article 5.17.4, within thirty (30) Calendar Days of receiving written notification from Transmission Provider of the amount due, including detail about how the amount was calculated.

The indemnification obligation shall terminate at the earlier of (1) the expiration of the ten year testing period and the applicable statute of limitation, as it may be extended by Transmission Provider upon request of the IRS, to keep these years open for audit or adjustment, or (2) the occurrence of a subsequent taxable event

and the payment of any related indemnification obligations as contemplated by this Article 5.17.

**5.17.4 Tax Gross-Up Amount.** Interconnection Customer's liability for the cost consequences of any current tax liability under this Article 5.17 shall be calculated on a fully grossed-up basis. Except as may otherwise be agreed to by the parties, this means that Interconnection Customer will pay Transmission Provider, in addition to the amount paid for the Interconnection Facilities and Network Upgrades, an amount equal to (1) the current taxes imposed on Transmission Provider ("Current Taxes") on the excess of (a) the gross income realized by Transmission Provider as a result of payments or property transfers made by Interconnection Customer to Transmission Provider under this QF-LGIA (without regard to any payments under this Article 5.17) (the "Gross Income Amount") over (b) the present value of future tax deductions for depreciation that will be available as a result of such payments or property transfers (the "Present Value Depreciation Amount"), plus (2) an additional amount sufficient to permit Transmission Provider to receive and retain, after the payment of all Current Taxes, an amount equal to the net amount described in clause (1).

For this purpose, (i) Current Taxes shall be computed based on Transmission Provider's composite federal and state tax rates at the time the payments or property transfers are received and Transmission Provider will be treated as being subject to tax at the highest marginal rates in effect at that time (the "Current Tax Rate"), and (ii) the Present Value Depreciation Amount shall be computed by discounting Transmission Provider's anticipated tax depreciation deductions as a result of such payments or property transfers by Transmission Provider's current weighted average cost of capital. Thus, the formula for calculating Interconnection Customer's liability to Transmission Owner pursuant to this Article 5.17.4 can be expressed as follows:  $(\text{Current Tax Rate} \times (\text{Gross Income Amount} - \text{Present Value of Tax Depreciation})) / (1 - \text{Current Tax Rate})$ . Interconnection Customer's estimated tax liability in the event taxes are imposed shall be stated in Appendix A, Interconnection Facilities, Network Upgrades and Distribution Upgrades.

**5.17.5 Private Letter Ruling or Change or Clarification of Law.** At Interconnection Customer's request and expense, Transmission Provider shall file with the IRS a request for a private letter ruling as to whether any property transferred or sums paid, or to be paid, by Interconnection Customer to Transmission Provider under this QF-LGIA are subject to federal income taxation. Interconnection Customer will prepare the initial draft of the request for a private letter ruling, and will certify under penalties of perjury that all facts represented in such request are true and accurate to the best of Interconnection Customer's knowledge. Transmission Provider and Interconnection Customer shall cooperate in good faith with respect to the submission of such request.

Transmission Provider shall keep Interconnection Customer fully informed of the status of such request for a private letter ruling and shall execute either a privacy act waiver or a limited power of attorney, in a form acceptable to the IRS, that

authorizes Interconnection Customer to participate in all discussions with the IRS regarding such request for a private letter ruling. Transmission Provider shall allow Interconnection Customer to attend all meetings with IRS officials about the request and shall permit Interconnection Customer to prepare the initial drafts of any follow-up letters in connection with the request.

**5.17.6 Subsequent Taxable Events.** If, within 10 years from the date on which the relevant Transmission Provider's Interconnection Facilities are placed in service, (i) Interconnection Customer Breaches the covenants contained in Article 5.17.2, (ii) a "disqualification event" occurs within the meaning of IRS Notice 88-129, or (iii) this QF-LGIA terminates and Transmission Provider retains ownership of the Interconnection Facilities and Network Upgrades, Interconnection Customer shall pay a tax gross-up for the cost consequences of any current tax liability imposed on Transmission Provider, calculated using the methodology described in Article 5.17.4 and in accordance with IRS Notice 90-60.

**5.17.7 Contests.** In the event any Governmental Authority determines that Transmission Provider's receipt of payments or property constitutes income that is subject to taxation, Transmission Provider shall notify Interconnection Customer, in writing, within thirty (30) Calendar Days of receiving notification of such determination by a Governmental Authority. Upon the timely written request by Interconnection Customer and at Interconnection Customer's sole expense, Transmission Provider may appeal, protest, seek abatement of, or otherwise oppose such determination. Upon Interconnection Customer's written request and sole expense, Transmission Provider may file a claim for refund with respect to any taxes paid under this Article 5.17, whether or not it has received such a determination. Transmission Provider reserves the right to make all decisions with regard to the prosecution of such appeal, protest, abatement or other contest, including the selection of counsel and compromise or settlement of the claim, but Transmission Provider shall keep Interconnection Customer informed, shall consider in good faith suggestions from Interconnection Customer about the conduct of the contest, and shall reasonably permit Interconnection Customer or an Interconnection Customer representative to attend contest proceedings. Interconnection Customer shall pay to Transmission Provider on a periodic basis, as invoiced by Transmission Provider, Transmission Provider's documented reasonable costs of prosecuting such appeal, protest, abatement or other contest. At any time during the contest, Transmission Provider may agree to a settlement either with Interconnection Customer's consent or after obtaining written advice from nationally-recognized tax counsel, selected by Transmission Provider, but reasonably acceptable to Interconnection Customer, that the proposed settlement represents a reasonable settlement given the hazards of litigation. Interconnection Customer's obligation shall be based on the amount of the settlement agreed to by Interconnection Customer, or if a higher amount, so much of the settlement that is supported by the written advice from nationally-recognized tax counsel selected under the terms of the preceding sentence. The settlement amount shall be calculated on a fully grossed-up basis to cover any related cost consequences of the current tax liability. Any settlement without Interconnection Customer's consent or

such written advice will relieve Interconnection Customer from any obligation to indemnify Transmission Provider for the tax at issue in the contest.

**5.17.8 Refund.** In the event that (a) a private letter ruling is issued to Transmission Provider which holds that any amount paid or the value of any property transferred by Interconnection Customer to Transmission Provider under the terms of this QF-LGIA is not subject to federal income taxation, (b) any legislative change or administrative announcement, notice, ruling or other determination makes it reasonably clear to Transmission Provider in good faith that any amount paid or the value of any property transferred by Interconnection Customer to Transmission Provider under the terms of this QF-LGIA is not taxable to Transmission Provider, (c) any abatement, appeal, protest, or other contest results in a determination that any payments or transfers made by Interconnection Customer to Transmission Provider are not subject to federal income tax, or (d) if Transmission Provider receives a refund from any taxing authority for any overpayment of tax attributable to any payment or property transfer made by Interconnection Customer to Transmission Provider pursuant to this QF-LGIA, Transmission Provider shall promptly refund to Interconnection Customer the following:

(i) any payment made by Interconnection Customer under this Article 5.17 for taxes that is attributable to the amount determined to be non-taxable, together with interest thereon,

(ii) interest on any amounts paid by Interconnection Customer to Transmission Provider for such taxes which Transmission Provider did not submit to the taxing authority, calculated in accordance with the methodology set forth in FERC's regulations at 18 CFR § 35.19a(a)(2)(iii) from the date payment was made by Interconnection Customer to the date Transmission Provider refunds such payment to Interconnection Customer, and

(iii) with respect to any such taxes paid by Transmission Provider, any refund or credit Transmission Provider receives or to which it may be entitled from any Governmental Authority, interest (or that portion thereof attributable to the payment described in clause (i), above) owed to Transmission Provider for such overpayment of taxes (including any reduction in interest otherwise payable by Transmission Provider to any Governmental Authority resulting from an offset or credit); provided, however, that Transmission Provider will remit such amount promptly to Interconnection Customer only after and to the extent that Transmission Provider has received a tax refund, credit or offset from any Governmental Authority for any applicable overpayment of income tax related to Transmission Provider's Interconnection Facilities.

The intent of this provision is to leave the Parties, to the extent practicable, in the event that no taxes are due with respect to any payment for Interconnection Facilities and Network Upgrades hereunder, in the same position they would have been in had no such tax payments been made.

**5.17.9 Taxes Other Than Income Taxes.** Upon the timely request by Interconnection Customer, and at Interconnection Customer's sole expense, Transmission Provider may appeal, protest, seek abatement of, or otherwise contest any tax (other than federal or state income tax) asserted or assessed against Transmission Provider for which Interconnection Customer may be required to reimburse Transmission Provider under the terms of this QF-LGIA. Interconnection Customer shall pay to Transmission Provider on a periodic basis, as invoiced by Transmission Provider, Transmission Provider's documented reasonable costs of prosecuting such appeal, protest, abatement, or other contest. Interconnection Customer and Transmission Provider shall cooperate in good faith with respect to any such contest. Unless the payment of such taxes is a prerequisite to an appeal or abatement or cannot be deferred, no amount shall be payable by Interconnection Customer to Transmission Provider for such taxes until they are assessed by a final, non-appealable order by any court or agency of competent jurisdiction. In the event that a tax payment is withheld and ultimately due and payable after appeal, Interconnection Customer will be responsible for all taxes, interest and penalties, other than penalties attributable to any delay caused by Transmission Provider.

**5.17.10 Transmission Owners Who Are Not Transmission Providers.** If Transmission Provider is not the same entity as the Transmission Owner, then (i) all references in this Article 5.17 to Transmission Provider shall be deemed also to refer to and to include the Transmission Owner, as appropriate, and (ii) this QF-LGIA shall not become effective until such Transmission Owner shall have agreed in writing to assume all of the duties and obligations of Transmission Provider under this Article 5.17 of this QF-LGIA.

**5.18 Tax Status.** Each Party shall cooperate with the other to maintain the other Party's tax status. Nothing in this QF-LGIA is intended to adversely affect any Transmission Provider's tax exempt status with respect to the issuance of bonds including, but not limited to, Local Furnishing Bonds.

**5.19 Modification.**

**5.19.1 General.** Either Party may undertake modifications to its facilities. If a Party plans to undertake a modification that reasonably may be expected to affect the other Party's facilities, that Party shall provide to the other Party sufficient information regarding such modification so that the other Party may evaluate the potential impact of such modification prior to commencement of the work. Such information shall be deemed to be confidential hereunder and shall include information concerning the timing of such modifications and whether such modifications are expected to interrupt the flow of electricity from the Large Generating Facility. The Party desiring to perform such work shall provide the relevant drawings, plans, and specifications to the other Party at least ninety (90) Calendar Days in advance of the commencement of the work or such shorter period upon which the Parties may agree, which agreement shall not unreasonably be withheld, conditioned or delayed.

In the case of Large Generating Facility modifications that do not require Interconnection Customer to submit an Interconnection Request, Transmission Provider shall provide, within thirty (30) Calendar Days (or such other time as the Parties may agree), an estimate of any additional modifications to the Transmission System, Transmission Provider's Interconnection Facilities or Network Upgrades necessitated by such Interconnection Customer modification and a good faith estimate of the costs thereof

**5.19.2 Standards.** Any additions, modifications, or replacements made to a Party's facilities shall be designed, constructed and operated in accordance with this QF-LGIA, Applicable Reliability Standards and Good Utility Practice.

**5.19.3 Modification Costs.** Interconnection Customer shall not be directly assigned for the costs of any additions, modifications, or replacements that Transmission Provider makes to Transmission Provider's Interconnection Facilities or the Transmission System to facilitate the interconnection of a third party to Transmission Provider's Interconnection Facilities or the Transmission System, or to provide transmission service to a third party under Transmission Provider's OATT. Interconnection Customer shall be responsible for the costs of any additions, modifications, or replacements to Interconnection Customer's Interconnection Facilities that may be necessary to maintain or upgrade such Interconnection Customer's Interconnection Facilities consistent with Applicable Laws and Regulations, Applicable Reliability Standards or Good Utility Practice.

## **Article 6. Testing and Inspection**

**6.1 Pre-Commercial Operation Date Testing and Modifications.** Prior to the Commercial Operation Date, Transmission Provider shall test Transmission Provider's Interconnection Facilities and Network Upgrades and Interconnection Customer shall test the Large Generating Facility and Interconnection Customer's Interconnection Facilities to ensure their safe and reliable operation. Similar testing may be required after initial operation. Each Party shall make any modifications to its facilities that are found to be necessary as a result of such testing. Interconnection Customer shall bear the cost of all such testing and modifications. Interconnection Customer shall generate test energy at the Large Generating Facility only if it has arranged for the delivery of such test energy.

**6.2 Post-Commercial Operation Date Testing and Modifications.** Each Party shall perform routine inspection and testing of its facilities and equipment in accordance with Good Utility Practice as may be necessary to ensure the continued interconnection of the Large Generating Facility with the Transmission System in a safe and reliable manner. Each Party shall have the right, upon advance written notice, to require reasonable additional testing of the other Party's facilities, at the requesting Party's expense, as may be in accordance with Good Utility Practice. Interconnection Customer shall bear the cost of all testing and modifications required under this Article 6.2.

**6.3 Right to Observe Testing.** Each Party shall notify the other Party in advance of its performance of tests of its Interconnection Facilities. The other Party has the right, at its own expense, to observe such testing.

**6.4 Right to Inspect.** Each Party shall have the right, but shall have no Obligation to: (i) observe the other Party's tests and/or inspection of any of its System Protection Facilities and other protective equipment, including Power System Stabilizers; (ii) review the settings of the other Party's System Protection Facilities and other protective equipment; and (iii) review the other Party's maintenance records relative to the Interconnection Facilities, the System Protection Facilities and other protective equipment. A Party may exercise these rights from time to time as it deems necessary upon reasonable notice to the other Party. The exercise or non-exercise by a Party of any such rights shall not be construed as an endorsement or confirmation of any element or condition of the Interconnection Facilities or the System Protection Facilities or the Power System Stabilizers or other protective equipment or the operation thereof, or as a warranty as to the fitness, safety, desirability, or reliability of same. Any information that a Party obtains through the exercise of any of its rights under this Article 6.4 shall be deemed to be Confidential Information and treated pursuant to Article 22 of this QF-LGIA.

## **Article 7. Metering**

**7.1 General.** Each Party shall comply with the Applicable Reliability Council requirements regarding metering. Unless otherwise agreed by the Parties, Transmission Provider shall install Metering Equipment at the Point of Interconnection prior to any operation of the Large Generating Facility and shall own, operate, test and maintain such Metering Equipment. Power flows to and from the Large Generating Facility shall be measured at or, at Transmission Provider's option, compensated to the Point of Interconnection. Transmission Provider shall provide metering quantities, in analog and/or digital form, to Interconnection Customer upon request. Interconnection Customer shall bear all reasonable documented costs associated with the purchase, installation, operation, testing and maintenance of the Metering Equipment.

### **7.2 Station Power Metering**

To the extent the Large Generating Facility relies, or may need to rely, on Station Power not generated by the Large Generating Facility itself, the Parties shall agree to and provide for the installation of Metering Equipment at such locations as necessary to meter the quantities of Station Power delivered to and used by the Large Generating Facility. The intent of such Metering Equipment is to allow the Parties to accurately meter Station Power so that the Net Output of the Large Generating Facility can be accurately ascertained on a hourly basis. Unless otherwise agreed by the Parties, the Transmission Provider shall install the Metering Equipment required by this Article 7.2 at such location or locations as necessary to meter Station Power for the purposes of this Article 7.2 and Transmission Provider shall own, operate, test and maintain such Station Power Metering Equipment. Interconnection Customer shall bear all reasonable

documented costs associated with the purchase, installation, operation, testing and maintenance of the Metering Equipment required by this Article 7.2.

**7.3 Check Meters.** Interconnection Customer, at its option and expense, may install and operate, on its premises and on its side of the Point of Interconnection, one or more check meters to check Transmission Provider's meters. Such check meters shall be for check purposes only and shall not be used for the measurement of power flows for purposes of this QF-LGIA, except as provided in Article 7.5 below. The check meters shall be subject at all reasonable times to inspection and examination by Transmission Provider or its designee. The installation, operation and maintenance thereof shall be performed entirely by Interconnection Customer in accordance with Good Utility Practice.

**7.4 Standards.** Transmission Provider shall install, calibrate, and test revenue quality Metering Equipment in accordance with applicable American National Standards Institute ("ANSI") standards.

**7.5 Testing of Metering Equipment.** Transmission Provider shall, at Interconnection Customer's expense, inspect and test all "transmission Provider-owned Metering Equipment upon installation and at least once every two (2) years thereafter. If requested to do so by Interconnection Customer, Transmission Provider shall, at Interconnection Customer's expense, inspect or test Metering Equipment more frequently than every two (2) years. Transmission Provider shall give reasonable notice of the time when any inspection or test shall take place, and Interconnection Customer may have representatives present at the test or inspection. If at any time Metering Equipment is found to be inaccurate or defective, it shall be adjusted, repaired or replaced at Interconnection Customer's expense, in order to provide accurate metering, unless the inaccuracy or defect is due to Transmission Provider's failure to maintain, then Transmission Provider shall pay. If Metering Equipment fails to register, or if the measurement made by Metering Equipment during a test varies by more than two percent from the measurement made by the standard meter used in the test, Transmission Provider shall adjust the measurements by correcting all measurements for the period during which Metering Equipment was in error by using Interconnection Customer's check meters, if installed. If no such check meters are installed or if the period cannot be reasonably ascertained, the adjustment shall be for the period immediately preceding the test of the Metering Equipment equal to one-half the time from the date of the last previous test of the Metering Equipment.

**7.6 Metering Data.** At Interconnection Customer's expense, the metered data shall be telemetered to one or more locations designated by Transmission Provider and one or more locations designated by Interconnection Customer. Such telemetered data shall be used, under normal operating conditions, as the official measurement of the amount of energy delivered from the Large Generating Facility to the Point of Interconnection.

## Article 8. Communications

**8.1 Interconnection Customer Obligations.** Interconnection Customer shall maintain satisfactory operating communications with Transmission Provider's Transmission System dispatcher or representative designated by Transmission Provider. Interconnection Customer shall provide standard voice line, dedicated voice line and facsimile communications at its Large Generating Facility control room or central dispatch facility through use of either the public telephone system, or a voice communications system that does not rely on the public telephone system. Interconnection Customer shall also provide the dedicated data circuit(s) necessary to provide Interconnection Customer data to Transmission Provider as set forth in Appendix D, Security Arrangements Details. The data circuit(s) shall extend from the Large Generating Facility to the location(s) specified by Transmission Provider. Any required maintenance of such communications equipment shall be performed by Interconnection Customer. Operational communications shall be activated and maintained under, but not be limited to, the following events: system paralleling or separation, scheduled and unscheduled shutdowns, equipment clearances, and hourly and daily load data. Interconnection Customer shall bear all costs associated with obtaining and maintaining the communication services and equipment required by this Article 8 including the cost of any ground potential rise or other communication-related study or testing required by a telecommunications provider or required by Good Utility Practice.

**8.2 Remote Terminal Unit.** Prior to the Initial Synchronization Date of the Large Generating Facility, a Remote Terminal Unit, or equivalent data collection and transfer equipment acceptable to the Parties, shall be installed by Interconnection Customer, or by Transmission Provider at Interconnection Customer's expense, to gather accumulated and instantaneous data to be telemetered to the location(s) designated by Transmission Provider through use of a dedicated point-to-point data circuit(s) as indicated in Article 8.1. The communication protocol for the data circuit(s) shall be specified by Transmission Provider. Instantaneous bi-directional analog real power and reactive power flow information must be telemetered directly to the location(s) specified by Transmission Provider.

Each Party will promptly advise the other Party if it detects or otherwise learns of any metering, telemetry or communications equipment errors or malfunctions that require the attention and/or correction by the other Party. The Party owning such equipment shall, at Interconnection Customer's expense, correct such error or malfunction as soon as reasonably feasible.

**8.3 No Annexation.** Any and all equipment placed on the premises of a Party shall be and remain the property of the Party providing such equipment regardless of the mode and manner of annexation or attachment to real property, unless otherwise mutually agreed by the Parties.

## Article 9. Operations

**9.1 General.** Each Party shall comply with the Applicable Reliability Council requirements. Each Party shall provide to the other Party all information that may reasonably be required by the other Party to comply with Applicable Laws and Regulations and Applicable Reliability Standards.

**9.2 Transmission Provider Obligations.** Transmission Provider shall cause the Transmission System and Transmission Provider's Interconnection Facilities to be operated, maintained and controlled in a safe and reliable manner and in accordance with this QF-LGIA. Transmission Provider may provide operating instructions to Interconnection Customer consistent with this QF-LGIA and Transmission Provider's operating protocols and procedures as they may change from time to time. Transmission Provider will consider changes to its operating protocols and procedures proposed by Interconnection Customer.

**9.3 Interconnection Customer Obligations.** Interconnection Customer shall at its own expense operate, maintain and control the Large Generating Facility and Interconnection Customer's Interconnection Facilities in a safe and reliable manner and in accordance with this QF-LGIA. Interconnection Customer shall operate the Large Generating Facility and Interconnection Customer's Interconnection Facilities in accordance with all applicable requirements of Transmission Provider's Control Area, as such requirements are set forth in Appendix C, Interconnection Details, of this QF-LGIA. Appendix C, Interconnection Details, will be modified to reflect changes to the requirements as they may change from time to time. Either Party may request that the other Party provide copies of the requirements set forth in Appendix C, Interconnection Details, of this QF-LGIA.

**9.4 Start-Up and Synchronization.** Consistent with the Parties' mutually acceptable procedures, Interconnection Customer is responsible for the proper synchronization of the Large Generating Facility to Transmission Provider's Transmission System.

### 9.5 Reactive Power.

**9.5.1 Power Factor Design Criteria.** Interconnection Customer shall design the Large Generating Facility to maintain a composite power delivery at continuous rated power output at the Point of Interconnection at a power factor within the range of 0.95 leading to 0.95 lagging, unless Transmission Provider has established different requirements that apply to all generators in the Control Area on a comparable basis. The requirements of this paragraph shall not apply to wind generators.

**9.5.2 Voltage Schedules.** Once Interconnection Customer has synchronized the Large Generating Facility with the Transmission System, Transmission Provider shall require Interconnection Customer to operate the Large Generating Facility to produce or absorb reactive power within the design limitations of the Large Generating Facility set forth in Article 9.6.1 (Power Factor Design Criteria). Transmission Provider's voltage schedules shall treat all sources of reactive power

in the Control Area in an equitable and not unduly discriminatory manner. Transmission Provider shall exercise Reasonable Efforts to provide Interconnection Customer with such schedules at least one (1) day in advance, and may make changes to such schedules as necessary to maintain the reliability of the Transmission System. Interconnection Customer shall operate the Large Generating Facility to maintain the specified output voltage or power factor at the Point of interconnection within the design limitations of the Large Generating Facility set forth in Article 9.6.1 (Power Factor Design Criteria). If Interconnection Customer is unable to maintain the specified voltage or power factor, it shall promptly notify Transmission Provider.

**9.5.2.1 Governors and Regulators.** Whenever the Large Generating Facility is operated in parallel with the Transmission System and the speed governors (if installed on the generating unit pursuant to Good Utility Practice) and voltage regulators are capable of operation, Interconnection Customer shall operate the Large Generating Facility with its speed governors and voltage regulators in automatic operation. If the Large Generating Facility's speed governors and voltage regulators are not capable of such automatic operation, Interconnection Customer shall immediately notify Transmission Provider's system operator, or its designated representative, and ensure that such Large Generating Facility's reactive power production or absorption (measured in MVARs) are within the design capability of the Large Generating Facility's generating unit(s) and steady state stability limits. Interconnection Customer shall not cause its Large Generating Facility to disconnect automatically or instantaneously from the Transmission System or trip any generating unit comprising the Large Generating Facility for an under or over frequency condition unless the abnormal frequency condition persists for a time period beyond the limits set forth in ANSI/IEEE Standard C37.106, or such other standard as applied to other generators in the Control Area on a comparable basis.

**9.5.3 Payment for Reactive Power.** Transmission Provider is required to pay Interconnection Customer for reactive power that Interconnection Customer provides or absorbs from the Large Generating Facility when Transmission Provider requests Interconnection Customer to operate its Large Generating Facility outside the range specified in Article 9.6.1, provided that if Transmission Provider pays its own or affiliated generators for reactive power service within the specified range, it must also pay Interconnection Customer. Payments shall be pursuant to Article 11.6 or such other agreement to which the Parties have otherwise agreed.

## **9.6 Outages and Interruptions.**

### **9.6.1 Outages.**

**9.6.1.1 Outage Authority and Coordination.** Each Party may in accordance with Good Utility Practice in coordination with the other Party remove from service any of its respective Interconnection Facilities or Network Upgrades

that may impact the other Party's facilities as necessary to perform maintenance or testing or to install or replace equipment. Absent an Emergency Condition, the Party scheduling a removal of such facility(ies) from service will use Reasonable Efforts to schedule such removal on a date and time mutually acceptable to the Parties. In all circumstances, any Party planning to remove such facility(ies) from service shall use Reasonable Efforts to minimize the effect on the other Party of such removal.

**9.6.1.2 Outage Schedules.** Transmission Provider shall post scheduled outages of its transmission facilities on its Open Access Same-Time Information System ("OASIS"). Interconnection Customer shall submit its planned maintenance schedules for the Large Generating Facility to Transmission Provider for a minimum of a rolling twenty-four month period. Interconnection Customer shall update its planned maintenance schedules as necessary. Transmission Provider may request Interconnection Customer to reschedule its maintenance as necessary to maintain the reliability of the Transmission System; provided, however, adequacy of generation supply shall not be a criterion in determining Transmission System reliability. Transmission Provider shall compensate Interconnection Customer for any additional direct costs that interconnection Customer incurs as a result of having to reschedule maintenance, including any additional overtime, breaking of maintenance contracts or other costs above and beyond the cost Interconnection Customer would have incurred absent Transmission Provider's request to reschedule maintenance. Interconnection Customer will not be eligible to receive compensation, if during the twelve (12) months prior to the date of the scheduled maintenance, interconnection Customer had modified its schedule of maintenance activities.

**9.6.1.3 Outage Restoration.** If an outage on a Party's Interconnection Facilities or Network Upgrades adversely affects the other Party's operations or facilities, the Party that owns or controls the facility that is out of service shall use Reasonable Efforts to promptly restore such facility(ies) to a normal operating condition consistent with the nature of the outage. The Party that owns or controls the facility that is out of service shall provide the other Party, to the extent such information is known, information on the nature of the Emergency Condition, an estimated time of restoration, and any corrective actions required. Initial verbal notice shall be followed up as soon as practicable with written notice explaining the nature of the outage.

**9.6.2 Interruption of Service.** If required by Good Utility Practice to do so, Transmission Provider may require Interconnection Customer to interrupt or reduce deliveries of electricity if such delivery of electricity could adversely affect Transmission Provider's ability to perform such activities as are necessary to safely and reliably operate and maintain the Transmission System. The following provisions shall apply to any interruption or reduction permitted under this Article 9.7.2:

**9.6.2.1** The interruption or reduction shall continue only for so long as

reasonably necessary under Good Utility Practice;

**9.6.2.2** Any such interruption or reduction shall be made on an equitable, non-discriminatory basis with respect to all Generating Facilities directly connected to the Transmission System;

**9.6.2.3** When the interruption or reduction must be made under circumstances which do not allow for advance notice, Transmission Provider shall notify Interconnection Customer by telephone as soon as practicable of the reasons for the curtailment, interruption, or reduction, and, if known, its expected duration. Telephone notification shall be followed by written notification as soon as practicable;

**9.6.2.4** Except during the existence of an Emergency Condition, when the interruption or reduction can be scheduled without advance notice, Transmission Provider shall notify Interconnection Customer in advance regarding the timing of such scheduling and further notify Interconnection Customer of the expected duration. Transmission Provider shall coordinate with Interconnection Customer using Good Utility Practice to schedule the interruption or reduction during periods of least impact to Interconnection Customer and Transmission Provider;

**9.6.2.5** The Parties shall cooperate and coordinate with each other to the extent necessary in order to restore the Large Generating Facility, Interconnection Facilities, and the Transmission System to their normal operating state, consistent with system conditions and Good Utility Practice.

**9.6.3 Under-Frequency and Over Frequency Conditions.** The Transmission System is designed to automatically activate a load-shed program as required by the Applicable Reliability Council in the event of an under-frequency system disturbance. Interconnection Customer shall implement under-frequency and over-frequency relay set points for the Large Generating Facility as required by the Applicable Reliability Council to ensure "ride through" capability of the Transmission System. The Large Generating Facility response to frequency deviations of pre-determined magnitudes, both under-frequency and over-frequency deviations, shall be studied and coordinated with Transmission Provider in accordance with Good Utility Practice. The term "ride through" as used herein shall mean the ability of a Large Generating Facility to stay connected to and synchronized with the Transmission System during system disturbances within a range of under-frequency and over-frequency conditions, in accordance with Good Utility Practice.

#### **9.6.4 System Protection and Other Control Requirements.**

**9.6.4.1 System Protection Facilities.** Interconnection Customer shall, at its expense, install, operate and maintain System Protection Facilities as a part of the Large Generating Facility or Interconnection Customer's Interconnection Facilities. "Transmission Provider shall install at

Interconnection Customer's expense any System Protection Facilities that may be required on Transmission Provider's Interconnection Facilities or the Transmission System as a result of the interconnection of the Large Generating Facility and Interconnection Customer's Interconnection Facilities.

**9.6.4.2** Each Party's protection facilities shall be designed and coordinated with other systems in accordance with Good Utility Practice.

**9.6.4.3** Each Party shall be responsible for protection of its facilities consistent with Good Utility Practice.

**9.6.4.4** Each Party's protective relay design shall incorporate the necessary test switches to perform the tests required in Article 6. The required test switches will be placed such that they allow operation of lockout relays while preventing breaker failure schemes from operating and causing unnecessary breaker operations and/or the tripping of Interconnection Customer's units.

**9.6.4.5** Each Party will test, operate and maintain System Protection Facilities in accordance with Good Utility Practice.

**9.6.4.6** Prior to the In-Service Date, and again prior to the Commercial Operation Date, each Party or its agent shall perform a complete calibration test and functional trip test of the System Protection Facilities. At intervals suggested by Good Utility Practice and following any apparent malfunction of the System Protection Facilities, each Party shall perform both calibration and functional trip tests of its System Protection Facilities. These tests do not require the tripping of any in-service generation unit. These tests do, however, require that all protective relays and lockout contacts be activated.

**9.6.5 Requirements for Protection.** In compliance with Good Utility Practice, Interconnection Customer shall provide, install, own, and maintain relays, circuit breakers and all other devices necessary to remove any fault contribution of the Large Generating Facility to any short circuit occurring on the Transmission System not otherwise isolated by Transmission Provider's equipment, such that the removal of the fault contribution shall be coordinated with the protective requirements of the Transmission System. Such protective equipment shall include, without limitation, a disconnecting device or switch with load-interrupting capability located between the Large Generating Facility and the Transmission System at a site selected upon mutual agreement (not to be unreasonably withheld, conditioned or delayed) of the Parties. Interconnection Customer shall be responsible for protection of the Large Generating Facility and Interconnection Customer's other equipment from such conditions as negative sequence currents, over- or under-frequency, sudden load rejection, over- or under-voltage, and generator loss-of-field. Interconnection Customer shall be solely responsible to disconnect the Large Generating Facility and Interconnection Customer's other equipment if conditions on the Transmission System could adversely affect the Large Generating Facility.

**9.6.6 Power Quality.** Neither Party's facilities shall cause excessive voltage flicker nor introduce excessive distortion to the sinusoidal voltage or current waves as defined by ANSI Standard C84.1-1989, in accordance with IEEE Standard 519, or any applicable superseding electric industry standard. In the event of a conflict between ANSI Standard C84.1-1989, or any applicable superseding electric industry standard, ANSI Standard C84.1-1989, or the applicable superseding electric industry standard, shall control.

**9.7 Switching and Tagging Rules.** Each Party shall provide the other Party a copy of its switching and tagging rules that are applicable to the other Party's activities. Such switching and tagging rules shall be developed on a non-discriminatory basis. The Parties shall comply with applicable switching and tagging rules, as amended from time to time, in obtaining clearances for work or for switching operations on equipment.

**9.8 Use of Interconnection Facilities by Third Parties.**

**9.8.1 Purpose of Interconnection Facilities.** Except as may be required by Applicable Laws and Regulations, or as otherwise agreed to among the Parties, the Interconnection Facilities shall be constructed for the sole purpose of interconnecting the Large Generating Facility to the Transmission System and shall be used for no other purpose.

**9.8.2 Third Party Users.** If required by Applicable Laws and Regulations or if the Parties mutually agree, such agreement not to be unreasonably withheld, to allow one or more third parties to use Transmission Provider's Interconnection Facilities, or any part thereof, Interconnection Customer will be entitled to compensation for the capital expenses it incurred in connection with the Interconnection Facilities based upon the pro rata use of the Interconnection Facilities by Transmission Provider, all third party users, and Interconnection Customer, in accordance with Applicable Laws and Regulations or upon some other mutually-agreed upon methodology. In addition, cost responsibility for ongoing costs, including operation and maintenance costs associated with the Interconnection Facilities, will be allocated between Interconnection Customer and any third party users based upon the pro rata use of the Interconnection Facilities by Transmission Provider, all third party users, and Interconnection Customer, in accordance with Applicable Laws and Regulations or upon some other mutually agreed upon methodology. If the issue of such compensation or allocation cannot be resolved through such negotiations, it shall be submitted to the OPUC for resolution.

**9.9 Disturbance Analysis Data Exchange.** The Parties will cooperate with one another in the analysis of disturbances to either the Large Generating Facility or Transmission Provider's Transmission System by gathering and providing access to any information relating to any disturbance, including information from oscillography, protective relay targets, breaker operations and sequence of events records, and any disturbance information required by Good Utility Practice.

## **Article 10. Maintenance**

**10.1 Transmission Provider Obligations.** Transmission Provider shall maintain the Transmission System and Transmission Provider's Interconnection Facilities in a safe and reliable manner and in accordance with this QF-LGIA.

**10.2 Interconnection Customer Obligations.** Interconnection Customer shall maintain the Large Generating Facility and Interconnection Customer's Interconnection Facilities in a safe and reliable manner and in accordance with this QF-LGIA.

**10.3 Coordination.** The Parties shall confer regularly to coordinate the planning, scheduling and performance of preventive and corrective maintenance on the Large Generating Facility and the Interconnection Facilities.

**10.4 Secondary Systems.** Each Party shall cooperate with the other in the inspection, maintenance, and testing of control or power circuits that operate below 600 volts, AC or DC, including, but not limited to, any hardware, control or protective devices, cables, conductors, electric raceways, secondary equipment panels, transducers, batteries, chargers, and voltage and current transformers that directly affect the operation of a Party's facilities and equipment which may reasonably be expected to impact the other Party. Each Party shall provide advance notice to the other Party before undertaking any work on such circuits, especially on electrical circuits involving circuit breaker trip and close contacts, current transformers, or potential transformers.

**10.5 Operating and Maintenance Expenses.** Subject to the provisions herein addressing the use of facilities by others, and except for operations and maintenance expenses associated with modifications made for providing interconnection or transmission service to a third party and such third party pays for such expenses, Interconnection Customer shall be responsible for all reasonable actual expenses including overheads, associated with: (1) owning, operating, maintaining, repairing, and replacing Interconnection Customer's Interconnection Facilities; and (2) operation, maintenance, repair and replacement of Transmission Provider's Interconnection Facilities.

## **Article 11. Performance Obligation**

**11.1 Interconnection Customer Interconnection Facilities.** Interconnection Customer shall design, procure, construct, install, own and/or control Interconnection Customer Interconnection Facilities described in Appendix A, Interconnection Facilities, Network Upgrades and Distribution Upgrades, at its sole expense.

**11.2 Transmission Provider's Interconnection Facilities.** In accordance with Good Utility Practice, Transmission Provider or Transmission Owner shall design, procure, construct, install, own and/or control the Transmission Provider's Interconnection Facilities described in Appendix A, Interconnection Facilities, Network Upgrades and Distribution Upgrades, at the sole expense of the Interconnection Customer.

**11.3 Network Upgrades and Distribution Upgrades.** Transmission Provider or Transmission Owner shall design, procure, construct, install, and own the Network Upgrades and Distribution Upgrades described in Appendix A, Interconnection Facilities, Network Upgrades and Distribution Upgrades. The Interconnection Customer shall be responsible for all costs related to Distribution Upgrades. Unless Transmission Provider or Transmission Owner elects to fund the capital for the Network Upgrades, they shall be solely funded by Interconnection Customer.

**11.4 Special Provisions for Affected Systems.** The Interconnection Customer shall be responsible for all costs related to Network Upgrades required on Affected Systems.

**11.5 Provision of Security.** At least thirty (30) Calendar Days prior to the commencement of the design, procurement, installation, or construction of a discrete portion of a Transmission Provider's Interconnection Facilities, Network Upgrades, or Distribution Upgrades, Interconnection Customer shall provide Transmission Provider, at Interconnection Customer's option, a guarantee, a surety bond, letter of credit or other form of security that is reasonably acceptable to Transmission Provider and is consistent with the Uniform Commercial Code of the jurisdiction identified in Article 14.2.1. Such security for payment shall be in an amount sufficient to cover the costs for constructing, designing, procuring and installing the applicable portion of Transmission Provider's Interconnection Facilities, Network Upgrades, or Distribution Upgrades and shall be reduced on a dollar-for-dollar basis for payments made to Transmission Provider for these purposes.

In addition:

**11.5.1** The guarantee must be made by an entity that meets the creditworthiness requirements of Transmission Provider, and contain terms and conditions that guarantee payment of any amount that may be due from Interconnection Customer, up to an agreed-to maximum amount.

**11.5.2** The letter of credit must be issued by a financial institution reasonably acceptable to Transmission Provider and must specify a reasonable expiration date.

**11.5.3** The surety bond must be issued by an insurer reasonably acceptable to Transmission Provider and must specify a reasonable expiration date.

**11.6 Interconnection Customer Compensation.** If Transmission Provider requests or directs Interconnection Customer to provide a service pursuant to Articles 9.5.3 (Payment for Reactive Power), or 13.4.1 of this QF-LGIA, Transmission Provider shall compensate Interconnection Customer in accordance with Interconnection Customer's applicable rate schedule then in effect unless the provision of such service(s) is subject to an RTO or ISO FERC-approved rate schedule. Interconnection Customer shall serve Transmission Provider or RTO or ISO with any filing of a proposed rate schedule at the time of such filing with FERC. To the extent that no rate schedule is in effect at the time the Interconnection Customer is required to provide or absorb any Reactive Power under this QF-LGIA, Transmission Provider agrees to compensate Interconnection Customer in such amount as would have been due Interconnection Customer had the rate schedule

been in effect at the time service commenced; provided, however, that such rate schedule must be filed at FERC or other appropriate Governmental Authority within sixty (60) Calendar Days of the commencement of service.

**11.6.1 Interconnection Customer Compensation for Actions During Emergency Condition.** Transmission Provider or RTO or ISO shall compensate Interconnection Customer for its provision of real and reactive power and other Emergency Condition services that Interconnection Customer provides to support the Transmission System during an Emergency Condition in accordance with Article 11.6.

## **Article 12. Invoice**

**12.1 General.** Each Party shall submit to the other Party, on a monthly basis, invoices of amounts due for the preceding month. Each invoice shall state the month to which the invoice applies and fully describe the services and equipment provided. The Parties may discharge mutual debts and payment obligations due and owing to each other on the same date through netting, in which case all amounts a Party owes to the other Party under this QF-LGIA, including interest payments or credits, shall be netted so that only the net amount remaining due shall be paid by the owing Party.

**12.2 Final Invoice.** Within six months after completion of the construction of Transmission Provider's Interconnection Facilities and the Network Upgrades, Transmission Provider shall provide an invoice of the final cost of the construction of Transmission Provider's Interconnection Facilities and the Network Upgrades and shall set forth such costs in sufficient detail to enable Interconnection Customer to compare the actual costs with the estimates and to ascertain deviations, if any, from the cost estimates. Transmission Provider shall refund to Interconnection Customer any amount by which the actual payment by Interconnection Customer for estimated costs exceeds the actual costs of construction within thirty (30) Calendar Days of the issuance of such final construction invoice.

**12.3 Payment.** Invoices shall be rendered to the paying Party at the address specified in Appendix F. The Party receiving the invoice shall pay the invoice within thirty (30) Calendar Days of receipt. All payments shall be made in immediately available funds payable to the other Party, or by wire transfer to a bank named and account designated by the invoicing Party. Payment of invoices by either Party will not constitute a waiver of any rights or claims either Party may have under this QF-LGIA.

**12.4 Disputes.** In the event of a billing dispute between Transmission Provider and Interconnection Customer, Transmission Provider shall continue to provide Interconnection Service under this QF-LGIA as long as Interconnection Customer: (i) continues to make all payments not in dispute; and (ii) pays to Transmission Provider or into an independent escrow account the portion of the invoice in dispute, pending resolution of such dispute. If Interconnection Customer fails to meet these two requirements for continuation of service, then Transmission Provider may provide notice to Interconnection Customer of a Default pursuant to Article 17. Within thirty

(30) Calendar Days after the resolution of the dispute, the Party that owes money to the other Party shall pay the amount due with interest calculated in accord with the methodology set forth in FERC's regulations at 18 CFR § 35.19a(a)(2)(iii).

## **Article 13. Emergencies**

**13.1 Obligations.** Each Party shall comply with the Emergency Condition procedures of the applicable ISO/RTO, NERC, the Applicable Reliability Council, Applicable Laws and Regulations, and any emergency procedures agreed to by the Parties.

**13.2 Notice.** Transmission Provider shall notify Interconnection Customer promptly when it becomes aware of an Emergency Condition that affects Transmission Provider's Interconnection Facilities or the Transmission System that may reasonably be expected to affect Interconnection Customer's operation of the Large Generating Facility or Interconnection Customer's Interconnection Facilities. Interconnection Customer shall notify Transmission Provider promptly when it becomes aware of an Emergency Condition that affects the Large Generating Facility or Interconnection Customer's Interconnection Facilities that may reasonably be expected to affect the Transmission System or Transmission Provider's Interconnection Facilities. 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 Interconnection Customer's or Transmission Provider's facilities and operations, its anticipated duration and the corrective action taken and/or to be taken. The initial notice shall be followed as soon as practicable with written notice.

**13.3 Immediate Action.** Unless, in Interconnection Customer's reasonable judgment, immediate action is required, Interconnection Customer shall obtain the consent of Transmission Provider, such consent to not be unreasonably withheld, prior to performing any manual switching operations at the Large Generating Facility or Interconnection Customer's Interconnection Facilities in response to an Emergency Condition either declared by Transmission Provider or otherwise regarding the Transmission System.

### **13.4 Transmission Provider Authority.**

**13.4.1 General.** Transmission Provider may take whatever actions or inactions with regard to the Transmission System or Transmission Provider's Interconnection Facilities it deems necessary during an Emergency Condition in order to (i) preserve public health and safety, (ii) preserve the reliability of the Transmission System or Transmission Provider's Interconnection Facilities, (iii) limit or prevent damage, and (iv) expedite restoration of service.

Transmission Provider shall use Reasonable Efforts to minimize the effect of such actions or inactions on the Large Generating Facility or Interconnection Customer's Interconnection Facilities. Transmission Provider may, on the basis of technical considerations, require the Large Generating Facility to mitigate an Emergency Condition by taking actions necessary and limited in scope to remedy the

Emergency Condition, including, but not limited to, directing Interconnection Customer to shut-down, start-up, increase or decrease the real or reactive power output of the Large Generating Facility; implementing a reduction or disconnection pursuant to Article 13.4.2; directing Interconnection Customer to assist with blackstart (if available) or restoration efforts; or altering the outage schedules of the Large Generating Facility and Interconnection Customer's Interconnection Facilities. Interconnection Customer shall comply with all of Transmission Provider's operating instructions concerning Large Generating Facility real power and reactive power output within the manufacturer's design limitations of the Large Generating Facility's equipment that is in service and physically available for operation at the time, in compliance with Applicable Laws and Regulations.

**13.4.2 Reduction and Disconnection.** Transmission Provider may reduce Interconnection Service or disconnect the Large Generating Facility or Interconnection Customer's Interconnection Facilities, when such, reduction or disconnection is necessary under Good Utility Practice due to Emergency Conditions. These rights are separate and distinct from any right of curtailment of Transmission Provider pursuant to Transmission Provider's OATT. When Transmission Provider can schedule the reduction or disconnection in advance, Transmission Provider shall notify Interconnection Customer of the reasons, timing and expected duration of the reduction or disconnection. Transmission Provider shall coordinate with Interconnection Customer using Good Utility Practice to schedule the reduction or disconnection during periods of least impact to Interconnection Customer and Transmission Provider. Any reduction or disconnection shall continue only for so long as reasonably necessary under Good Utility Practice. The Parties shall cooperate with each other to restore the Large Generating Facility, the Interconnection Facilities, and the Transmission System to their normal operating state as soon as practicable consistent with Good Utility Practice.

**13.5 Interconnection Customer Authority.** Consistent with Good Utility Practice and the QF-LGIA and the QF-LGIP, Interconnection Customer may take actions or inactions with regard to the Large Generating Facility or Interconnection Customer's Interconnection Facilities during an Emergency Condition in order to (i) preserve public health and safety, (ii) preserve the reliability of the Large Generating Facility or Interconnection Customer's Interconnection Facilities, (iii) limit or prevent damage, and (iv) expedite restoration of service. Interconnection Customer shall use Reasonable Efforts to minimize the effect of such actions or inactions on the Transmission System and Transmission Provider's Interconnection Facilities. Transmission Provider shall use Reasonable Efforts to assist Interconnection Customer in such actions.

**13.6 Limited Liability.** Except as otherwise provided in Article 11.6.1 of this LGIA, neither Party shall be liable to the other for any action it takes in responding to an Emergency Condition so long as such action is made in good faith and is consistent with Good Utility Practice.

## **Article 14. Regulatory Requirements and Governing Law**

**14.1 Regulatory Requirements.** Each Party's obligations under this QF-LGIA shall be subject to its receipt of any required approval or certificate from one or more Governmental Authorities in the form and substance satisfactory to the applying Party, or the Party making any required filings with, or providing notice to, such Governmental Authorities, and the expiration of any time period associated therewith. These regulatory requirements include, but are not limited to, certification of the Interconnection Customer's Generating Facility as a QF. Each Party shall in good faith seek and use its Reasonable Efforts to obtain such other approvals. Nothing in this QF-LGIA shall require Interconnection Customer to take any action that could result in its inability to obtain, or its loss of, status or exemption under the Federal Power Act, the Public Utility Holding Company Act of 1935, as amended, or the Public Utility Regulatory Policies Act of 1978.

### **14.2 Governing Law.**

**14.2.1** The validity, interpretation and performance of this QF-LGIA and each of its provisions shall be governed by the laws of the state where the Point of Interconnection is located, without regard to its conflicts of law principles.

**14.2.2** This QF-LGIA is subject to all Applicable Laws and Regulations.

**14.2.3** Each Party expressly reserves the right to seek changes in, appeal, or otherwise contest any laws, orders, rules, or regulations of a Governmental Authority.

## **Article 15. Notices.**

**15.1 General.** Unless otherwise provided in this QF-LGIA, any notice, demand or request required or permitted to be given by either Party to the other and any instrument required or permitted to be tendered or delivered by either Party in writing to the other shall be effective when delivered and may be so given, tendered or delivered, by recognized national courier, or by depositing the same with the United States Postal Service with postage prepaid, for delivery by certified or registered mail, addressed to the Party, or personally delivered to the Party, at the address set out in Appendix F, Addresses for Delivery of Notices and Billings.

Either Party may change the notice information in this QF-LGIA by giving five (5) Business Days written notice prior to the effective date of the change.

**15.2 Billings and Payments.** Billings and payments shall be sent to the addresses set out in Appendix F.

**15.3 Alternative Forms of Notice.** Any notice or request required or permitted to be given by a Party to the other and not required by this QF-LGIA to be given in writing may be so given by telephone, facsimile or email to the telephone numbers and email addresses set out in Appendix F.

**15.4 Operations and Maintenance Notice.** Each Party shall notify the other Party in writing of the identity of the person(s) that it designates as the point(s) of contact with respect to the implementation of Articles 9 and 10.

## **Article 16. Force Majeure**

### **16.1 Force Majeure.**

**16.1.1** Economic hardship is not considered a Force Majeure event.

**16.1.2** Neither Party shall be considered to be in Default with respect to any obligation hereunder, (including obligations under Article 4), other than the obligation to pay money when due, if prevented from fulfilling such obligation by Force Majeure. A Party unable to fulfill any obligation hereunder (other than an obligation to pay money when due) by reason of Force Majeure shall give notice and the full particulars of such Force Majeure to the other Party in writing or by telephone as soon as reasonably possible after the occurrence of the cause relied upon. Telephone notices given pursuant to this article shall be confirmed in writing as soon as reasonably possible and shall specifically state full particulars of the Force Majeure, the time and date when the Force Majeure occurred and when the Force Majeure is reasonably expected to cease. The Party affected shall exercise due diligence to remove such disability with reasonable dispatch, but shall not be required to accede or agree to any provision not satisfactory to it in order to settle and terminate a strike or other labor disturbance.

## **Article 17. Default**

### **17.1 Default**

**17.1.1 General.** No Default shall exist where such failure to discharge an obligation (other than the payment of money) is the result of Force Majeure as defined in this QF-LGIA or the result of an act of omission of the other Party. Upon a Breach, the non-breaching Party shall give written notice of such Breach to the Breaching Party. Except as provided in Article 17.1.2, the Breaching Party shall have thirty (30) Calendar Days from receipt of the Breach notice within which to cure such Breach; provided however, if such Breach is not capable of cure within thirty (30) Calendar Days, the Breaching Party shall commence such cure within thirty (30) Calendar Days after notice and continuously and diligently complete such cure within ninety (90) Calendar Days from receipt of the Breach notice; and, if cured within such time, the Breach specified in such notice shall cease to exist.

**17.1.2 Right to Terminate.** If a Breach is not cured as provided in this article, or if a Breach is not capable of being cured within the period provided for herein, the non-breaching Party shall have the right to declare a Default and terminate this QF-LGIA by written notice at any time until cure occurs, and be relieved of any further obligation hereunder and, whether or not that Party terminates this QF-LGIA, to recover from the Breaching Party all amounts due hereunder, plus all other damages

and remedies to which it is entitled at law or in equity. The provisions of this article will survive termination of this QF-LGIA.

## **Article 18. Indemnity, Consequential Damages and Insurance**

**18.1 Indemnity.** 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 inactions of its obligations under this QF-LGIA on behalf of the Indemnifying Party, except in cases of gross negligence or intentional wrongdoing by the indemnified Party.

**18.1.1 Indemnified Person.** If an Indemnified Person is entitled to indemnification under this Article 18 as a result of a claim by a third party, and the Indemnifying Party fails, after notice and reasonable opportunity to proceed under Article 18.1, to assume the defense of such 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.

**18.1.2 Indemnifying Party.** If an Indemnifying Party is obligated to indemnify and hold any Indemnified Person harmless under this Article 18, 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.

**18.1.3 Indemnity Procedures.** 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 Article 18.1 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.

The Indemnifying Party shall have the right to assume the defense thereof with counsel designated by such Indemnifying Party and reasonably satisfactory to the Indemnified Person. If the defendants in any such action include one or more Indemnified Persons and the Indemnifying Party and if the Indemnified Person reasonably concludes that there may be legal defenses available to it and/or other Indemnified Persons which are different from or additional to those available to the Indemnifying Party, the Indemnified Person shall have the right to select separate counsel to assert such legal defenses and to otherwise participate in the defense of such action on its own behalf. In such instances, the Indemnifying Party shall only be required to pay the fees and expenses of one additional attorney to represent an Indemnified Person or Indemnified Persons having such differing or additional legal defenses.

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

**18.2 Consequential Damages.** Other than the Liquidated Damages heretofore described, in no event shall either Party be liable under any provision of this QF-LGIA 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.

**18.3 Insurance.** Each party shall, at its own expense, maintain in force throughout the period of this QF-LGIA, and until released by the other Party, the following minimum insurance coverages, with insurers authorized to do business in the state where the Point of Interconnection is located:

**18.3.1** Employers' Liability and Workers' Compensation Insurance providing statutory benefits in accordance with the laws and regulations of the state in which the Point of Interconnection is located.

**18.3.2** Commercial General Liability Insurance including premises and operations, personal injury, broad form property damage, broad form blanket contractual liability coverage (including coverage for the contractual indemnification) products and completed operations coverage, coverage for explosion, collapse and underground hazards, independent contractors coverage, coverage for pollution to the extent normally available and punitive damages to the extent normally available and a cross liability endorsement, with minimum limits of One Million Dollars (\$ 1,000,000) per occurrence/One Million Dollars (\$ 1,000,000) aggregate combined single limit for personal injury, bodily injury, including death and property damage.

**18.3.3** Comprehensive Automobile Liability Insurance for coverage of owned and non-owned and hired vehicles, trailers or semi-trailers designed for travel on public roads, with a minimum, combined single limit of One Million Dollars (\$ 1,000,000) per occurrence for bodily injury, including death, and property damage.

**18.3.4** Excess Public Liability Insurance over and above the Employers' Liability

Commercial General Liability and Comprehensive Automobile Liability Insurance coverage, with a minimum combined single limit of Twenty Million Dollars (\$ 20,000,000) per occurrence/Twenty Million Dollars (\$ 20,000,000) aggregate.

**18.3.5** The Commercial General Liability Insurance, Comprehensive Automobile Insurance and Excess Public Liability Insurance policies shall name the other Party, its parent, associated and Affiliate companies and their respective directors, officers, agents, servants and employees ("Other Party Group") as additional insured. All policies shall contain provisions whereby the insurers waive all rights of subrogation in accordance with the provisions of this QF-LGIA against the Other Party Group and provide thirty (30) Calendar Days advance written notice to the Other Party Group prior to anniversary date of cancellation or any material change in coverage or condition.

**18.3.6** The Commercial General Liability Insurance, Comprehensive Automobile Liability Insurance and Excess Public Liability Insurance policies shall contain provisions that specify that the policies are primary and shall apply to such extent without consideration for other policies separately carried and shall state that each insured is provided coverage as though a separate policy had been issued to each, except the insurer's liability shall not be increased beyond the amount for which the insurer would have been liable had only one insured been covered. Each Party shall be responsible for its respective deductibles or retentions.

**18.3.7** The Commercial General Liability Insurance, Comprehensive Automobile Liability Insurance and Excess Public Liability Insurance policies, if written on a Claims First Made Basis, shall be maintained in full force and effect for two (2) years after termination of this QF-LGIA, which coverage may be in the form of tail coverage or extended reporting period coverage if agreed by the Parties.

**18.3.8** The requirements contained herein as to the types and limits of all insurance to be maintained by the Parties are not intended to and shall not in any manner, limit or qualify the liabilities and obligations assumed by the Parties under this QF-LGIA.

**18.3.9** Within ten (10) days following execution of this QF-LGIA, and as soon as practicable after the end of each fiscal year or at the renewal of the insurance policy and in any event within ninety (90) days thereafter, each Party shall provide certification of all insurance required in this QF-LGIA, executed by each insurer or by an authorized representative of each insurer.

**18.3.10** Notwithstanding the foregoing, each Party may self-insure to meet the minimum insurance requirements of Articles 18.3.2 through 18.3.8 to the extent it maintains a self-insurance program; provided that, such Party's senior secured debt is rated at investment grade or better by Standard & Poor's and that its self-insurance program meets the minimum insurance requirements of Articles 18.3.2 through 18.3.8. For any period of time that a Party's senior secured debt is unrated by Standard & Poor's or is rated at less than investment grade by Standard & Poor's, such Party shall comply with the insurance requirements applicable to it under

Articles 18.3.2 through 18.3.9. In the event that a Party is permitted to self-insure pursuant to this article, it shall notify the other Party that it meets the requirements to self-insure and that its self-insurance program meets the minimum insurance requirements in a manner consistent with that specified in Article 18.3.9.

**18.3.11** The Parties agree to report to each other in writing as soon as practical all accidents or occurrences resulting in injuries to any person, including death, and any property damage arising out of this QF-LGIA.

## **Article 19. Assignment**

**19.1 Assignment.** This QF-LGIA may be assigned by either Party only with the written consent of the other; provided that either Party may assign this QF-LGIA without the consent of the other Party to any Affiliate 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 QF-LGIA; and provided further that Interconnection Customer shall have the right to assign this QF-LGIA, without the consent of Transmission Provider, for collateral security purposes to aid in providing financing for the Large Generating Facility, provided that Interconnection Customer will promptly notify Transmission Provider of any such assignment. Any financing arrangement entered into by Interconnection Customer pursuant to this article will provide that prior to or upon the exercise of the secured party's, trustee's or mortgagee's assignment rights pursuant to said arrangement, the secured creditor, the trustee or mortgagee will notify Transmission Provider of the date and particulars of any such exercise of assignment right(s), including providing the Transmission Provider with proof that it meets the requirements of Articles 11.5 and 18.3. Any attempted assignment that violates this article is void and ineffective. Any assignment under this QF-LGIA shall not relieve a Party of its obligations, nor shall a Party's obligations be enlarged, in whole or in part, by reason thereof. Where required, consent to assignment will not be unreasonably withheld, conditioned or delayed.

## **Article 20. Severability**

**20.1 Severability.** If any provision in this QF-LGIA is finally determined to be invalid, void or unenforceable by any court or other Governmental Authority having jurisdiction, such determination shall not invalidate, void or make unenforceable any other provision, agreement or covenant of this QF-LGIA; provided that if Interconnection Customer (or any third party, but only if such third party is not acting at the direction of Transmission Provider) seeks and obtains such a final determination with respect to any provision of the Alternate Option (Article 5.1.2), or the Negotiated Option (Article 5.1.4), then none of these provisions shall thereafter have any force or effect and the Parties' rights and obligations shall be governed solely by the Standard Option (Article 5.1.1).

## **Article 21. Comparability**

**21.1 Comparability.** The Parties will comply with all applicable comparability and code of conduct laws, rules and regulations, as amended from time to time.

## Article 22. Confidentiality

**22.1 Confidentiality.** Confidential Information shall include, without limitation, all information relating to a Party's technology, research and development, business affairs, and pricing, and any information supplied by either of the Parties to the other prior to the execution of this QF-LGIA.

Information is Confidential Information only if it is clearly designated or marked in writing as confidential on the face of the document, or, if the information is conveyed orally or by inspection, if the Party providing the information orally informs the Party receiving the information that the information is confidential.

If requested by either Party, the other Party shall provide in writing, the basis for asserting that the information referred to in this Article 22 warrants confidential treatment, and the requesting Party may disclose such writing to the appropriate Governmental Authority. Each Party shall be responsible for the costs associated with affording confidential treatment to its information. The release of Confidential Information shall be subject to Applicable Laws and Regulations and Applicable Reliability Standards.

**22.1.1 Term.** During the term of this QF-LGIA, and for a period of three (3) years after the expiration or termination of this QF-LGIA, except as otherwise provided in this Article 22, each Party shall hold in confidence and shall not disclose to any person Confidential Information.

**22.1.2 Scope.** Confidential Information shall not include information that the receiving Party can demonstrate: (1) is generally available to the public other than as a result of a disclosure by the receiving Party; (2) was in the lawful possession of the receiving Party on a non-confidential basis before receiving it from the disclosing Party; (3) was supplied to the receiving Party without restriction by a third party, who, to the knowledge of the receiving Party after due inquiry, was under no obligation to the disclosing Party to keep such information confidential; (4) was independently developed by the receiving Party without reference to Confidential Information of the disclosing Party; (5) is, or becomes, publicly known, through no wrongful act or omission of the receiving Party or Breach of this QF-LGIA; or (6) is required, in accordance with Article 22.1.7 of the QF-LGIA, Order of Disclosure, to be disclosed by any Governmental Authority or is otherwise required to be disclosed by law or subpoena, or is necessary in any legal proceeding establishing rights and obligations under this QF-LGIA. Information designated as Confidential Information will no longer be deemed confidential if the Party that designated the information as confidential notifies the other Party that it no longer is confidential.

**22.1.3 Release of Confidential Information.** Neither Party shall release or disclose Confidential Information to any other person, except to its Affiliates (limited by the Standards of Conduct requirements), subcontractors, employees, consultants, or to parties who may be or considering providing financing to or equity participation with Interconnection Customer, or to potential purchasers or

assignees of Interconnection Customer, on a need-to-know basis in connection with this QF-LGIA, unless such person has first been advised of the confidentiality provisions of this Article 22 and has agreed to comply with such provisions. Notwithstanding the foregoing, a Party providing Confidential Information to any person shall remain primarily responsible for any release of Confidential Information in contravention of this Article 22.

**22.1.4 Rights.** Each Party retains all rights, title, and interest in the Confidential Information that each Party discloses to the other Party. The disclosure by each Party to the other Party of Confidential Information shall not be deemed a waiver by either Party or any other person or entity of the right to protect the Confidential Information from public disclosure.

**22.1.5 No Warranties.** By providing Confidential Information, neither Party makes any warranties or representations as to its accuracy or completeness. In addition, by supplying Confidential Information, neither Party obligates itself to provide any particular information or Confidential Information to the other Party nor to enter into any further agreements or proceed with any other relationship or joint venture.

**22.1.6 Standard of Care.** Each Party shall use at least the same standard of care to protect Confidential Information it receives as it uses to protect its own Confidential Information from unauthorized disclosure, publication or dissemination. Each Party may use Confidential Information solely to fulfill its obligations to the other Party under this QF-LGIA or its regulatory requirements.

**22.1.7 Order of Disclosure.** If a court or a Government Authority or entity with the right, power, and apparent authority to do so requests or requires either Party, by subpoena, oral deposition, interrogatories, requests for production of documents, administrative order, or otherwise, to disclose Confidential Information, that Party shall provide the other Party with prompt notice of such request(s) or requirement(s) so that the other Party may seek an appropriate protective order or waive compliance with the terms of this QF-LGIA. Notwithstanding the absence of a protective order or waiver, the Party may disclose such Confidential Information which, in the opinion of its counsel, the Party is legally compelled to disclose. Each Party will use Reasonable Efforts to obtain reliable assurance that confidential treatment will be accorded any Confidential Information so furnished.

**22.1.8 Termination of Agreement.** Upon termination of this QF-LGIA for any reason, each Party shall, within ten (10) Calendar Days of receipt of a written request from the other Party, use Reasonable Efforts to destroy, erase, or delete (with such destruction, erasure, and deletion certified in writing to the other Party) or return to the other Party, without retaining copies thereof, any and all written or electronic Confidential Information received from the other Party.

**22.1.9 Remedies.** The Parties agree that monetary damages would be inadequate to compensate a Party for the other Party's Breach of its obligations under this Article 22. Each Party accordingly agrees that the other Party shall be entitled to

equitable relief, by way of injunction or otherwise, if the first Party Breaches or threatens to Breach its obligations under this Article 22, which equitable relief shall be granted without bond or proof of damages, and the receiving Party shall not plead in defense that there would be an adequate remedy at law. Such remedy shall not be deemed an exclusive remedy for the Breach of this Article 22, but shall be in addition to all other remedies available at law or in equity. The Parties further acknowledge and agree that the covenants contained herein are necessary for the protection of legitimate business interests and are reasonable in scope. No Party, however, shall be liable for indirect, incidental, or consequential or punitive damages of any nature or kind resulting from or arising in connection with this Article 22.

**22.1.10 Disclosure to OPUC or its Staff.** Notwithstanding anything in this Article 22 to the contrary, and pursuant to 18 CFR section 1b.20, if OPUC or its staff, during the course of an investigation or otherwise, requests information from one of the Parties that is otherwise required to be maintained in confidence pursuant to this QF-LGIA, the Party shall provide the requested information to OPUC or its staff, within the time provided for in the request for information. In providing the information to OPUC or its staff, the Party must request that the information be treated as confidential and non-public by OPUC and its staff and that the information be withheld from public disclosure. Parties are prohibited from notifying the other Party to this QF-LGIA prior to the release of the Confidential Information to OPUC or its staff. The Party shall notify the other Party to the QF-LGIA when it is notified by OPUC or its staff that a request to release Confidential Information has been received by OPUC, at which time either of the Parties may respond before such information would be made public,

**22.1.11** Subject to the exception in Article 22.1.10, any information that a Party claims is competitively sensitive, commercial or financial information under this QF-LGIA ("Confidential Information") shall not be disclosed by the other Party to any person not employed or retained by the other Party, except to the extent disclosure is (i) required by law; (ii) reasonably deemed by the disclosing Party to be required to be disclosed in connection with a dispute between or among the Parties, or the defense of litigation or dispute; (iii) otherwise permitted by consent of the other Party, such consent not to be unreasonably withheld; or (iv) necessary to fulfill its obligations under this QF-LGIA or as a transmission service provider or a Control Area operator including disclosing the Confidential Information to an RTO or ISO or to a regional or national reliability organization. The Party asserting confidentiality shall notify the other Party in writing of the information it claims is confidential. Prior to any disclosures of the other Party's Confidential Information under this subparagraph, or if any third party or Governmental Authority makes any request or demand for any of the information described in this subparagraph, the disclosing Party agrees to promptly notify the other Party in writing and agrees to assert confidentiality and cooperate with the other Party in seeking to protect the Confidential Information from public disclosure by confidentiality agreement, protective order or other reasonable measures.

## **Article 23. Environmental Releases**

**23.1** Each Party shall notify the other Party, first orally and then in writing, of the release of any Hazardous Substances, any asbestos or lead abatement activities, or any type of remediation activities related to the Large Generating Facility or the Interconnection Facilities, each of which may reasonably be expected to affect the other Party. The notifying Party shall: (i) provide the notice as soon as practicable, provided such Party makes a good faith effort to provide the notice no later than twenty-four hours after such Party becomes aware of the occurrence; and (ii) promptly furnish to the other Party copies of any publicly available reports filed with any Governmental Authorities addressing such events.

## **Article 24. Information Requirements**

**24.1 Information Acquisition.** Transmission Provider and Interconnection Customer shall submit specific information regarding the electrical characteristics of their respective facilities to each other as described below and in accordance with Applicable Reliability Standards.

**24.2 Information Submission by Transmission Provider.** The initial information submission by Transmission Provider shall occur no later than one hundred eighty (180) Calendar Days prior to Trial Operation and shall include Transmission System information necessary to allow Interconnection Customer to select equipment and meet any system protection and stability requirements, unless otherwise agreed to by the Parties. On a monthly basis Transmission Provider shall provide Interconnection Customer a status report on the construction and installation of Transmission Provider's Interconnection Facilities and Network Upgrades, including, but not limited to, the following information: (1) progress to date; (2) a description of the activities since the last report (3) a description of the action items for the next period; and (4) the delivery status of equipment ordered.

**24.3 Updated Information Submission by Interconnection Customer.** The updated information submission by Interconnection Customer, including manufacturer information, shall occur no later than one hundred eighty (180) Calendar Days prior to the Trial Operation. Interconnection Customer shall submit a completed copy of the Large Generating Facility data requirements contained in Appendix 1 to the LGIP. It shall also include any additional information provided to Transmission Provider for the Feasibility and Facilities Study. Information in this submission shall be the most current Large Generating Facility design or expected performance data. Information submitted for stability models shall be compatible with Transmission Provider standard models. If there is no compatible model, Interconnection Customer will work with a consultant mutually agreed to by the Parties to develop and supply a standard model and associated information.

If Interconnection Customer's data is materially different from what was originally provided to Transmission Provider pursuant to the Interconnection Study Agreement between Transmission Provider and Interconnection Customer, then Transmission

Provider will conduct appropriate studies to determine the impact on Transmission Provider Transmission System based on the actual data submitted pursuant to this Article 24.3. The Interconnection Customer shall not begin Trial Operation until such studies are completed.

**24.4 Information Supplementation.** Prior to the Commercial Operation Date, the Parties shall supplement their information submissions described above in this Article 24 with any and all "as-built" Large Generating Facility information or "as-tested" performance information that differs from the initial submissions or, alternatively, written confirmation that no such differences exist. The Interconnection Customer shall conduct tests on the Large Generating Facility as required by Good Utility Practice such as an open circuit "step voltage" test on the Large Generating Facility to verify proper operation of the Large Generating Facility's automatic voltage regulator.

Unless otherwise agreed, the test conditions shall include: (1) Large Generating Facility at synchronous speed; (2) automatic voltage regulator on and in voltage control mode; and (3) a five percent change in Large Generating Facility terminal voltage initiated by a change in the voltage regulators reference voltage. Interconnection Customer shall provide validated test recordings showing the responses of Large Generating Facility terminal and field voltages. In the event that direct recordings of these voltages is impractical, recordings of other voltages or currents that mirror the response of the Large Generating Facility's terminal or field voltage are acceptable if information necessary to translate these alternate quantities to actual Large Generating Facility terminal or field voltages is provided. Large Generating Facility testing shall be conducted and results provided to Transmission Provider for each individual generating unit in a station.

Subsequent to the Commercial Operation Date, Interconnection Customer shall provide Transmission Provider any information changes due to equipment replacement, repair, or adjustment. Transmission Provider shall provide Interconnection Customer any information changes due to equipment replacement, repair or adjustment in the directly connected substation or any adjacent Transmission Provider-owned substation that may affect Interconnection Customer's Interconnection Facilities equipment ratings, protection or operating requirements. The Parties shall provide such information no later than thirty (30) Calendar Days after the date of the equipment replacement, repair or adjustment.

## **Article 25. Information Access and Audit Rights**

**25.1 Information Access.** Each Party (the "disclosing Party") shall make available to the other Party information that is in the possession of the disclosing Party and is necessary in order for the other Party to: (i) verify the costs incurred by the disclosing Party for which the other Party is responsible under this QF-LGIA; and (ii) carry out its obligations and responsibilities under this QF-LGIA. The Parties shall not use such information for purposes other than those set forth in this Article 25.1 and to enforce their rights under this QF-LGIA.

**25.2 Reporting of Non-Force Majeure Events.** Each Party (the "notifying Party") shall notify the other Party when the notifying Party becomes aware of its inability to comply with the provisions of this QF-LGIA for a reason other than a Force Majeure event. The Parties agree to cooperate with each other and provide necessary information regarding such inability to comply, including the date, duration, reason for the inability to comply, and corrective actions taken or planned to be taken with respect to such inability to comply. Notwithstanding the foregoing, notification, cooperation or information provided under this article shall not entitle the Party receiving such notification to allege a cause for anticipatory breach of this QF-LGIA.

**25.3 Audit Rights.** Subject to the requirements of confidentiality under Article 22 of this QF-LGIA, each Party shall have the right, during normal business hours, and upon prior reasonable notice to the other Party, to audit at its own expense the other Party's accounts and records pertaining to either Party's performance or either Party's satisfaction of obligations under this QF-LGIA. Such audit rights shall include audits of the other Party's costs, calculation of invoiced amounts, Transmission Provider's efforts to allocate responsibility for the provision of reactive support to the Transmission System, Transmission Provider's efforts to allocate responsibility for interruption or reduction of generation on the Transmission System, and each Party's actions in an Emergency Condition. Any audit authorized by this Article shall be performed at the offices where such accounts and records are maintained and shall be limited to those portions of such accounts and records that relate to each Party's performance and satisfaction of obligations under this QF-LGIA. Each Party shall keep such accounts and records for a period equivalent to the audit rights periods described in Article 25.4.

#### **25.4 Audit Rights Periods.**

**25.4.1 Audit Rights Period for Construction-Related Accounts and Records.** Accounts and records related to the design, engineering, procurement, and construction of Transmission Provider's Interconnection Facilities and Network Upgrades shall be subject to audit for a period of twenty-four months following Transmission Provider's issuance of a final invoice in accordance with Article 12.2.

**25.4.2 Audit Rights Period for All Other Accounts and Records.** Accounts and records related to either Party's performance or satisfaction of all obligations under this QF-LGIA other than those described in Article 25.4.1 shall be subject to audit as follows: (i) for an audit relating to cost obligations, the applicable audit rights period shall be twenty-four months after the auditing Party's receipt of an invoice giving rise to such cost obligations; and (ii) for an audit relating to all other obligations, the applicable audit rights period shall be twenty-four months after the event for which the audit is sought.

**25.5 Audit Results.** If an audit by a Party determines that an overpayment or an underpayment has occurred, a notice of such overpayment or underpayment shall be given to the other Party together with those records from the audit which support such determination.

## **Article 26. Subcontractors**

**26.1 General.** Nothing in this QF-LGIA shall prevent a Party from utilizing the services of any subcontractor as it deems appropriate to perform its obligations under this QF-LGIA; provided, however, that each Party shall require its subcontractors to comply with all applicable terms and conditions of this QF-LGIA in providing such services and each Party shall remain primarily liable to the other Party for the performance of such subcontractor.

**26.2 Responsibility of Principal.** The creation of any subcontract relationship shall not relieve the hiring Party of any of its obligations under this QF-LGIA. 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; provided, however, that in no event shall Transmission Provider be liable for the actions or inactions of Interconnection Customer or its subcontractors with respect to obligations of Interconnection Customer under Article 5 of this QF-LGIA. Any applicable obligation imposed by this QF-LGIA upon the hiring Party shall be equally binding upon, and shall be construed as having application to, any subcontractor of such Party.

**26.3 No Limitation by Insurance.** The obligations under this Article 26 will not be limited in any way by any limitation of subcontractor's insurance.

## **Article 27. Disputes**

**27.1 Submission.** In the event either Party has a dispute, or asserts a claim, that arises out of or in connection with this QF-LGIA or its performance, such Party (the "disputing Party") shall provide the other Party with written notice of the dispute or claim ("Notice of Dispute"). Such dispute or claim shall be referred to a designated senior representative of each Party for resolution on an informal basis as promptly as practicable after receipt of the Notice of Dispute by the other Party. In the event the designated representatives are unable to resolve the claim or dispute through unassisted or assisted negotiations within thirty (30) Calendar Days of the other Party's receipt of the Notice of Dispute, such claim or dispute may, upon mutual agreement of the parties, be submitted to arbitration and resolved in accordance with the arbitration procedures set forth below. In the event the Parties do not agree to submit such claim or dispute to arbitration, each Party may exercise whatever rights and remedies it may have in equity or at law consistent with the terms of this QF-LGIA.

### **27.2 Arbitration of Disputes.**

1) An interconnecting public utility or an interconnection applicant may petition the Commission for arbitration of disputes arising during review of an application to interconnect a large generator facility or during negotiation of an interconnection agreement. If the public utility or the applicant petitions the Commission to arbitrate their dispute, then the Commission will use an administrative law judge (ALJ) as arbitrator unless workload constraints necessitate the use of an outside arbitrator.

(2) A petition for arbitration of an interconnection agreement must contain: (a) A statement of all unresolved issues; (b) A description of each party's position on the unresolved issues; and (c) A proposed agreement addressing all issues, including those on which the parties have reached agreement and those that are in dispute.

(3) A petition for arbitration of a dispute arising during review of an application to interconnect a large generator facility must contain: (a) A statement of all unresolved issues; (b) A description of each party's position on the unresolved issues; and (c) A proposed resolution for each unresolved issue.

(4) Respondent may file a response within 25 calendar days of the petition for arbitration. In the response, the respondent must address each issue listed in the petition, describe the respondent's position on those issues, and present any additional issues for which the respondent seeks resolution.

(5) The filing of a petition for arbitration of a dispute arising during review of an application to interconnect a large generator facility does not affect the application's queue position.

(6) The arbitration is conducted in a manner similar to a contested case proceeding, and the arbitrator has the same authority to conduct the arbitration process as an ALJ has in conducting hearings under the Commission's rules, but the arbitration process is streamlined. The arbitrator holds an early conference to discuss processing of the case. The arbitrator establishes the schedule and decides whether an oral hearing is necessary. After the oral hearing or other procedures (for example, rounds of comments), each party submits its final proposed interconnection agreement or resolution of disputed issues. The arbitrator chooses between the two final offers. If neither offer is consistent with applicable statutes, Commission rules, and Commission policies, then the arbitrator will make a decision that meets those requirements.

(7) The arbitrator may allow formal discovery only to the extent deemed necessary. Parties are required to make good faith attempts to exchange information relevant to any disputed issue in an informal, voluntary, and prompt manner. Unresolved discovery disputes are resolved by the arbitrator upon request of a party. The arbitrator will order a party to provide information if the arbitrator determines the requesting party has a reasonable need for the requested information and that the request is not overly burdensome.

(8) Only the two negotiating parties have full party status. The arbitrator may confer with Commission staff for assistance throughout the arbitration process.

(9) To keep the process moving forward, appeals to the Commission are not allowed during the arbitration process. An arbitrator may certify a question to the Commission if the arbitrator believes it is necessary.

(10) To accommodate the need for flexibility, the arbitrator may use different procedures so long as the procedures are fair, treat the parties equitably, and substantially comply with the procedures listed here.

(11) The arbitrator must serve the arbitration decision on the interconnecting public utility and the interconnection applicant. The parties may file comments on the arbitration decision with the Commission within 10 calendar days after service.

(12) The Commission must accept, reject, or modify an arbitration decision within 30 calendar days after service of the decision.

(13) Within 14 calendar days after the Commission issues an order on a petition for arbitration of an interconnection agreement, the petitioner must prepare an interconnection agreement complying with the terms of the decision and serve it on respondent. Respondent must either sign and file the interconnection agreement or file objections to it within 10 calendar days of service of the agreement. If objections are filed, respondent must state how the interconnection agreement fails to comply with the Commission order and offer substitute language complying with the decision. The Commission must approve or reject a filed interconnection agreement within 20 calendar days of its filing or the agreement is deemed approved.

(14) If petitioner, without respondent's consent, fails to timely prepare and serve an interconnection agreement on respondent, respondent may file a motion requesting the Commission dismiss the petition for arbitration with prejudice. The Commission may grant such motion if the petitioner's failure to timely prepare and serve the interconnection agreement was the result of inexcusable neglect on the part of petitioner.

(15) The public utility and the applicant may agree to hire an outside arbitrator rather than file a petition with the Commission pursuant to article 27.3.

**27.3 External Arbitration Procedures.** Any arbitration initiated under this QF-LGIA shall be conducted before a single neutral arbitrator appointed by the Parties. If the Parties fail to agree upon a single arbitrator within ten (10) Calendar Days of the submission of the dispute to arbitration, each Party shall choose one arbitrator who shall sit on a three-member arbitration panel, The two arbitrators so chosen shall within twenty (20) Calendar Days select a third arbitrator to chair the arbitration panel. In either case, the arbitrators shall be knowledgeable in electric utility matters, including electric transmission and bulk power issues, and shall not have any current or past substantial business or financial relationships with any party to the arbitration (except prior arbitration). The arbitrator (s) shall provide each of the Parties an opportunity to be heard and, except as otherwise provided herein, shall conduct the arbitration in accordance with the Commercial Arbitration Rules of the American Arbitration Association ("Arbitration Rules"; provided, however, in the event of a conflict between the Arbitration Rules and the terms of this Article 27, the terms of this Article 27 shall prevail.

**27.4 Arbitration Decisions.** Unless otherwise agreed by the Parties, the arbitrator (s) shall render a decision within ninety (90) Calendar Days of appointment and shall notify the Parties in writing of such decision and the reasons therefore. The arbitrator (s) shall be authorized only to interpret and apply the provisions of this QF-LGIA and shall have no power to modify or change any provision of this QF-LGIA in any manner. The decision of the arbitrator (s) shall be final and binding upon the Parties, and judgment on the award may be entered in any court having jurisdiction. The decision of the arbitrator (s) may be appealed solely on the grounds that the conduct of the arbitrator (s), or the decision itself, violated the standards set forth in the Federal Arbitration Act or the Administrative Dispute Resolution Act.

**27.5 Costs.** Each Party shall be responsible for its own costs incurred during the arbitration process and for the following costs, if applicable: (1) the cost of the arbitrator chosen by the Party to sit on the three member panel and one half of the cost of the third arbitrator chosen; or (2) one half the cost of the single arbitrator jointly chosen by the Parties.

## **Article 28. Representations, Warranties, and Covenants**

**28.1 General.** Each Party makes the following representations, warranties and covenants:

**28.1.1 Good Standing.** Such Party is duly organized, validly existing and in good standing under the laws of the state in which it is organized, formed, or incorporated, as applicable; that it is qualified to do business in the state or states in which the Large Generating Facility, Interconnection Facilities and Network Upgrades owned by such Party, as applicable, are located; and that it has the corporate power and authority to own its properties, to carry on its business as now being conducted and to enter into this QF-LGIA and carry out the transactions contemplated hereby and perform and carry out all covenants and obligations on its part to be performed under and pursuant to this QF-LGIA.

**28.1.2 Authority.** Such Party has the right, power and authority to enter into this QF-LGIA, to become a Party hereto and to perform its obligations hereunder. This QF-LGIA is a legal, valid and binding obligation of such Party, enforceable against such Party in accordance with its terms, except as the enforceability thereof may be limited by applicable bankruptcy, insolvency, reorganization or other similar laws affecting creditors' rights generally and by general equitable principles (regardless of whether enforceability is sought in a proceeding in equity or at law).

**28.1.3 No Conflict.** The execution, delivery and performance of this QF-LGIA does not violate or conflict with the organizational or formation documents, or bylaws or operating agreement, of such Party, or any judgment, license, permit, order, material agreement or instrument applicable to or binding upon such Party or any of its assets.

**28.1.4 Consent and Approval.** Such Party has sought or obtained, or, in accordance with this QF-LGIA will seek or obtain, each consent, approval,

authorization, order, or acceptance by any Governmental Authority in connection with the execution, delivery and performance of this QF-LGIA, and it will provide to any Governmental Authority notice of any actions under this QF-LGIA that are required by Applicable Laws and Regulations.

## **Article 29 Miscellaneous**

**29.1 Binding Effect.** This QF-LGIA and the rights and obligations hereof, shall be binding upon and shall inure to the benefit of the successors and assigns of the Parties hereto.

**29.2 Conflicts.** In the event of a conflict between the body of this QF-LGIA and any attachment, appendices or exhibits hereto, the terms and provisions of the body of this QF-LGIA shall prevail and be deemed the final intent of the Parties.

**29.3 Rules of Interpretation.** This QF-LGIA, unless a clear contrary intention appears, shall be construed and interpreted as follows: (1) the singular number includes the plural number and vice versa; (2) reference to any person includes such person's successors and assigns but, in the case of a Party, only if such successors and assigns are permitted by this QF-LGIA, and reference to a person in a particular capacity excludes such person in any other capacity or individually; (3) reference to any agreement (including this QF-LGIA), document, instrument or tariff means such agreement, document, instrument, or tariff as amended or modified and in effect from time to time in accordance with the terms thereof and, if applicable, the terms hereof, (4) reference to any Applicable Laws and Regulations means such Applicable Laws and Regulations as amended, modified, codified, or reenacted, in whole or in part, and in effect from time to time, including, if applicable, rules and regulations promulgated thereunder; (5) unless expressly stated otherwise, reference to any Article, Section or Appendix means such Article of this QF-LGIA or such Appendix to this QF-LGIA, or such Section to the QF-LGIP or such Appendix to the QF-LGIP, as the case may be; (6) "hereunder", "hereof", "herein", "hereto" and words of similar import shall be deemed references to this QF-LGIA as a whole and not to any particular Article or other provision hereof or thereof; (7) "including" (and with correlative meaning "include") means including without limiting the generality of any description preceding such term; and (8) relative to the determination of any period of time, "from" means "from and including", "to" means "to but excluding" and "through" means "through and including".

**29.4 Entire Agreement.** This QF-LGIA, including all Appendices and Schedules attached hereto, 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 this QF-LGIA. There are no other agreements, representations, warranties, or covenants which constitute any part of the consideration for, or any condition to, either Party's compliance with its obligations under this QF-LGIA.

**29.5 No Third Party Beneficiaries.** This QF-LGIA 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.

**29.6 Waiver.** The failure of a Party to this QF-LGIA to insist, on any occasion, upon strict performance of any provision of this QF-LGIA will not be considered a waiver of any obligation, right, or duty of, or imposed upon, such Party.

Any waiver at any time by either Party of its rights with respect to this QF-LGIA 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 this QF-LGIA. Termination or Default of this QF-LGIA for any reason by Interconnection Customer shall not constitute a waiver of Interconnection Customer's legal rights to obtain an interconnection from Transmission Provider. Any waiver of this QF-LGIA shall, if requested, be provided in writing.

**29.7 Headings.** The descriptive headings of the various Articles of this QF-LGIA have been inserted for convenience of reference only and are of no significance in the interpretation or construction of this QF-LGIA.

**29.8 Multiple Counterparts.** This QF-LGIA may be executed in two or more counterparts, each of which is deemed an original but all constitute one and the same instrument.

**29.9 Amendment.** The Parties may by mutual agreement amend this QF-LGIA by a written instrument duly executed by the Parties.

**29.10 Modification by the Parties.** The Parties may by mutual agreement amend the Appendices to this QF-LGIA by a written instrument duly executed by the Parties. Such amendment shall become effective and a part of this QF-LGIA upon satisfaction of all Applicable Laws and Regulations.

**29.11 Reservation of Rights.** Transmission Provider shall have the right to make a unilateral filing with OPUC to modify this QF-LGIA with respect to any rates, terms and conditions, charges, classifications of service, rule or regulation under applicable provision of the Federal or Oregon law or the OPUC's rules and regulations thereunder, and Interconnection Customer shall have the right to make a unilateral filing with OPUC to modify this QF-LGIA pursuant to any other applicable provision of Federal or Oregon law or the OPUC's rules and regulations thereunder; provided that each Party shall have the right to protest any such filing by the other Party and to participate fully in any proceeding before OPUC in which such modifications may be considered.

**29.12 No Partnership.** This QF-LGIA shall 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.

**IN WITNESS WHEREOF**, the Parties have executed this QF-LGIA in duplicate originals, each of which shall constitute and be an original effective Agreement between the Parties.

**[Insert name of Transmission Provider or Transmission Owner, if applicable]**

By: \_\_\_\_\_

By: \_\_\_\_\_

Title: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

Date: \_\_\_\_\_

**[Insert name of Interconnection Customer]**

By: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

## **Appendix A to QF-LGIA**

### **Interconnection Facilities, Network Upgrades and Distribution Upgrades**

#### **1. Interconnection Facilities:**

**(a) [insert Interconnection Customer's Interconnection Facilities]:**

**(b) [insert Transmission Provider's Interconnection Facilities]:**

#### **2. Network Upgrades:**

**(a) [insert Stand Alone Network Upgrades]:**

**(b) [insert Other Network Upgrades]:**

#### **3. Distribution Upgrades:**

## **Appendix B to QF-LGIA**

### **Milestones**

**Appendix C to QF-LGIA**

**Interconnection Details**

## **Appendix D to QF-LGIA**

### **Security Arrangements Details**

Infrastructure security of Transmission System equipment and operations and control hardware and software is essential to ensure day-to-day Transmission System reliability and operational security. FERC will expect all Transmission Providers, market participants, and Interconnection Customers interconnected to the Transmission System to comply with the recommendations offered by the President's Critical Infrastructure Protection Board and, eventually, best practice recommendations from the electric reliability authority. All public utilities will be expected to meet basic standards for system infrastructure and operational security, including physical, operational, and cyber-security practices.

**Appendix E to QF-LGIA**

**Commercial Operation Date**

This Appendix E is a part of the QF-LGIA between Transmission Provider and Interconnection Customer.

**[Date]**

**[Transmission Provider Address]**

Re: \_\_\_\_\_ Large Generating Facility

Dear \_\_\_\_\_:

On **[Date]** **[Interconnection Customer]** has completed Trial Operation of Unit No. \_\_\_\_\_. This letter confirms that **[Interconnection Customer]** commenced Commercial Operation of Unit No. \_\_\_\_\_ at the Large Generating Facility, effective as of **[Date plus one day]**.

Thank you.

**[Signature]**

**[Interconnection Customer Representative]**

## Appendix F to QF-LGIA

### Addresses for Delivery of Notices and Billings

#### Notices:

Transmission Provider:

[To be supplied.]

Interconnection Customer:

[To be supplied.]

#### Billings and Payments:

Transmission Provider:

[To be supplied.]

Interconnection Customer:

[To be supplied.]

#### Alternative Forms of Delivery of Notices (telephone, facsimile or email):

Transmission Provider:

[To be supplied.]

Interconnection Customer:

[To be supplied.]

## APPENDIX G

### INTERCONNECTION REQUIREMENTS FOR A WIND GENERATING PLANT

Appendix G sets forth requirements and provisions specific to a wind generating plant. All other requirements of this QF-LGIA continue to apply to wind generating plant interconnections.

#### A. Technical Standards Applicable to a Wind Generating Plant

##### i. Low Voltage Ride-Through (LVRT) Capability

A wind generating plant shall be able to remain online during voltage disturbances up to the time periods and associated voltage levels set forth in the standard below. All wind generating plants must meet the following requirements:

1. Wind generating plants are required to remain in-service during three-phase faults with normal clearing (which is a time period of approximately 4 - 9 cycles) and single line to ground faults with delayed clearing, and subsequent post-fault voltage recovery to pre-fault voltage unless clearing the fault effectively disconnects the generator from the system. The clearing time requirement for a three-phase fault will be specific to the wind generating plant substation location, as determined by and documented by the transmission provider.
2. The maximum clearing time the wind generating plant shall be required to withstand for a three-phase fault shall be 9 cycles at a voltage as low as 0.15 p.u., as measured at the high side of the wind generating plant step-up transformer (*i.e.* the transformer that steps the voltage up to the transmission interconnection voltage or "GSU"), after which, if the fault remains following the location-specific normal clearing time for three-phase faults, the wind generating plant may disconnect from the transmission system.
3. This requirement does not apply to faults that would occur between the wind generator terminals and the high side of the GSU.
4. Wind generating plants may be tripped after the fault period if this action is intended as part of a special protection system.

Issued by: \_\_\_\_\_

Issued on: \_\_\_\_\_

Effective: \_\_\_\_\_

5. Wind generating plants may meet the LVRT requirements of this standard by the performance of the generators or by installing additional equipment (*e.g.*, Static VAR Compensator, etc.) within the wind generating plant or by a combination of generator performance and additional equipment.

6. Existing individual generator units that are, or have been, interconnected to the network at the same location at the effective date of the Appendix G LVRT Standard are exempt from meeting the Appendix G LVRT Standard for the remaining life of the existing generation equipment. Existing individual generator units that are replaced are required to meet the Appendix G LVRT Standard.

**ii. Power Factor Design Criteria (Reactive Power)**

A wind generating plant shall maintain a power factor within the range of 0.95 leading to 0.95 lagging, measured at the Point of Interconnection as defined in this QF-LGIA, if the Transmission Provider's System Impact Study shows that such a requirement is necessary to ensure safety or reliability. The power factor range standard can be met by using, for example, power electronics designed to supply this level of reactive capability 606 (taking into account any limitations due to voltage level, real power output, etc.) or fixed and switched capacitors if agreed to by the Transmission Provider, or a combination of the two. The Interconnection Customer shall not disable power factor equipment while the wind plant is in operation. Wind plants shall also be able to provide sufficient dynamic voltage support in lieu of the power system stabilizer and automatic voltage regulation at the generator excitation system if the System Impact Study shows this to be required for system safety or reliability.

**iii. Supervisory Control and Data Acquisition (SCADA) Capability**

The wind plant shall provide SCADA capability to transmit data and receive instructions from the Transmission Provider to protect system reliability. The Transmission Provider and the wind plant Interconnection Customer shall determine what SCADA information is essential for the proposed wind plant, taking into account the size of the plant and its characteristics, location, and importance in maintaining generation resource adequacy and transmission system reliability in its area.

Issued by: \_\_\_\_\_

Issued on: \_\_\_\_\_

Effective: \_\_\_\_\_

**Attachment A to QF-LGIA  
One-line Diagram**

Issued by: \_\_\_\_\_

Issued on: \_\_\_\_\_

Effective: \_\_\_\_\_

**Attachment B to QF-LGIA  
Scope of Work**

Issued by: \_\_\_\_\_  
Issued on: \_\_\_\_\_

Effective: \_\_\_\_\_

**Attachment C to QF-LGIA**  
**Facility Connection Requirements for Transmission Systems**

Issued by: \_\_\_\_\_  
Issued on: \_\_\_\_\_

Effective: \_\_\_\_\_

**Docket UM 2032**

**Attachment 3**

**to**

**JOINT UTILITIES' APPLICATION  
FOR APPROVAL OF COMPLIANCE FILING**

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*Idaho Power's Application for Small Generator Facility  
Interconnection*



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

**Applicant Contact Information :**

Name: \_\_\_\_\_

Mailing Address: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip Code: \_\_\_\_\_

Telephone (Daytime): \_\_\_\_\_ (Evening): \_\_\_\_\_

Facsimile Number: \_\_\_\_\_ E-Mail Address: \_\_\_\_\_

**Address of Customer Facility Where Small Generator Facility will be Interconnected :**

(if different from above)

Street Address: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip Code: \_\_\_\_\_

**System Installer/Consulting Engineer :**

Name: \_\_\_\_\_

Mailing Address: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip Code: \_\_\_\_\_

Telephone (Daytime): \_\_\_\_\_ (Evening): \_\_\_\_\_

Facsimile Number: \_\_\_\_\_ E-Mail Address: \_\_\_\_\_

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

Capacity: \_\_\_\_\_(Amps) Voltage: \_\_\_\_\_(Volts)

Type of Service:  Single Phase  Three Phase

Will a transformer be used between the generator and the point of interconnection? \_\_\_Yes \_\_\_No

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

Is the transformer: \_\_\_single phase \_\_\_three phase? Size: \_\_\_\_\_kVA

Transformer Impedance: \_\_\_\_\_% on \_\_\_\_\_kVA Base

If Three Phase:

Transformer Primary: \_\_\_\_\_ Volts \_\_\_\_\_ Delta \_\_\_ Wye \_\_\_\_\_ Wye Grounded

Transformer Secondary: \_\_\_\_\_ Volts \_\_\_\_\_ Delta \_\_\_ Wye \_\_\_\_\_ Wye Grounded

Transformer Tertiary: \_\_\_\_\_ Volts \_\_\_\_\_ Delta \_\_\_ Wye \_\_\_\_\_ Wye Grounded

**Requested Procedure Under Which to Evaluate Interconnection Request<sup>1</sup> :**

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

- Tier 2** – Certified interconnection equipment with an aggregate Electric Nameplate Capacity of 2 MW or less. Indicate type of certification below. The application fee amount is \$500.
  - Lab Tested – tested to IEEE 1547.1 and other specified standards by a nationally recognized testing laboratory and is appropriately labeled.
  - Field Tested – an identical small generator facility has been approved by an Oregon utility under a Tier 4 study review process within the prior 36 months of the date of this interconnection request.
- Tier 3** – A Small Generator Facility connected to the T&D system that does not export power. The Electric Nameplate Capacity rating may be 50 kW or smaller, if connecting to area network or 10 MW or smaller, if connecting to a radial distribution feeder. The application fee amount is \$1000.
- Tier 4** – Electric Nameplate Capacity rating is 10 MW or smaller and the Small Generator Facility does not qualify for a Tier 1, Tier 2 or Tier 3 review or has been reviewed but not approved under a Tier 1, Tier 2 or Tier 3 review. Application fee amount is \$1,000.

<sup>1</sup> **Note:** Descriptions for interconnection review categories do not list all criteria that must be satisfied. For a complete list of criteria, please refer to PUC Rule OAR 860, Division 082, (Rule).

**Field Tested Equipment:**

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

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

**Small Generator Facility Information:**

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

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_
5. \_\_\_\_\_

*Please provide copies of manufacturer brochures or technical specifications*

**Energy Production Equipment/Inverter Information:**

Synchronous     Induction     Inverter     Other \_\_\_\_\_

Electric Nameplate Rating: \_\_\_\_\_ kW    \_\_\_\_\_ kVA

Rated Voltage: \_\_\_\_\_ Volts Rated Current: \_\_\_\_\_ Amps

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

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

Maximum Physical Export Capability Requested: \_\_\_\_\_ (kW)

Individual Generator Power Factor: \_\_\_\_\_

Rated Power Factor: Leading: \_\_\_\_\_ Lagging: \_\_\_\_\_

**For Synchronous Machines:**

Manufacturer: \_\_\_\_\_ Model No.: \_\_\_\_\_

Version No.: \_\_\_\_\_ Submit \_\_\_\_\_ copies of the

Saturation Curve and the Vee Curve.

Salient     Non-Salient

Torque: \_\_\_\_\_ lb-ft    Rated RPM: \_\_\_\_\_

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

Type of Exciter: \_\_\_\_\_

Output Power of Exciter: \_\_\_\_\_

Type of Voltage Regulator: \_\_\_\_\_

Locked Rotor Current: \_\_\_\_\_ Amps

Synchronous Speed: \_\_\_\_\_ RPM Winding Connection: \_\_\_\_\_

Min. Operating Freq./Time: \_\_\_\_\_

Generator Connection:  Delta  Wye  Wye  
 Grounded Direct-axis Synchronous Reactance: (Xd) \_\_\_\_\_ ohms  
 Direct-axis Transient Reactance: (X'd) \_\_\_\_\_ ohms  
 Direct-axis Sub-transient Reactance: (X''d) \_\_\_\_\_ ohms  
 Negative Sequence Reactance, X<sub>2</sub>: \_\_\_\_\_ P.U.  
 Zero Sequence Reactance, X<sub>0</sub>: \_\_\_\_\_ P.U. KVA Base: \_\_\_\_\_  
 Field Volts: \_\_\_\_\_ Field Amperes: \_\_\_\_\_

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

**For Induction Machines:**

Manufacturer: \_\_\_\_\_ Model No.: \_\_\_\_\_  
 Version No.: \_\_\_\_\_ Locked Rotor Current: \_\_\_\_\_ Amps  
 Rotor Resistance: (Rr) \_\_\_\_\_ ohms Exciting Current: \_\_\_\_\_ Amps  
 Rotor Reactance: (Xr) \_\_\_\_\_ ohms Reactive Power Required: \_\_\_\_\_  
 Magnetizing Reactance: (Xm) \_\_\_\_\_ ohms \_\_\_\_\_ VARs (No Load)  
 Stator Resistance: (Rs) \_\_\_\_\_ ohms \_\_\_\_\_ VARs (Full Load) Stator Reactance: (Xs) \_\_\_\_\_ ohms  
 Short Circuit Reactance: (X''d) \_\_\_\_\_ ohms Phases: \_\_\_\_\_  
 Single  Three-Phase   
 Frame Size: \_\_\_\_\_ Design Letter: \_\_\_\_\_ Temp. Rise: \_\_\_\_\_ °C.

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

Manufacturer: \_\_\_\_\_ Model: \_\_\_\_\_  
 Electric Nameplate Capacity rating: (kVA) \_\_\_\_\_

**Additional Information For Inverter Based Facilities:**

**Inverter Information:**

Manufacturer: \_\_\_\_\_ Model: \_\_\_\_\_  
 Type:  Forced Commutated  Line Commutated  
 Electric Nameplate Capacity Rated Output: \_\_\_\_\_ Amps \_\_\_\_\_ Volts \_\_\_\_\_ kW  
 Efficiency: \_\_\_\_\_ % Power Factor: \_\_\_\_\_ %

**DC Source / Prime Mover:**

Solar     Wind     Hydro     Other \_\_\_\_\_

Electric Nameplate Capacity Rating: \_\_\_\_\_ kW                      Rating: \_\_\_\_\_ kVA

Rated Voltage: \_\_\_\_\_ Volts

Open Circuit Voltage (If applicable): \_\_\_\_\_ Volts

Rated Current: \_\_\_\_\_ Amps

Short Circuit Current (If applicable): \_\_\_\_\_ Amps

**Other Facility Information:**

Is Facility a QF?    Yes     No

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

One Line Diagram attached:     Yes     No

Plot Plan attached:     Yes     No

Installation Test Plan attached:     Yes     No

Estimated Commissioning Date (if known): \_\_\_\_\_

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

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

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

**The type of interconnection service requested (check one)**

**Network Resource Interconnection Service.**

**Check here only if Applicant requesting Network Resource Interconnection Service also seeks to have its Generating Facility studied for Energy Resource Interconnection Service**

**Applicant Signature:**

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

Applicant Signature: \_\_\_\_\_

Title: \_\_\_\_\_ Date: \_\_\_\_\_

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

Application fee included

Amount \_\_\_\_\_

**Public Utility Acknowledgement:**

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

Public Utility Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Printed Name: \_\_\_\_\_ Title: \_\_\_\_\_

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

**Docket UM 2032**

**Attachment 4**

**to**

**JOINT UTILITIES' APPLICATION  
FOR APPROVAL OF COMPLIANCE FILING**

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*Idaho Power's Interconnection Facilities Study Agreement*

## Interconnection Facilities Study Agreement

This agreement is made and entered into this \_\_\_\_ day of \_\_\_\_\_, 20\_\_  
~~09~~ by and between \_\_\_\_\_, a  
\_\_\_\_\_ organized and existing under the laws of the State of  
\_\_\_\_\_, (“Applicant”) and Idaho Power Company existing under  
the laws of the State of Idaho, (“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 860-082-0005 through 860-082-0085.
2. Interconnection Customer and Public Utility shall cause an Interconnection Facilities Study consistent with OAR 860-082-0005 through 860-082-0085.
3. The Applicant will provide the data requested in Attachment 1 of this Form. The scope of the Interconnection Facilities Study shall be subject to this data.
4. The Interconnection Facilities Study report shall provide:
  - 4.1 A description of the Interconnection Equipment, Interconnection Facilities and System Upgrades required for interconnecting the Small Generator Facility to the Public Utility’s T&D System,

4.2 A good-faith, non-binding, estimate of the Interconnection Equipment, Interconnection Facilities, and System Upgrades costs to interconnect the Small Generator Facility to the Public Utility's T&D System, and

4.3 A reasonable schedule for the procurement, construction, installation and testing of the Interconnection Facilities, and System Upgrades required to interconnect the Small Generator Facility to the Public Utility's T&D System.

5. The Public Utility will require a study deposit as described in OAR 860-082-0035(5)(a).

6. The Public Utility will provide an Interconnection Facility Study scope, schedule and good-faith, non-binding cost estimate as Attachment 2 of this form. 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 860-082-0035 and will be based on actual costs.

8. The Cost Responsibility for Studies is detailed in OAR 860-082-0035.

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:

Idaho Power Company

Signed \_\_\_\_\_

Name (Printed):

\_\_\_\_\_ Title \_\_\_\_\_

[Insert name of the Applicant]

Signed \_\_\_\_\_

Name (Printed):

\_\_\_\_\_ Title \_\_\_\_\_

**Attachment 1 to the Interconnection Facilities Study Agreement**  
**Data To Be Provided by Applicant**

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: \_\_\_\_\_

Type of Interconnection Service Requested:

\_\_\_\_\_ Network Resource Interconnection Service

\_\_\_\_\_ Energy Resource Interconnection Service

**Attachment 2**

**Interconnection Facilities Study Agreement**

Detailed Scope, Schedule and Cost Estimate for Facility Study provided by Public Utility.

**Docket UM 2032**

**Attachment 5**

**to**

**JOINT UTILITIES' APPLICATION  
FOR APPROVAL OF COMPLIANCE FILING**

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*Idaho Power's Schedule 85*

SCHEDULE 85  
COGENERATION AND SMALL POWER  
PRODUCTION STANDARD  
CONTRACT RATES

AVAILABILITY

Service under this schedule is available for power delivered to the Company's control area within the State of Oregon.

APPLICABILITY

Service under this schedule is applicable to any Seller that:

1. Owns or operates a Qualifying Facility meeting the Eligibility Threshold defined below, receiving Network Resource Interconnection Service if the Qualifying Facility interconnects directly to the Company's distribution or transmission system, and desires to sell Energy generated by the Qualifying Facility to the Company in compliance with all the terms and conditions of the Standard Contract; (C)  
(C)  
(C)
2. Meets all applicable requirements of the Company's Generation Interconnection Process.

For Qualifying Facilities with a Nameplate Capacity rating greater than 10 MW, or on-system Qualifying Facilities of any size receiving Energy Resource Interconnection Service a negotiated Non-Standard Contract between the Seller and the Company is required. (C)  
(C)

DEFINITIONS

Eligibility Threshold is the Nameplate Capacity requirement of a Qualifying Facility in order to be eligible for the terms and conditions of the Standard Contract. The separate Eligibility Threshold delineations are:

1. For all solar QF projects:
  - a. With a Nameplate Capacity no greater than 3 MW – the project is eligible for a Standard Contract with fixed terms and standard avoided cost prices;
  - b. With a Nameplate Capacity above 3 MW and less than or equal to 10 MW – the project is eligible for a Standard Contract with fixed terms and negotiated avoided cost prices;
2. For all non-solar QF projects with a Nameplate Capacity of 10 MW or less – the project is eligible for a Standard Contract with fixed terms and standard avoided cost prices.

Energy means the electric energy, expressed in kWh, generated by the Qualifying Facility and delivered by the Seller to the Company in accordance with the conditions of this schedule and the Standard Contract. Energy is measured net of Losses and Station Use.

Generation Interconnection Process is the Company's generation interconnection application and engineering review process developed to ensure a safe and reliable generation interconnection in compliance with all applicable regulatory requirements, Prudent Electrical Practices and national safety standards. The Generation Interconnection Process is managed by the Company's Delivery-Load Serving Operations Business Unit.

Heat Rate Conversion Factor is 7,100 MMBTU divided by 1,000.

Heavy Load (HL) Hours are the daily hours from hour ending 0700-2200 Mountain Time, (16 hours) excluding all hours on all Sundays, New Years Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day and Christmas Day.

Intermittent describes a Qualifying Facility that produces electrical energy from the use of wind, solar or run of river hydro as the prime mover.

SCHEDULE 85  
COGENERATION AND SMALL POWER  
PRODUCTION STANDARD  
CONTRACT RATES  
(Continued)

DEFINITIONS (Continued)

Light Load (LL) Hours are the daily hours from hour ending 2300-0600 Mountain Time (8 hours), plus all other hours on all Sundays, New Years Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day and Christmas Day. (M) (M)

Losses are the loss of electric energy occurring as a result of the transformation and transmission of electric energy from the Qualifying Facility to the Point of Delivery. (M)

Nameplate Capacity means the full-load electrical quantities assigned by the designer to a generator and its prime mover or other piece of electrical equipment, such as transformers and circuit breakers, under standardized conditions, expressed in amperes, kilovolt amperes, kilowatts, volts, or other appropriate units. Usually indicated on a nameplate attached to the individual machine or device. (M) (C)

Non-Standard Contract is a negotiated contract between any Seller that owns or operates a Qualifying Facility with a nameplate capacity rating which either does not meet the Eligibility Threshold or receives Energy Resource Interconnection Service if the Qualifying Facility is on-system, and desires to sell Energy generated by the Qualifying Facility to the Company. The starting point for negotiation of price is the Avoided Cost Components established in this schedule and may be modified to address specific factors mandated by federal and state law, including

1. The utility's system cost data; (C)
2. The availability of capacity or energy from a Qualifying Facility during the system daily and seasonal peak periods, including: (C)
  - a. The ability of the utility to dispatch the qualifying facility;
  - b. The expected or demonstrated reliability of the qualifying facility;
  - c. The terms of any contract or other legally enforceable obligation, including the duration of the obligation, termination notice requirement and sanctions for non-compliance;
  - d. The extent to which scheduled outages of the qualifying facility can be usefully coordinated with scheduled outages of the utility's facilities;
  - e. The usefulness of energy and capacity supplied from a qualifying facility during system emergencies, including its ability to separate its load from its generation;
  - f. The individual and aggregate value of energy and capacity from qualifying facilities on the electric utility's system; and
  - g. The smaller capacity increments and the shorter lead times available with additions of capacity from qualifying facilities; and
3. The relationship of the availability of energy or capacity from the Qualifying Facility to the ability of the electric utility to avoid costs, including the deferral of capacity additions and the reduction of fossil fuel use; and
4. The costs or savings resulting from variations in line losses from those that would have existed in the absence of purchases from a Qualifying Facility, if the purchasing electric utility generated an equivalent amount of energy itself or purchased an equivalent amount of electric energy or capacity.

SCHEDULE 85  
COGENERATION AND SMALL POWER  
PRODUCTION STANDARD  
CONTRACT RATES  
(Continued)

DEFINITIONS (Continued)

The guidelines for negotiating a Non-Standard Contract are more specifically described later in this schedule in GUIDELINES FOR NEGOTIATION OF POWER PURCHASE AGREEMENTS FOR QFS NOT MEETING THE ELIGIBILITY THRESHOLD.

(M)  
(M)  
(M)

Point of Delivery is the location where the Company's and the Seller's electrical facilities are inter-connected or where the Company's and the Seller's host transmission provider's electrical facilities are interconnected.

Prudent Electrical Practices are those practices, methods and equipment that are commonly used in prudent electrical engineering and operations to operate electric equipment lawfully and with safety, dependability, efficiency and economy.

(M)

PURPA means the Public Utility Regulatory Policies Act of 1978.

Qualifying Facility or QF is a cogeneration facility or a small power production facility which meets the PURPA criteria for qualification set forth in Subpart B of Part 292, Subchapter K, Chapter I, Title 18, of the Code of Federal Regulations.

Seasonality Factor is the factor used in determining the seasonal purchase price of energy. The applicable factors are:

- 73.50% for Season 1 (March, April, May);
- 120.00% for Season 2 (July, August, November, December);
- 100.00% for Season 3 (June, September, October, January, February).

Seller is any entity that owns or operates a Qualifying Facility and desires to sell Energy to the Company.

(C)

Standard Contracts are the pro forma Energy Sales Agreements the Company maintains on file with the Public Utility Commission of Oregon for Intermittent and non-intermittent on-system Qualifying Facilities receiving Network Resource Interconnection Service and Intermittent and non-intermittent off-system Qualifying Facilities, with a Nameplate Capacity which meets the Eligibility Threshold.

Station Use is electric energy used to operate the Qualifying Facility which is auxiliary to or directly related to the generation of electricity and which, but for the generation of electricity, would not be consumed by the Seller.

QUALIFYING FACILITY INFORMATION INQUIRY PROCESS

There are two separate processes required for a Seller to deliver and sell energy from a Qualifying Facility to the Company. These processes may be completed separately or simultaneously.

(C)  
(C)

SCHEDULE 85  
COGENERATION AND SMALL POWER  
PRODUCTION STANDARD  
CONTRACT RATES  
(Continued)

QUALIFYING FACILITY INFORMATION INQUIRY PROCESS (Continued)

1. Generation Interconnection Process

(M)

All generation projects physically interconnecting to the Company's electrical system, regardless of size, location or ownership, must successfully complete the Generation Interconnection Process prior to the project delivering energy to the Company. A complete description of the Small Generator Interconnection Procedures, the Interconnection Application and Company contact information is maintained on the Idaho Power website at [www.idahopower.com](http://www.idahopower.com), or Seller may contact the Company's Delivery-Load Serving Operations Business Unit at 1-208-388-2658 for further information. To be eligible for a Standard Contract, an on-system QF must receive Network Resource Interconnection Service. To be studied for Energy Resource Interconnection Service, the QF shall provide an attestation to the Company that it intends to negotiate a Non-Standard Contract and the attestation shall be provided to the Company before the QF executes an interconnection facilities study agreement. To receive Energy Resource Interconnection Service, the QF shall provide an attestation that it has executed a Non-Standard Contract between the Seller and the Company. The attestation must be signed by the Seller and the Company and delivered to the Company before the execution of an interconnection agreement. The attestation must be provided by the Seller within 60 days of the Seller receiving a final interconnection agreement or the interconnection application will be deemed withdrawn.

(M)

(N)

(N)

All generation projects delivering power under the off-system Energy Sales Agreement must successfully complete a comparable Generation Interconnection Process with the Seller's host interconnection provider and transmission provider.

(M)

2. Energy Sales Agreement

To begin the process of completing a Standard Contract or negotiating a Non-Standard Contract, for a proposed project, the Seller must submit to the Company a request for an Energy Sales Agreement. All requests will be processed in the order of receipt by the Company.

a. Communications

Unless otherwise directed by the Company, all communications to the Company regarding an Energy Sales Agreement should be directed in writing as follows:

Idaho Power Company  
Cogeneration and Small Power Production  
P O Box 70  
Boise, Idaho 83707

b. Procedures

i. The Company's approved Energy Sales Agreement may be obtained from the Company's website at <http://www.idahopower.com> or if the Seller is unable to obtain it from the website, the Company will send a copy within 10 business days of a written request.

ii. In order to obtain a project specific draft Energy Sales Agreement the Seller must provide in writing to the Company, general project information required for the completion of an Energy Sales Agreement, including, but not limited to:

(M)

SCHEDULE 85  
COGENERATION AND SMALL POWER  
PRODUCTION STANDARD  
CONTRACT RATES  
(Continued)

QUALIFYING FACILITY INFORMATION INQUIRY PROCESS (Continued)

b. Procedures (Continued)

- a) Date of request
- b) Company / Organization that will be the contracting party
- c) Contract notification information including name, address and telephone number
- d) Verification that the Qualifying Facility meets the "Eligibility for Standard Rates and Contract" criteria
- e) Copy of the Qualifying Facility's QF certificate
- f) Copy of the FERC license (applicable to hydro projects only)
- g) Location of the proposed project including general area and specific legal property description
- h) Description of the proposed project including specific equipment models, types, sizes and configurations
- i) Type of project (wind, hydro, geothermal etc)
- j) Nameplate capacity of the proposed project
- k) Schedule 85 pricing option selected
- l) Desired term of the Energy Sales Agreement
- m) Annual net energy amount
- n) Maximum capacity of the Qualifying Facility
- o) Estimated first energy date
- p) Estimated operation date
- q) Point of Delivery
- r) Status of the Generation Interconnection Process

iii. The Company shall provide a draft Energy Sales Agreement when all information described in Paragraph 2 above has been received in writing from the Seller. Within 15 business days following receipt of all information required in Paragraph 2 the Company will provide the Seller with a draft Energy Sales Agreement including current standard avoided cost prices and/or other optional pricing mechanisms as approved by the Oregon Public Utility Commission in this Schedule.

iv. The Company will respond within 15 business days to any written comments and proposals that the Seller provides in response to the draft Energy Sales Agreement.

v. If the Seller desires to proceed with the Energy Sales Agreement after reviewing the Company's draft Energy Sales Agreement, it may request in writing that the Company prepare a final draft Energy Sales Agreement. In connection with such request, the Seller must provide the Company with an updated status of the Generation Interconnection Process which indicates that the Seller's provided information (i.e. first energy date, operation date, etc.) are realistically attainable and any additional or clarified project information that the Company reasonably determines to be necessary for the preparation of a final draft Energy Sales Agreement. Once the Company has received the written request for a final draft Energy Sales Agreement and all additional or clarified project information that the Company reasonably determines to be necessary for the preparation of a final draft Energy Sales Agreement, the Company will provide Seller with a final draft Energy Sales Agreement within 15 business days.

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SCHEDULE 85  
COGENERATION AND SMALL POWER  
PRODUCTION STANDARD  
CONTRACT RATES  
(Continued)

QUALIFYING FACILITY INFORMATION INQUIRY PROCESS (Continued)

b. Procedures (Continued)

- vi. After reviewing the final draft Energy Sales Agreement, the Seller may either prepare another set of written comments and proposals or approve the final draft Energy Sales Agreement. If the Seller prepares written comments and proposals, the Company will respond within 15 business days to those comments and proposals.
- vii. When both parties are in full agreement as to all terms and conditions of the final draft Energy Sales Agreement, the Company will prepare and forward to the Seller within 15 business days a final executable version of the Energy Sales Agreement. Once the Seller executes the Energy Sales Agreement and returns all copies to the Company, the Company will execute the Energy Sales Agreement. Following the Company's execution a completely executed copy will be returned to the Seller. Prices and other terms and conditions in the Energy Sales Agreement will not be final and binding until the Energy Sales Agreement has been executed by both parties.

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SCHEDULE 85  
 COGENERATION AND SMALL POWER  
 PRODUCTION STANDARD  
 CONTRACT RATES  
 (Continued)

AVOIDED COST PRICE  
 Standard Avoided Cost Prices for Baseload QF

Year	On-Peak	Off-Peak
	\$/MWh	\$/MWh
	(a)	(b)
2023	\$116.25	\$81.19
2024	\$54.14	\$38.51
2025	\$56.27	\$40.28
2026	\$59.61	\$43.25
2027	\$68.43	\$51.70
2028	\$65.45	\$48.33
2029	\$64.35	\$46.83
2030	\$63.83	\$45.91
2031	\$64.56	\$46.23
2032	\$65.90	\$47.15
2033	\$67.84	\$48.66
2034	\$71.52	\$51.89
2035	\$73.95	\$53.87
2036	\$75.23	\$54.69
2037	\$76.77	\$55.76
2038	\$78.33	\$56.84
2039	\$80.02	\$58.04
2040	\$84.31	\$61.82
2041	\$87.07	\$64.06
2042	\$88.94	\$65.40
2043	\$91.38	\$67.30
2044	\$95.93	\$71.30
2045	\$99.73	\$74.53
2046	\$102.27	\$76.49
2047	\$105.37	\$78.99

Notes:

- (a) 2023: On-peak Market Prices; 2024-2047: On-peak capacity value of the Proxy Baseload resource plus Fuel and Capitalized Energy Cost of the Proxy Baseload resource.
- (b) 2023 Off-Peak Market Prices; 2024-2047: Fuel and Capitalized Energy Cost of the Proxy Baseload resource.

(CM)

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SCHEDULE 85  
COGENERATION AND SMALL POWER  
PRODUCTION STANDARD  
CONTRACT RATES  
 (Continued)

Standard Avoided Cost Prices with Integration Charges for a Wind QF

Year	On-Peak	Off-Peak	Wind Integration Charge	On-Peak with Integration Charge	Off-Peak with Integration Charge
	(\$/MWh)	\$/MWh	\$/MWh	\$/MWh	\$/MWh
	(a)	(b)	(c)	(d)	(e)
				(a)-(c)	(b)-(c)
2023	\$116.25	\$81.19	\$0.83	\$115.42	\$80.36
2024	\$44.39	\$38.51	\$0.85	\$43.54	\$37.66
2025	\$46.29	\$40.28	\$0.87	\$45.42	\$39.41
2026	\$49.40	\$43.25	\$0.89	\$48.51	\$42.36
2027	\$57.99	\$51.70	\$0.91	\$57.08	\$50.79
2028	\$54.77	\$48.33	\$0.93	\$53.84	\$47.40
2029	\$53.41	\$46.83	\$0.95	\$52.46	\$45.88
2030	\$52.65	\$45.91	\$0.97	\$51.68	\$44.94
2031	\$53.12	\$46.23	\$0.99	\$52.13	\$45.24
2032	\$54.20	\$47.15	\$1.02	\$53.18	\$46.13
2033	\$55.87	\$48.66	\$1.04	\$54.83	\$47.62
2034	\$59.27	\$51.89	\$1.06	\$58.21	\$50.83
2035	\$61.42	\$53.87	\$1.09	\$60.33	\$52.78
2036	\$62.41	\$54.69	\$1.11	\$61.30	\$53.58
2037	\$63.66	\$55.76	\$1.14	\$62.52	\$54.62
2038	\$64.92	\$56.84	\$1.16	\$63.76	\$55.68
2039	\$66.30	\$58.04	\$1.19	\$65.11	\$56.85
2040	\$70.27	\$61.82	\$1.22	\$69.05	\$60.60
2041	\$72.71	\$64.06	\$1.25	\$71.46	\$62.81
2042	\$74.25	\$65.40	\$1.28	\$72.97	\$64.12
2043	\$76.35	\$67.30	\$1.30	\$75.05	\$66.00
2044	\$80.56	\$71.30	\$1.33	\$79.23	\$69.97
2045	\$84.00	\$74.53	\$1.37	\$82.63	\$73.16
2046	\$86.18	\$76.49	\$1.40	\$84.78	\$75.09
2047	\$88.91	\$78.99	\$1.43	\$87.48	\$77.56

(CM)

Notes

- (a) 2023 On-Peak Market Prices; 2024-2047: Value of on-peak capacity allocated to on-peak hours of a Wind resource plus Fuel and Capitalized Energy Cost of the Proxy Baseload resource.
- (b) 2023 Off-Peak Market Prices; 2024-2047: Fuel and Capitalized Energy Cost of the Proxy Baseload resource.
- (c) Wind Integration Charges based on current penetration level of 727-1397 MW. The integration charge will be updated when the next penetration level is reached.

SCHEDULE 85  
COGENERATION AND SMALL POWER  
PRODUCTION STANDARD  
CONTRACT RATES  
(Continued)

Standard Avoided Cost Prices with Integration Charges for a PV Solar QF

Year	On-Peak	Off-Peak	PV Solar Integration Charge	On-Peak with Integration Charge	Off-Peak with Integration Charge
	(\$/MWh)	\$/MWh	\$/MWh	\$/MWh	\$/MWh
	(a)	(b)	(c)	(d)	(e)
				(a)-(c)	(b)-(c)
2023	\$116.25	\$81.19	\$4.13	\$112.12	\$77.06
2024	\$42.62	\$38.51	\$4.23	\$38.39	\$34.28
2025	\$44.48	\$40.28	\$4.32	\$40.16	\$35.96
2026	\$47.55	\$43.25	\$4.42	\$43.13	\$38.83
2027	\$56.10	\$51.70	\$4.53	\$51.57	\$47.17
2028	\$52.83	\$48.33	\$4.63	\$48.20	\$43.70
2029	\$51.43	\$46.83	\$4.74	\$46.69	\$42.09
2030	\$50.62	\$45.91	\$4.85	\$45.77	\$41.06
2031	\$51.05	\$46.23	\$4.96	\$46.09	\$41.27
2032	\$52.08	\$47.15	\$5.07	\$47.01	\$42.08
2033	\$53.70	\$48.66	\$5.19	\$48.51	\$43.47
2034	\$57.05	\$51.89	\$5.31	\$51.74	\$46.58
2035	\$59.15	\$53.87	\$5.43	\$53.72	\$48.44
2036	\$60.09	\$54.69	\$5.55	\$54.54	\$49.14
2037	\$61.28	\$55.76	\$5.68	\$55.60	\$50.08
2038	\$62.49	\$56.84	\$5.81	\$56.68	\$51.03
2039	\$63.82	\$58.04	\$5.95	\$57.87	\$52.09
2040	\$67.73	\$61.82	\$6.08	\$61.65	\$55.74
2041	\$70.11	\$64.06	\$6.22	\$63.89	\$57.84
2042	\$71.59	\$65.40	\$6.37	\$65.22	\$59.03
2043	\$73.63	\$67.30	\$6.51	\$67.12	\$60.79
2044	\$77.77	\$71.30	\$6.66	\$71.11	\$64.64
2045	\$81.15	\$74.53	\$6.81	\$74.34	\$67.72
2046	\$83.27	\$76.49	\$6.97	\$76.30	\$69.52
2047	\$85.92	\$78.99	\$7.13	\$78.79	\$71.86

## Notes:

- 2023 On-Peak Market Prices; 2024-2047: Value of on-peak capacity allocated to on-peak hours of a PV Solar resource plus Fuel and Capitalized Energy Cost of the Proxy Baseload resource.
- (a) 2023 Off-Peak Market Prices; 2024-2047: Fuel and Capitalized Energy Cost of the Proxy Baseload resource.
- (b) Solar Integration Charges based on current penetration level of 562-1355 MW. The integration charge will be updated when the next penetration level is reached.

SCHEDULE 85  
COGENERATION AND SMALL POWER  
PRODUCTION STANDARD  
CONTRACT RATES  
(Continued)

(M)

NET ENERGY PURCHASE PRICE

For contract years one (1) through (15) fifteen, the monthly Net Energy Purchase Price will be calculated as follows:

For all Energy delivered to the Company on a monthly basis during HL hours the Net Energy Purchase Price will be:

The On-Peak price from the preceding applicable Standard Avoided Cost Price tables multiplied by the appropriate Seasonality Factor.

For all Energy delivered to the Company on a monthly basis during LL hours the Net Energy Purchase Price will be:

The Off-Peak price from the preceding applicable Standard Avoided Cost Price tables multiplied by the appropriate Seasonality Factor.

For all periods after the end of the fifteenth (15<sup>th</sup>) contract year, the Company will pay the Seller monthly, for Energy delivered and accepted at the Point of Delivery in accordance with the Seller's election of the following options:

Option 1 – Dead Band Method

Net Energy Purchase Price =

On-Peak = (AGPU + Capacity Payment On-Peak Hours) X Seasonality Factor

Off-Peak = AGPU X Seasonality Factor

Actual Gas Price Used (AGPU) =

90% of Fuel Cost if

Indexed Fuel Cost is less than 90% Fuel Cost; else

110% of Fuel Cost if

Indexed Fuel Cost is greater than 110% Fuel Cost; else

Indexed Fuel Cost

where

On-Peak and Off-Peak are established in this schedule by QF resource type for the applicable calendar year of the actual Net Energy deliveries to the Company, and

Indexed Fuel Cost is the applicable weighted monthly average index price of natural gas at Sumas multiplied by the Heat Rate Conversion Factor.

Option 2 – Gas Market Method

Net Energy Purchase Price =

On-Peak = (AGPU + Capacity Payment On-Peak Hours) X Seasonality Factor

Off-Peak = AGPU X Seasonality Factor

(M)

SCHEDULE 85  
COGENERATION AND SMALL POWER  
PRODUCTION STANDARD  
CONTRACT RATES  
(Continued)

GUIDELINES FOR NEGOTIATION OF POWER PURCHASE AGREEMENTS  
FOR QFS NOT MEETING THE ELIGIBILITY THRESHOLD(Continued)

(GM)

Actual Gas Price Used (AGPU) = Indexed Fuel Cost

where

On-Peak and Off-Peak are established in this schedule by QF resource type for the applicable calendar year of the actual Net Energy deliveries to the Company, and

Indexed Fuel Cost is the applicable weighted monthly average index price of natural gas at Sumas multiplied by the Heat Rate Conversion Factor.

MISCELLANEOUS PROVISIONS

Insurance

Qualifying Facilities with a Nameplate Capacity of 200 kilowatts or smaller are not required to provide evidence of liability insurance.

GUIDELINES FOR NEGOTIATION OF POWER PURCHASE AGREEMENTS  
FOR QFS NOT MEETING THE ELIGIBILITY THRESHOLD

1. The Company will not impose terms and conditions beyond what is standard practice. The Edison Electric Institute master agreement and the Company's Standard Contracts are useful starting points in negotiating QF agreements.
2. The Company will provide an indicative pricing proposal for a QF that plans to provide firm energy or capacity and chooses avoided cost rates calculated at the time of the obligation. The Company will provide an indicative pricing proposal within 30 days of receipt of the information the Company requires from the QF. The proposal may include other terms and conditions, tailored to the individual characteristics of the proposed project. The avoided cost rates in the indicative pricing proposal will be based on the following:
  - a. The starting point for negotiations is the avoided cost calculated under the modeling methodology approved by the Idaho Public Utilities Commission for negotiated contracts, as refined by the Oregon Public Utility Commission to incorporate stochastic analyses of electric and natural gas prices, loads, hydro and unplanned outages.
  - b. The prospective QF may request in writing that the Company prepare a draft power purchase agreement to serve as the basis for negotiations. The Company may require additional information from the QF necessary to prepare a draft agreement.
  - c. Within 30 days of receiving the required information, the Company will provide a draft power purchase agreement containing a comprehensive set of proposed terms and conditions.
  - d. The QF must submit in writing a statement of its intention to begin negotiations with the Company and may include written comments and proposals. The Company is not obligated to begin negotiations until it receives written notification from the QF. The Company will not unreasonably delay negotiations and will respond in good faith to all proposals by the QF.

(M)

SCHEDULE 85  
COGENERATION AND SMALL POWER  
PRODUCTION STANDARD  
CONTRACT RATES  
(Continued)

GUIDELINES FOR NEGOTIATION OF POWER PURCHASE AGREEMENTS  
FOR QFS NOT MEETING THE ELIGIBILITY THRESHOLD (Continued)

(GM)

- e. When the parties have agreed, the Company will prepare a final version of the contract within 15 business days. A contract is not final and binding until signed by both parties.
  - f. At any time after 60 days from the date the QF has provided its written notification pursuant to paragraph d., the QF may file a complaint with the Oregon Public Utility Commission asking the Commission to adjudicate any unresolved contract terms and conditions.
3. QFs have the unilateral right to select a contract length of up to 20 years for a PURPA contract. The contract length selected by the QF may impact other contractual issues including, but not limited to, the avoided cost determination with respect to that QF.
  4. The Company should consider the QF to be providing firm energy or capacity if the contract requires delivery of a specified amount of energy or capacity over a specified term and includes sanctions for non-compliance under a legally enforceable obligation. The Company shall not determine that a QF provides no capacity value simply because the Company did not select it through a competitive bidding process. For a QF providing firm energy or capacity:
    - a. The Company and the QF should negotiate the time periods when the QF may schedule outages and the advance notification requirement for such outages, using provisions in the Company's partial requirements tariffs as guidance.
    - b. The QF should be required to make best efforts to meet its capacity obligations during Company system emergencies.
    - c. The Company and the QF should negotiate security, default, damage and termination provisions that keep the Company and its ratepayers whole in the event the QF fails to meet obligations under the contract.
    - d. Delay of commercial operation should not be a cause of termination if the Company determines at the time of contract execution that it will be resource-sufficient as of the QF on-line date specified in the contract; however, damages may be appropriate.
    - e. Lack of natural motive force for testing to prove commercial operation should not be a cause of termination.
    - f. The Company should include a provision in the contract that states the Company may require a QF terminated due to its default and wishing to resume selling to the Company be subject to the terms of the original contract until its end date.
  5. An "as available" obligation for delivery of energy, including deliveries in excess of Nameplate Capacity or the amount committed in the QF contract, should be treated as a non-firm commitment. Non-firm commitments should not be subject to minimum delivery requirements, default damages for construction delay or under-delivery, default damages for the QF choosing to terminate the contract early, or default security for these purposes.

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SCHEDULE 85  
COGENERATION AND SMALL POWER  
PRODUCTION STANDARD  
CONTRACT RATES  
(Continued)

GUIDELINES FOR NEGOTIATION OF POWER PURCHASE AGREEMENTS  
FOR QFS NOT MEETING THE ELIGIBILITY THRESHOLD (Continued)

(GM)

6. For QFs unable to establish creditworthiness, the Company must at a minimum allow the QF to choose either a letter of credit or cash escrow for providing default security. When determining security requirements, the Company should take into account the risk associated with the QF based on such factors as its size and type of supply commitments.
7. When QF rates are based on avoided costs calculated at the time of delivery, the Company should use day-ahead on- and off-peak market index prices at the appropriate market hub(s).
  - a. For QFs providing firm energy or capacity that choose this option, avoided cost rates should be based on day-ahead market index prices for firm purchases.
  - b. For QFs providing energy on an "as available" basis, avoided cost rates should be based on day-ahead market index prices for non-firm purchases.
8. The Company should not make adjustments to standard avoided cost rates other than those approved by the Oregon Public Utility Commission and consistent with these guidelines.
9. The Company should make adjustments to avoided costs for reliability on an expected forward-looking basis. The Company should design QF rates to provide an incentive for the QF to achieve the contracted level and timing of energy deliveries.
10. The Company should make adjustments to avoided costs for dispatchability on a probabilistic, forward-looking basis.
11. If avoided cost rates for a QF are calculated at the time of the obligation and the Company's avoided resource is a fossil fuel plant, the Company should adjust avoided cost rates for the resource deficiency period to take into account avoided fossil fuel price risk.
12. Avoided cost rates for wind QFs should be adjusted for integration cost estimates based on studies conducted for the Company's system, unless the QF contracts for integration services with a third party.
  - a. The Company should use the most recent integration cost data available, consistent with its evaluation of competitively bid and self-built wind resources.
  - b. The portion of integration costs attributable to reserves costs should be based on the difference in such costs between the wind QF and the Company proxy plant.
  - c. The Company should base first-year integration costs on the actual level of wind resources in the control area, plus the proposed QF. Integration costs for years two through five of the contract should be based on the expected level of wind resources in the control area each year, including the new resources the Company expects to add. Integration costs should be fixed at the year-five level, adjusted for inflation, for the remainder of the life of the wind projects in the control area.
  - d. The Company is prohibited from using a long-range planning target for wind resources as the basis for integration costs. However, if the Company is subject to near-term targets under a mandatory Renewable Portfolio Standard, the Company may base its integration costs on the level of renewable resources it must acquire over the next 10 years.

(M)

SCHEDULE 85  
COGENERATION AND SMALL POWER  
PRODUCTION STANDARD  
CONTRACT RATES  
(Continued)

GUIDELINES FOR NEGOTIATION OF POWER PURCHASE AGREEMENTS  
FOR QFS NOT MEETING THE ELIGIBILITY THRESHOLD (Continued)

(M)

- e. In determining integration costs, the Company should make reasonable estimates regarding the portion of renewable resources to be acquired that will be intermittent resources.
- 13. The Company should adjust avoided cost rates for QF line losses relative to the Company proxy plant based on a proximity-based approach.
- 14. The Company should evaluate whether there are potential savings due to transmission and distribution system upgrades that can be avoided or deferred as a result of the QFs location relative to the Company proxy plant and adjust avoided cost rates accordingly.
- 15. The Company should not adjust avoided cost rates for any distribution or transmission system upgrades needed to accept QF power. Such costs should be separately charged as part of the interconnection process.
- 16. The Company should not adjust avoided cost rates based on its determination of the additional cost it might incur for any debt imputation by a credit rating agency.
- 17. Regarding Surplus Sale and Simultaneous Purchase and Sale:
  - a. QFs may either contract with the Company for a “surplus sale” or for a “simultaneous purchase and sale” provided, however, that the QFs selection of either such contractual arrangement shall not be inconsistent with any retail tariff provision of the Company then in effect or any agreement between the QF and the Company;
  - b. The two sale/purchase arrangements described in paragraph 17. a will be available to QFs regardless of whether they qualify for standard contracts and rates or non-standard contracts and rates, however the “simultaneous purchase and sale” is not available to QFs not directly connected to the Company’s electrical system;
  - c. The negotiation parameters and guidelines should be the same for both sale/purchase arrangements described in paragraph 17. a; and
  - d. The avoided cost calculations by the Company do not require adjustment solely as a result of the selection of one of the sale/purchase arrangements described in paragraph 17.a., rather than the other.

(M)

**Docket UM 2032**

**Attachment 6**

**to**

**JOINT UTILITIES' APPLICATION  
FOR APPROVAL OF COMPLIANCE FILING**

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*PGE's Small Generator Facility Interconnection Application*



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

**Applicant Contact Information:**

Name: \_\_\_\_\_

Mailing Address: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip Code: \_\_\_\_\_

Telephone (Daytime): \_\_\_\_\_ (Evening): \_\_\_\_\_

E-Mail Address: \_\_\_\_\_

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

Street Address/GPS Coordinates: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip Code: \_\_\_\_\_

**Electric Service Information for Site Location:**

Capacity: \_\_\_\_\_(Amps) Voltage: \_\_\_\_\_(Volts)

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

Estimated Commissioning Date (if known): \_\_\_\_\_

**System Installer:**

Name: \_\_\_\_\_

Mailing Address: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip Code: \_\_\_\_\_

Telephone (office): \_\_\_\_\_ (cell): \_\_\_\_\_

Facsimile Number: \_\_\_\_\_ E-Mail Address: \_\_\_\_\_

**Consulting Engineer (if applicable):**

Name: \_\_\_\_\_

Mailing Address: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip Code: \_\_\_\_\_

Telephone (office): \_\_\_\_\_ (cell): \_\_\_\_\_

Facsimile Number: \_\_\_\_\_ E-Mail Address: \_\_\_\_\_

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

### Requested Procedure Under Which to Evaluate Interconnection Request<sup>1</sup>:

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

- Tier 2** - Certified interconnection equipment with an aggregate Electric Nameplate Capacity of 2 MW or less. Indicate type of certification below. The application fee amount is \$500.
- Lab Tested - system equipment tested to IEEE 1547.1 and other specified standards by a nationally recognized testing laboratory and is appropriately labeled.
- Field Tested\* – an identical small generator facility has been approved by an Oregon utility under a Tier 4 study review process within the prior 36 months of the date of this interconnection request.
- Tier 3** – Interconnected facility will not export power beyond point of interconnection. The Electric Nameplate Capacity rating may be 50 kW or smaller, if connecting to an area network or 10 MW or smaller, if connecting to a radial distribution feeder. The application fee amount is \$1,000.
- Tier 4** – Electric Nameplate Capacity rating is 10 MW or smaller and the Small Generator Facility does not qualify for a Tier 1, Tier 2 or Tier 3 review or has been reviewed but not approved under a Tier 1, Tier 2 or Tier 3 review. Application fee amount is \$1,000.

<sup>1</sup> **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).

### Type of Interconnection Service Requested (check one):

Network Resource Interconnection Service only

Applicant wishes to be studied for both Network Resource Interconnection Service and Energy Resource Interconnection Service and understands it will need to select one service type prior to the Facilities Study.

### \*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.

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

- A written statement by the Applicant indicating that the small generator facility being proposed is identical, except for Minor Equipment Modification, to the one previously approved by an Oregon utility for parallel operation.

If a Tier 2 Application utilizing Field Tested equipment is proposed, the remainder of the application will not be required to be completed.

**Small Generator Facility Information:**

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

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

*Please provide copies of manufacturer brochures or technical specifications*

**Customer-Owned Transformer Information:**

Will Applicant own and maintain transformer?  Yes  No,

If yes, is it  Single-phase  3-phase

If 3-phase:

Primary: \_\_\_\_\_ Volts  Delta  Wye  Wye Grounded

Secondary: \_\_\_\_\_ Volts  Delta  Wye  Wye Grounded

Tertiary: \_\_\_\_\_ Volts  Delta  Wye  Wye Grounded

Transformer Impedance \_\_\_\_\_% on \_\_\_\_\_kVA base

**Mode of Operation / Energy Source:**

Proposed Operation Mode  QF  Other

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

Energy Source:  Solar  Wind  Hydro  Diesel  Natural Gas

Other \_\_\_\_\_

Prime Mover Type:  Photovoltaic  Reciprocating Engine  Fuel Cell

Turbine  Other \_\_\_\_\_

**Energy Production Equipment/Inverter Information:**

Synchronous  Induction  Inverter  Other \_\_\_\_\_

Total Electric Nameplate Rating: \_\_\_\_\_kW \_\_\_\_\_kVA

(**DC total** for inverter-based solar arrays, wind turbines, etc. —or— **AC generator capacity**)

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

Rated Voltage: \_\_\_\_\_ Volts

Rated Current: \_\_\_\_\_ Amps

System Type Tested (Total System):  Yes  No, attach product literature**For Synchronous Machines:**

Manufacturer: \_\_\_\_\_

Model No.: \_\_\_\_\_ Version No.: \_\_\_\_\_

Saturation Curve and the Vee Curve (*submit copies*):  Salient  Non-Salient

Torque: \_\_\_\_\_ lb-ft Rated RPM: \_\_\_\_\_

Field Amperes: \_\_\_\_\_ at rated generator voltage and current and \_\_\_\_\_ PF over-excited

Type of Exciter: \_\_\_\_\_

Output Power of Exciter: \_\_\_\_\_

Type of Voltage Regulator: \_\_\_\_\_

Locked Rotor Current: \_\_\_\_\_ Amps

Synchronous Speed: \_\_\_\_\_ RPM

Winding Connection: \_\_\_\_\_

Min. Operating Freq./Time: \_\_\_\_\_

Generator Connection:  Delta  Wye  Wye GroundedDirect-axis Synchronous Reactance: ( $X_d$ ) \_\_\_\_\_ ohmsDirect-axis Transient Reactance: ( $X'_d$ ) \_\_\_\_\_ ohmsDirect-axis Sub-transient Reactance: ( $X''_d$ ) \_\_\_\_\_ ohms**For Induction Machines:**

Manufacturer: \_\_\_\_\_

Model No.: \_\_\_\_\_ Version No.: \_\_\_\_\_

Locked Rotor Current: \_\_\_\_\_ Amps

Rotor Resistance: ( $R_r$ ) \_\_\_\_\_ ohms Exciting Current: \_\_\_\_\_ AmpsRotor Reactance: ( $X_r$ ) \_\_\_\_\_ ohms Reactive Power Required: \_\_\_\_\_Magnetizing Reactance: ( $X_m$ ) \_\_\_\_\_ ohms \_\_\_\_\_ VARs (No Load)Stator Resistance: ( $R_s$ ) \_\_\_\_\_ ohms \_\_\_\_\_ VARs (Full Load)Stator Reactance: ( $X_s$ ) \_\_\_\_\_ ohmsShort Circuit Reactance: ( $X''_d$ ) \_\_\_\_\_ ohmsPhases:  Single  3-Phase

Frame Size: \_\_\_\_\_ Design Letter: \_\_\_\_\_ Temp. Rise: \_\_\_\_\_ °C.

**Tier 2, Tier 3 or Tier 4 Interconnection Application**  
(cont.)**For Inverter Based Facilities:**

Manufacturer: \_\_\_\_\_ Model: \_\_\_\_\_

Rated Voltage: \_\_\_\_\_ Volts

Open Circuit Voltage (*if applicable*): \_\_\_\_\_ Volts

Rated Current: \_\_\_\_\_ Amps

Short Circuit Current (*if applicable*): \_\_\_\_\_ Amps**Inverter Information:**

Manufacturer: \_\_\_\_\_ Model: \_\_\_\_\_

Electric Nameplate Capacity Rated Output: \_\_\_\_\_ Amps \_\_\_\_\_ Volts \_\_\_\_\_ kW

Efficiency: \_\_\_\_\_ % Power Factor: \_\_\_\_\_

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

Manufacturer: \_\_\_\_\_ Model: \_\_\_\_\_

Electric Nameplate Capacity rating: \_\_\_\_\_ kVA

Enclosure Checklist:

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

**Applicant Signature:**

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

Applicant Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Printed Name: \_\_\_\_\_ Title (*if applicable*): \_\_\_\_\_

Application Fee included: \$ \_\_\_\_\_

.....

**PGE Acknowledgement:**

I hereby acknowledge the receipt of a Interconnection Request and Application Fee.

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

PGE Representative Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Printed Name: \_\_\_\_\_ Title: \_\_\_\_\_

**Docket UM 2032**

**Attachment 7**

**to**

**JOINT UTILITIES' APPLICATION  
FOR APPROVAL OF COMPLIANCE FILING**

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*PGE's Small Generator Facility Study Agreement*



## Small Generator Facility Facilities Study Agreement

This Agreement is made and entered into this date, \_\_\_\_\_ by and between \_\_\_\_\_, {data: Legal Entity X}, (“Applicant”) and Portland General Electric Company, a corporation existing under the laws of the State of Oregon, (“PGE”). Applicant and PGE each may be referred to as a “Party,” or collectively as the “Parties.”

### Recitals:

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

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

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

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

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

1. When used in this Agreement, with initial capitalization, the terms specified shall have the meanings set forth in this Agreement or as given in OAR 860-082-0005 through 860-082-0085 and to the extent that this Agreement conflicts with the Rules, the Rules shall take precedence.
2. Applicant and PGE shall cause to be performed a Facilities Study consistent with OAR 860-082-0060(8).
3. Applicant desires to be studied for \_\_\_\_\_ (select either Network Resource Interconnection Service or Energy Resource Interconnection Service).
4. The scope of the Facilities Study shall be subject to data provided by Applicant in its Application as well as the data provided by the Applicant in Attachment A of this Agreement.

54. A Facilities Study report (1) shall provide a description, estimated cost, and schedule for required Interconnection Facilities and System Upgrade(s) to interconnect the Small Generator Facility to PGE's T&D System including a description of any facilities or upgrades necessary to address impacts to Affected Systems and (2) shall address the short circuit, instability, and power flow issues identified in any prior System Impact Studies.

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

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

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

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

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

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

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

**Signatures:**

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

For APPLICANT:

Signature: \_\_\_\_\_

Printed Name: \_\_\_\_\_

Title (*if any*): \_\_\_\_\_

Date: \_\_\_\_\_

For PORTLAND GENERAL ELECTRIC COMPANY:

Signature: \_\_\_\_\_

Printed Name: \_\_\_\_\_

Title (*if any*): \_\_\_\_\_

Date: \_\_\_\_\_

**Attachment A**  
**Facilities Study Agreement**

**Data to be Provided by Applicant with the Facilities Study Agreement**

Type of Interconnection Service Requested (specify either Network Resource Interconnection Service or Energy Resource Interconnection Service):

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

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

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

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

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

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

Will an alternate source of auxiliary power be available during CT/PT maintenance?

Will a transfer bus on the generation side of the metering require that each meter set be designed for the total plant generation? \_\_\_\_\_ (Please indicate on the one-line diagram.)

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

What protocol does the control system or PLC use?

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

As part of the Interconnection process, the following utility system upgrades have been determined to be necessary to facilitate a safe and reliable interconnection:

The Facilities Study report will provide the estimated costs and design, procurement, and construction timelines for the above work.

Budget for the study is estimated at \${data: Cost FaS Estimate}.

PGE will deliver the study results within ( ) business days from the time that PGE has received all of the following:

- Signed copy of the study agreement, and
- \$1000.00 deposit payment, and
- All necessary materials outlined in Attachment A of this Study Agreement.

If PGE determines during the Study process that supplemental or clarifying information is required, then PGE will request the information from the applicant. The time necessary to complete the evaluation of the application will be extended by the time required for the receipt of the additional information.

**Docket UM 2032**

**Attachment 8**

**to**

**JOINT UTILITIES' APPLICATION  
FOR APPROVAL OF COMPLIANCE FILING**

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*PGE's Schedule 201*

**SCHEDULE 201  
QUALIFYING FACILITY 10 MW or LESS  
AVOIDED COST POWER PURCHASE INFORMATION**

**PURPOSE**

To provide information about Standard Avoided Costs and Renewable Avoided Costs, Standard Power Purchase Agreements (PPA) and Negotiated PPAs, power purchase prices and price options for power delivered by a Qualifying Facility (QF) to the Company with nameplate capacity of 10,000 kW (10MW) or less.

**AVAILABLE**

To owners of QFs making sales of electricity to the Company in the State of Oregon (Seller).

To be eligible for a Standard PPA, a QF interconnecting directly to PGE's transmission or distribution system (i.e., an on-system QF) must obtain Network Resource Interconnection Service (NRIS).

**APPLICABLE**

For power purchased from small power production or cogeneration facilities that are QFs as defined in 18 Code of Federal Regulations (CFR) Section 292, that meet the eligibility requirements described herein and where the energy is delivered to the Company's system and made available for Company purchase pursuant to a Standard PPA.

**ESTABLISHING CREDITWORTHINESS**

The Seller must establish creditworthiness prior to service under this schedule. For a Standard PPA, a Seller may establish creditworthiness with a written acknowledgment that it is current on all existing debt obligations and that it was not a debtor in a bankruptcy proceeding within the preceding 24 months. If the Seller is not able to establish creditworthiness, the Seller must provide security deemed sufficient by the Company as set forth in the Standard PPA.

**POWER PURCHASE INFORMATION**

A Seller may call the Power Production Coordinator at (503) 464-8000 to obtain more information about being a Seller or how to apply for service under this schedule.

**PPA**

In accordance with terms set forth in this schedule and the Commission's Rules as applicable, the Company will purchase any Energy in excess of station service (power necessary to produce generation) and amounts attributable to conversion losses, which are made available from the Seller.

A Seller must execute a PPA with the Company prior to delivery of power to the Company. The agreement will have a term of up to 20 years as selected by the QF and memorialized in the PPA.

A QF with a nameplate capacity rating of 10 MW or less as defined herein may elect the option of a Standard PPA.

**SCHEDULE 201 (Continued)**

## PPA (Continued)

Any Seller may elect to negotiate a PPA with the Company. Such negotiation will comply with the requirements of the Federal Energy Regulatory Commission (FERC), and the Commission including the guidelines in Order No. 07-360, and Schedule 202. Negotiations for power purchase pricing will be based on either the filed Standard Avoided Costs or Renewable Avoided Costs in effect at that time.

**STANDARD PPA (Nameplate capacity of 10 MW or less)**

A Seller choosing a Standard PPA will complete all informational and price option selection requirements in the applicable Standard PPA and submit the executed Agreement to the Company prior to service under this schedule. The Standard PPA is available at [www.portlandgeneral.com](http://www.portlandgeneral.com). The available Standard PPAs are:

- Standard In-System Non-Variable Power Purchase Agreement
- Standard Off-System Non-Variable Power Purchase Agreement
- Standard In-System Variable Power Purchase Agreement
- Standard Off-System Variable Power Purchase Agreement
- Standard Renewable In-System Non-Variable Power Purchase Agreement
- Standard Renewable Off-System Non-Variable Power Purchase Agreement
- Standard Renewable In-System Variable Power Purchase Agreement
- Standard Renewable Off-System Variable Power Purchase Agreement

The Standard PPAs applicable to variable resources are available only to QFs utilizing wind, solar or run of river hydro as the primary motive force.

**GUIDELINES FOR 10 MW OR LESS FACILITIES ELECTING STANDARD PPA**

To execute the Standard PPA the Seller must complete all of the general project information requested in the applicable Standard PPA.

When all information required in the Standard PPA has been received in writing from the Seller, the Company will respond within 15 business days with a draft Standard PPA.

The Seller may request in writing that the Company prepare a final draft Standard PPA. The Company will respond to this request within 15 business days. In connection with such request, the QF must provide the Company with any additional or clarified project information that the Company reasonably determines to be necessary for the preparation of a final draft Standard PPA.

When both parties are in full agreement as to all terms and conditions of the draft Standard PPA, the Company will prepare and forward to the Seller a final executable version of the agreement within 15 business days. Following the Company's execution, an executed copy will be returned to the Seller. Prices and other terms and conditions in the PPA will not be final and binding until the Standard PPA has been executed by both parties.

**SCHEDULE 201 (Continued)****OFF-SYSTEM PPA**

A Seller with a facility that interconnects with an electric system other than the Company's electric system may enter into a PPA with the Company after following the applicable Standard or Negotiated PPA guidelines and making the arrangements necessary for transmission of power to the Company's system.

**BASIS FOR POWER PURCHASE PRICE****AVOIDED COST SUMMARY**

The power purchase prices are based on either the Company's Standard Avoided Costs or Renewable Avoided Costs in effect at the time the agreement is executed. Avoided Costs are defined in 18 CFR 292.101(6) as "the incremental costs to an electric utility of electric energy or capacity or both which, but for the purchase from the qualifying facility or qualifying facilities, such utility would generate itself or purchase from another source."

Monthly On-Peak prices are included in both the Standard Avoided Costs as listed in Tables 1a, 2a, and 3a and Renewable Avoided Costs as listed in Tables 4a, 5a, and 6a. Monthly Off-Peak prices are included in both the Standard Avoided Costs as listed in Tables 1b, 2b, and 3b and Renewable Avoided Costs as listed in Tables 4b, 5b, and 6b.

**ON-PEAK PERIOD**

The On-Peak period is 6:00 a.m. until 10:00 p.m., Monday through Saturday.

**OFF-PEAK PERIOD**

The Off-Peak period is 10:00 p.m. until 6:00 a.m., Monday through Saturday, and all day on Sunday.

Standard Avoided Costs are based on forward market price estimates through the Resource Sufficiency Period, the period of time during which the Company's Standard Avoided Costs are associated with incremental purchases of Energy and capacity from the market. For the Resource Deficiency Period, the Standard Avoided Costs reflect the fully allocated costs of a natural gas fueled combined cycle combustion turbine (CCCT) including fuel and capital costs. The CCCT Avoided Costs are based on the variable cost of Energy plus capitalized Energy costs at a 94.01% capacity factor based on a natural gas price forecast, with prices modified for shrinkage and transportation costs.

Renewable Avoided Costs are based on forward market price estimates through the Renewable Resource Sufficiency Period, the period of time during which the Company's Renewable Avoided Costs are associated with incremental purchases of energy and capacity from the market. For the Renewable Resource Deficiency Period, the Renewable Avoided Costs reflect the fully allocated costs of a wind plant including capital costs.

**SCHEDULE 201 (Continued)****PRICING FOR STANDARD PPA**

Pricing represents the purchase price per MWh the Company will pay for electricity delivered to a Point of Delivery (POD) within the Company's service territory pursuant to a Standard PPA up to the nameplate rating of the QF in any hour.

**ELIGIBILITY REQUIREMENTS TO RECEIVE THE STANDARD FIXED PRICE OPTION OR THE RENEWABLE FIXED PRICE OPTION**

The Standard PPA pricing will be based on either the Standard or Renewable Avoided Costs in effect at the time the agreement is executed. A QF will be eligible to receive either the Standard Fixed Price Option or the Renewable Fixed Price Option described below only if the nameplate capacity of the QF does not exceed 3 MW for solar QF projects or 10 MW for all other types of QF projects. A QF that does not meet these eligibility requirements must negotiate prices pursuant to the terms of Schedule 202. Solar QF projects with nameplate capacity that exceed 3 MW but do not exceed 10 MW are eligible for a Standard PPA containing negotiated prices under Schedule 202. Eligibility for the Standard Fixed Price Option or the Renewable Fixed Price Option may also be affected by the Definition of a Small Cogeneration Facility or Small Power Production Facility Eligible to Receive the Standard Fixed Price Option or the Renewable Fixed Price Option Under the Standard PPA stated below.

Except for As-Available Energy, the Company will pay the Seller either the On-Peak Standard Avoided Cost pursuant to Tables 1a, 2a, or 3a or the On-Peak Renewable Avoided Costs pursuant to Tables 4a, 5a, or 6a for Net Output delivered in the On-Peak Period. Except for As-Available Energy, the Company will pay the Seller either the Off-Peak Standard Avoided Cost pursuant to Tables 1b, 2b, or 3b or the Off-Peak Renewable Avoided Costs pursuant to Tables 4b, 5b, or 6b for Net Output delivered in the Off-Peak Period. The Company will pay the Seller the As-Available Rate for all As-Available Energy delivered during the PPA Term.

**1) Standard Fixed Price Option**

The Standard Fixed Price Option is based on Standard Avoided Costs including forecasted natural gas prices. It is available to all QFs that meet the eligibility requirements identified above.

This option is available for a maximum term of 15 years. Prices will be as established at the time the Standard PPA is executed and will be equal to the Standard Avoided Costs in Tables 1a and 1b, 2a and 2b, or 3a and 3b, depending on the type of QF, effective at execution. QFs using any resource type other than wind and solar are assumed to be Base Load QFs.

**SCHEDULE 201 (Continued)**

## PRICING OPTIONS FOR STANDARD PPA (Continued)

## Standard Fixed Price Option (Continued)

Prices paid to the Seller under the Standard Fixed Price Option include adjustments for the capacity contribution of the QF resource type relative to that of the avoided proxy resource. Both the Base Load QF resources (Tables 1a and 1b) and the avoided proxy resource, the basis used to determine Standard Avoided Costs for the Standard Fixed Price Option, are assumed to have a capacity contribution to peak of 100%. The capacity contribution for Wind QF resources (Tables 2a and 2b) is assumed to be 25.00%. The capacity contribution for Solar QF resources (Tables 3a and 3b) is assumed to be 8.50%.

Prices paid to the Seller under the Standard Fixed Price Option for Wind QFs (Tables 2a and 2b) include a reduction for the wind integration costs in Table 7. However, if the Wind QF is outside of PGE's Balancing Authority Area as contemplated in the Commission's Order No. 14-058, the Seller is paid the wind integration charges in Table 7, in addition to the prices listed in Tables 2a and 2b, for a net-zero effect.

Prices paid to the Seller under the Standard Fixed Price Option for Solar QFs (Tables 3a and 3b) include a reduction for the solar integration costs in Table 7. However, if the Solar QF is outside of PGE's Balancing Authority Area as contemplated in the Commission's Order No. 14-058, the Seller is paid the solar integration charges in Table 7, in addition to the prices listed in Tables 3a and 3b, for a net-zero effect.

Sellers with terms exceeding 15 years from the commercial operation date will receive pricing equal to the Mid-C Index Price for all years up to five in excess of the initial 15 years after the commercial operation date selected by the Seller and memorialized in the PPA.

**SCHEDULE 201 (Continued)**

PRICING OPTIONS FOR STANDARD PPA (Continued)  
 Standard Fixed Price Option (Continued)

TABLE 1a												
Avoided Costs												
Fixed Price Option for Base Load QF												
On-Peak Forecast (\$/MWH)												
Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2023	0.00	0.00	0.00	0.00	70.99	73.54	153.56	252.44	204.53	82.20	97.49	135.21
2024	133.27	109.83	68.03	61.92	53.76	58.86	175.07	215.84	167.93	81.29	94.54	137.35
2025	54.43	54.34	52.97	49.95	49.80	50.78	51.57	51.80	51.61	52.09	54.47	56.86
2026	58.95	57.53	54.71	51.01	50.95	51.59	52.22	52.37	52.17	52.62	54.25	56.69
2027	58.61	57.36	54.53	51.35	51.22	51.61	52.14	52.36	52.25	52.91	55.17	57.95
2028	59.13	58.02	55.29	51.35	51.32	51.82	52.44	52.77	52.77	53.89	55.95	60.07
2029	52.30	52.41	50.89	50.01	50.11	50.21	50.29	50.40	50.51	50.84	51.67	51.78
2030	52.57	52.69	51.79	50.92	51.01	51.12	51.21	51.32	51.42	52.02	52.86	52.96
2031	53.45	53.55	53.45	52.55	52.66	52.75	52.84	52.96	53.06	54.00	55.08	55.19
2032	55.86	55.97	56.28	55.33	55.44	55.54	55.64	55.77	55.90	56.23	57.22	57.34
2033	58.06	57.20	58.92	57.58	57.51	57.79	57.86	57.86	58.02	58.41	59.17	59.02
2034	60.12	59.78	58.07	57.04	57.15	57.26	57.37	57.49	57.60	57.97	59.06	59.18
2035	59.32	59.13	58.24	57.22	57.33	57.44	57.54	57.65	57.77	58.16	59.18	59.30
2036	58.80	58.16	57.73	56.76	56.86	56.96	57.04	57.15	57.26	57.56	58.48	58.58
2037	61.14	58.40	57.52	56.56	56.66	56.76	56.85	56.95	57.05	57.28	58.25	58.35
2038	61.12	59.73	58.53	57.59	57.69	57.78	57.89	57.99	58.08	58.32	59.45	59.55
2039	61.61	61.38	60.89	60.09	60.10	60.22	60.34	60.44	60.54	61.77	63.17	63.31
2040	66.56	66.50	66.31	65.37	65.49	65.95	66.15	66.29	66.41	68.44	70.13	70.30
2041	73.28	73.40	71.35	70.33	70.49	70.66	70.83	71.01	71.13	72.27	73.96	74.15
2042	77.55	78.52	72.87	71.97	72.19	72.51	72.83	72.72	72.70	73.96	74.66	75.03
2043	78.20	77.29	74.15	73.40	73.46	73.53	73.69	73.86	74.07	74.32	76.36	76.60
2044	80.59	80.14	74.51	73.92	73.76	74.10	74.03	74.22	74.75	76.60	66.92	67.33
2045	71.03	76.76	75.98	74.90	75.45	75.49	75.35	75.62	75.75	76.35	78.34	78.73
2046	81.68	81.36	78.44	77.58	77.68	77.84	77.95	78.19	78.31	78.97	81.14	81.37
2047	85.81	84.83	82.31	81.63	81.67	81.72	81.97	82.12	82.33	83.59	86.69	86.84
2048	90.17	86.71	85.28	84.64	84.69	84.76	85.01	85.18	85.37	87.75	92.15	92.32

**SCHEDULE 201 (Continued)**

PRICING OPTIONS FOR STANDARD PPA (Continued)  
Standard Fixed Price Option (Continued)

TABLE 1b												
Avoided Costs												
Fixed Price Option for Base Load QF												
Off-Peak Forecast (\$/MWH)												
Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2023	0.00	0.00	0.00	0.00	58.76	43.46	69.97	101.57	92.39	74.05	83.22	109.72
2024	108.81	90.46	59.88	55.80	43.57	43.57	79.25	111.36	84.34	60.90	75.17	109.83
2025	28.12	28.02	26.66	23.63	23.48	24.47	25.25	25.49	25.29	25.77	28.16	30.55
2026	32.10	30.68	27.86	24.16	24.09	24.74	25.37	25.51	25.32	25.77	27.40	29.83
2027	31.21	29.96	27.13	23.95	23.81	24.21	24.73	24.95	24.84	25.51	27.77	30.55
2028	31.16	30.06	27.33	23.39	23.36	23.85	24.47	24.80	24.81	25.93	27.99	32.11
2029	23.77	23.87	22.36	21.47	21.57	21.68	21.75	21.87	21.98	22.30	23.14	23.24
2030	23.45	23.57	22.66	21.80	21.89	22.00	22.09	22.20	22.30	22.90	23.74	23.84
2031	23.73	23.84	23.74	22.83	22.95	23.03	23.13	23.24	23.35	24.28	25.36	25.47
2032	25.73	25.83	26.14	25.20	25.31	25.40	25.51	25.64	25.76	26.09	27.09	27.20
2033	27.12	26.25	27.97	26.63	26.56	26.85	26.92	26.91	27.07	27.47	28.22	28.07
2034	28.44	28.10	26.39	25.35	25.47	25.58	25.69	25.80	25.92	26.29	27.38	27.50
2035	27.09	26.91	26.01	24.99	25.10	25.21	25.31	25.42	25.54	25.93	26.96	27.07
2036	26.02	25.38	24.94	23.98	24.08	24.18	24.26	24.36	24.48	24.78	25.70	25.80
2037	27.58	24.83	23.96	23.00	23.10	23.19	23.29	23.38	23.49	23.71	24.68	24.78
2038	26.87	25.48	24.28	23.34	23.44	23.53	23.64	23.74	23.83	24.07	25.20	25.30
2039	26.65	26.43	25.94	25.14	25.15	25.26	25.39	25.49	25.58	26.82	28.22	28.36
2040	30.89	30.83	30.64	29.70	29.83	30.29	30.48	30.62	30.74	32.77	34.47	34.63
2041	36.88	37.01	34.95	33.93	34.10	34.26	34.43	34.61	34.73	35.87	37.56	37.75
2042	40.41	41.38	35.72	34.83	35.04	35.36	35.69	35.58	35.55	36.82	37.52	37.89
2043	40.30	39.39	36.24	35.50	35.55	35.62	35.78	35.95	36.17	36.41	38.46	38.69
2044	42.04	41.58	35.95	35.36	35.20	35.55	35.47	35.66	36.19	38.04	28.37	28.77
2045	31.43	37.16	36.38	35.30	35.85	35.89	35.75	36.02	36.15	36.74	38.74	39.13
2046	41.40	41.08	38.16	37.30	37.40	37.56	37.67	37.91	38.02	38.69	40.86	41.08
2047	44.70	43.73	41.20	40.52	40.57	40.61	40.86	41.01	41.23	42.48	45.58	45.73
2048	48.35	44.89	43.47	42.83	42.87	42.95	43.19	43.36	43.55	45.93	50.34	50.50

## SCHEDULE 201 (Continued)

PRICING OPTIONS FOR STANDARD PPA (Continued)  
Standard Fixed Price Option (Continued)

TABLE 2a												
Avoided Costs												
Fixed Price Option for Wind QF												
On-Peak Forecast (\$/MWH)												
Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2023	0.00	0.00	0.00	0.00	70.64	73.19	153.21	252.09	204.18	81.86	97.15	134.86
2024	132.92	109.47	67.68	61.56	53.41	58.51	174.71	215.49	167.58	80.93	94.18	137.00
2025	43.23	43.13	41.77	38.74	38.60	39.58	40.37	40.60	40.40	40.88	43.27	45.66
2026	47.52	46.10	43.28	39.58	39.51	40.16	40.79	40.93	40.74	41.19	42.82	45.25
2027	46.94	45.70	42.86	39.69	39.55	39.95	40.47	40.69	40.58	41.24	43.51	46.29
2028	47.22	46.12	43.39	39.45	39.42	39.91	40.53	40.86	40.87	41.99	44.05	48.17
2029	40.15	40.26	38.74	37.86	37.96	38.06	38.14	38.25	38.37	38.69	39.53	39.63
2030	40.17	40.29	39.39	38.53	38.61	38.72	38.81	38.92	39.02	39.62	40.46	40.56
2031	40.80	40.90	40.80	39.90	40.01	40.10	40.19	40.31	40.41	41.35	42.43	42.54
2032	43.03	43.13	43.45	42.50	42.61	42.71	42.81	42.94	43.06	43.40	44.39	44.51
2033	44.89	44.02	45.74	44.40	44.34	44.62	44.69	44.68	44.84	45.24	45.99	45.85
2034	46.64	46.29	44.58	43.55	43.66	43.77	43.89	44.00	44.12	44.49	45.57	45.70
2035	45.60	45.41	44.52	43.50	43.61	43.72	43.82	43.93	44.05	44.44	45.46	45.58
2036	44.84	44.20	43.77	42.80	42.90	43.00	43.09	43.19	43.30	43.60	44.53	44.62
2037	46.85	44.11	43.24	42.28	42.37	42.47	42.56	42.66	42.77	42.99	43.96	44.06
2038	46.53	45.15	43.95	43.01	43.11	43.20	43.31	43.41	43.50	43.74	44.87	44.97
2039	46.73	46.50	46.01	45.21	45.22	45.34	45.46	45.56	45.66	46.89	48.29	48.43
2040	51.37	51.31	51.12	50.18	50.31	50.77	50.96	51.11	51.23	53.26	54.95	55.12
2041	57.78	57.91	55.85	54.84	55.00	55.16	55.34	55.51	55.63	56.78	58.46	58.65
2042	61.74	62.71	57.06	56.16	56.37	56.70	57.02	56.91	56.88	58.15	58.85	59.22
2043	62.07	61.16	58.01	57.26	57.32	57.39	57.55	57.72	57.93	58.18	60.23	60.46
2044	64.18	63.72	58.09	57.50	57.35	57.69	57.61	57.80	58.33	60.18	50.51	50.92
2045	54.17	59.91	59.12	58.05	58.59	58.63	58.49	58.76	58.89	59.49	61.48	61.87
2046	64.53	64.22	61.29	60.44	60.53	60.69	60.80	61.04	61.16	61.82	63.99	64.22
2047	68.31	67.33	64.81	64.13	64.17	64.22	64.47	64.62	64.83	66.09	69.19	69.34
2048	72.37	68.91	67.48	66.84	66.89	66.96	67.20	67.37	67.56	69.94	74.35	74.51

**SCHEDULE 201 (Continued)**

PRICING OPTIONS FOR STANDARD PPA (Continued)  
Standard Fixed Price Option (Continued)

TABLE 2b												
Avoided Costs												
Fixed Price Option for Wind QF												
Off-Peak Forecast (\$/MWH)												
Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2023	0.00	0.00	0.00	0.00	58.41	43.12	69.62	101.22	92.05	73.70	82.87	109.38
2024	108.46	90.11	59.53	55.45	43.22	43.22	78.89	111.00	83.99	60.55	74.82	109.47
2025	27.76	27.66	26.30	23.27	23.12	24.11	24.89	25.13	24.93	25.41	27.80	30.19
2026	31.74	30.31	27.49	23.79	23.73	24.37	25.00	25.15	24.95	25.40	27.03	29.47
2027	30.83	29.59	26.75	23.57	23.44	23.83	24.36	24.58	24.47	25.13	27.39	30.18
2028	30.78	29.68	26.94	23.01	22.98	23.47	24.09	24.42	24.43	25.55	27.61	31.72
2029	23.38	23.48	21.96	21.08	21.18	21.28	21.36	21.47	21.59	21.91	22.75	22.85
2030	23.05	23.17	22.27	21.40	21.49	21.60	21.69	21.80	21.90	22.50	23.34	23.44
2031	23.33	23.43	23.33	22.43	22.54	22.63	22.72	22.83	22.94	23.88	24.96	25.06
2032	25.31	25.42	25.73	24.78	24.89	24.99	25.10	25.22	25.35	25.68	26.67	26.79
2033	26.69	25.83	27.55	26.21	26.14	26.42	26.49	26.49	26.65	27.04	27.80	27.65
2034	28.01	27.67	25.95	24.92	25.03	25.15	25.26	25.37	25.49	25.86	26.95	27.07
2035	26.65	26.47	25.57	24.55	24.66	24.77	24.87	24.98	25.10	25.49	26.51	26.63
2036	25.57	24.93	24.49	23.53	23.63	23.73	23.81	23.91	24.03	24.33	25.25	25.35
2037	27.12	24.37	23.50	22.54	22.64	22.73	22.83	22.92	23.03	23.25	24.23	24.32
2038	26.40	25.02	23.82	22.87	22.97	23.07	23.17	23.27	23.36	23.60	24.73	24.83
2039	26.18	25.95	25.46	24.66	24.67	24.79	24.91	25.01	25.10	26.34	27.74	27.88
2040	30.40	30.34	30.15	29.21	29.34	29.80	29.99	30.14	30.25	32.28	33.98	34.14
2041	36.38	36.51	34.45	33.44	33.60	33.76	33.93	34.11	34.23	35.37	37.06	37.25
2042	39.90	40.87	35.22	34.32	34.53	34.86	35.18	35.07	35.04	36.31	37.01	37.38
2043	39.78	38.87	35.73	34.98	35.04	35.10	35.26	35.43	35.65	35.89	37.94	38.17
2044	41.51	41.05	35.42	34.83	34.68	35.02	34.94	35.13	35.66	37.51	27.84	28.25
2045	30.89	36.62	35.84	34.76	35.31	35.35	35.21	35.48	35.61	36.20	38.20	38.59
2046	40.85	40.53	37.61	36.75	36.85	37.01	37.11	37.36	37.47	38.14	40.30	40.53
2047	44.14	43.16	40.64	39.96	40.00	40.05	40.30	40.45	40.66	41.92	45.02	45.17
2048	47.78	44.32	42.89	42.25	42.30	42.37	42.62	42.79	42.98	45.36	49.76	49.92

**SCHEDULE 201 (Continued)**

PRICING OPTIONS FOR STANDARD PPA (Continued)  
Standard Fixed Price Option (Continued)

<b>TABLE 3a</b>												
<b>Avoided Costs</b>												
<b>Fixed Price Option for Solar QF</b>												
<b>On-Peak Forecast (\$/MWH)</b>												
<b>Year</b>	<b>Jan</b>	<b>Feb</b>	<b>Mar</b>	<b>Apr</b>	<b>May</b>	<b>Jun</b>	<b>Jul</b>	<b>Aug</b>	<b>Sep</b>	<b>Oct</b>	<b>Nov</b>	<b>Dec</b>
2023	0.00	0.00	0.00	0.00	69.55	72.10	152.12	251.00	203.08	80.76	96.05	133.77
2024	131.80	108.36	66.56	60.45	52.29	57.39	173.60	214.37	166.46	79.82	93.07	135.88
2025	32.32	32.23	30.86	27.84	27.69	28.67	29.46	29.69	29.50	29.98	32.36	34.75
2026	36.39	34.97	32.14	28.45	28.38	29.03	29.66	29.80	29.61	30.06	31.69	34.12
2027	35.58	34.34	31.50	28.33	28.19	28.59	29.11	29.33	29.22	29.88	32.15	34.93
2028	35.63	34.53	31.79	27.86	27.83	28.32	28.94	29.27	29.28	30.39	32.46	36.57
2029	28.32	28.43	26.91	26.03	26.13	26.23	26.31	26.42	26.54	26.86	27.70	27.80
2030	28.10	28.22	27.32	26.45	26.54	26.65	26.74	26.85	26.95	27.55	28.39	28.49
2031	28.48	28.58	28.48	27.58	27.69	27.78	27.87	27.99	28.09	29.03	30.11	30.22
2032	30.53	30.63	30.95	30.00	30.11	30.21	30.31	30.44	30.56	30.90	31.89	32.01
2033	32.06	31.19	32.91	31.57	31.51	31.79	31.86	31.86	32.01	32.41	33.17	33.02
2034	33.51	33.16	31.45	30.42	30.53	30.65	30.76	30.87	30.99	31.36	32.45	32.57
2035	32.24	32.05	31.16	30.14	30.25	30.36	30.46	30.57	30.69	31.08	32.10	32.22
2036	31.25	30.61	30.17	29.21	29.31	29.41	29.49	29.60	29.71	30.01	30.93	31.03
2037	32.94	30.19	29.32	28.36	28.46	28.55	28.65	28.75	28.85	29.07	30.05	30.15
2038	32.34	30.96	29.76	28.81	28.91	29.01	29.11	29.21	29.30	29.54	30.67	30.77
2039	32.24	32.01	31.52	30.72	30.73	30.85	30.97	31.07	31.17	32.40	33.80	33.94
2040	36.58	36.53	36.34	35.40	35.52	35.98	36.18	36.32	36.44	38.47	40.16	40.33
2041	42.69	42.82	40.76	39.75	39.91	40.07	40.25	40.42	40.54	41.69	43.37	43.56
2042	46.34	47.31	41.66	40.76	40.98	41.30	41.62	41.51	41.49	42.75	43.45	43.82
2043	46.35	45.44	42.30	41.55	41.61	41.68	41.84	42.01	42.22	42.47	44.51	44.75
2044	48.19	47.73	42.10	41.51	41.36	41.70	41.62	41.81	42.34	44.19	34.52	34.93
2045	37.76	43.50	42.71	41.64	42.18	42.22	42.08	42.35	42.48	43.08	45.07	45.46
2046	47.83	47.52	44.59	43.74	43.83	44.00	44.10	44.34	44.46	45.12	47.29	47.52
2047	51.27	50.29	47.77	47.09	47.13	47.18	47.43	47.58	47.79	49.05	52.15	52.29
2048	55.03	51.57	50.14	49.50	49.55	49.62	49.86	50.03	50.22	52.60	57.01	57.17

**SCHEDULE 201 (Continued)**PRICING OPTIONS FOR STANDARD PPA (Continued)  
Standard Fixed Price Option (Continued)

<b>TABLE 3b</b>												
<b>Avoided Costs</b>												
<b>Fixed Price Option for Solar QF</b>												
<b>Off-Peak Forecast (\$/MWH)</b>												
<b>Year</b>	<b>Jan</b>	<b>Feb</b>	<b>Mar</b>	<b>Apr</b>	<b>May</b>	<b>Jun</b>	<b>Jul</b>	<b>Aug</b>	<b>Sep</b>	<b>Oct</b>	<b>Nov</b>	<b>Dec</b>
2023	0.00	0.00	0.00	0.00	57.32	42.02	68.53	100.13	90.95	72.61	81.78	108.28
2024	107.34	88.99	58.41	54.33	42.10	42.10	77.78	109.89	82.87	59.43	73.70	108.36
2025	26.62	26.52	25.16	22.13	21.98	22.97	23.75	23.99	23.79	24.27	26.66	29.05
2026	30.57	29.15	26.32	22.63	22.56	23.21	23.84	23.98	23.79	24.24	25.87	28.30
2027	29.64	28.40	25.57	22.39	22.25	22.65	23.17	23.39	23.28	23.94	26.21	28.99
2028	29.57	28.47	25.73	21.80	21.76	22.26	22.88	23.21	23.21	24.33	26.40	30.51
2029	22.14	22.24	20.73	19.84	19.94	20.05	20.13	20.24	20.35	20.68	21.51	21.61
2030	21.79	21.91	21.00	20.14	20.23	20.34	20.43	20.54	20.64	21.24	22.08	22.18
2031	22.04	22.14	22.04	21.14	21.25	21.34	21.43	21.55	21.65	22.59	23.67	23.78
2032	24.00	24.10	24.42	23.47	23.58	23.67	23.78	23.91	24.03	24.37	25.36	25.48
2033	25.35	24.49	26.21	24.87	24.80	25.08	25.15	25.15	25.31	25.70	26.46	26.31
2034	26.64	26.30	24.59	23.55	23.67	23.78	23.89	24.00	24.12	24.49	25.58	25.70
2035	25.26	25.07	24.18	23.15	23.26	23.37	23.48	23.59	23.71	24.10	25.12	25.23
2036	24.14	23.50	23.07	22.10	22.20	22.30	22.38	22.49	22.60	22.90	23.82	23.92
2037	25.66	22.92	22.05	21.09	21.18	21.28	21.38	21.47	21.58	21.80	22.77	22.87
2038	24.91	23.53	22.33	21.39	21.49	21.58	21.69	21.79	21.88	22.12	23.25	23.35
2039	24.66	24.44	23.95	23.14	23.16	23.27	23.40	23.50	23.59	24.83	26.22	26.37
2040	28.85	28.79	28.61	27.66	27.79	28.25	28.45	28.59	28.71	30.74	32.43	32.60
2041	34.80	34.93	32.87	31.86	32.02	32.18	32.36	32.53	32.65	33.80	35.48	35.68
2042	38.29	39.26	33.61	32.71	32.92	33.25	33.57	33.46	33.43	34.70	35.40	35.77
2043	38.14	37.23	34.08	33.33	33.39	33.46	33.62	33.79	34.00	34.25	36.30	36.53
2044	39.83	39.37	33.74	33.15	33.00	33.34	33.27	33.45	33.99	35.83	26.16	26.57
2045	29.18	34.91	34.13	33.05	33.59	33.64	33.50	33.77	33.90	34.49	36.49	36.88
2046	39.10	38.79	35.86	35.01	35.10	35.26	35.37	35.61	35.73	36.39	38.56	38.79
2047	42.36	41.38	38.86	38.18	38.22	38.27	38.52	38.67	38.88	40.14	43.24	43.38
2048	45.96	42.50	41.07	40.43	40.48	40.56	40.80	40.97	41.16	43.54	47.94	48.11

**SCHEDULE 201 (Continued)**

## PRICING OPTIONS FOR STANDARD PPA (Continued)

**2) Renewable Fixed Price Option**

The Renewable Fixed Price Option is based on Renewable Avoided Costs. It is available only to Renewable QFs that generate electricity from a renewable energy source that may be used by the Company to comply with the Oregon Renewable Portfolio Standard as set forth in ORS 469A.005 to 469A.210 and that satisfy the eligibility requirements identified above.

This option is available for a maximum term of 15 years. Prices will be as established at the time the Standard PPA is executed and will be equal to the Renewable Avoided Costs in Tables 4a and 4b, 5a and 5b, or 6a and 6b, depending on the type of QF, effective at execution. QFs using any resource type other than wind and solar are assumed to be Base Load QFs.

Sellers will retain all Environmental Attributes generated by the facility during the Renewable Resource Sufficiency Period. A Renewable QF choosing the Renewable Fixed Price Option must cede all RPS Attributes generated by the facility to the Company from the start of the Renewable Resource Deficiency Period through the remainder of the PPA term.

Prices paid to the Seller under the Renewable Fixed Price Option include adjustments for the capacity contribution of the QF resource type relative to that of the avoided proxy resource. Both Wind QF resources (Tables 5a and 5b) and the avoided proxy resource, the basis used to determine Renewable Avoided Costs for the Renewable Fixed Price Option, are assumed to have a capacity contribution to peak of 25.00%. The capacity contribution for Solar QF resources (Tables 6a and 6b) is assumed to be 8.50%. The capacity contribution for Base Load QF resources (Tables 4a and 4b) is assumed to be 100%.

The Renewable Avoided Costs during the Renewable Resource Deficiency Period reflect an increase for avoided wind integration costs, shown in Table 7.

Prices paid to the Seller under the Renewable Fixed Price Option for Wind QFs (Tables 5a and 5b) include a reduction for the wind integration costs in Table 7, which cancels out wind integration costs included in the Renewable Avoided Costs during the Renewable Resource Deficiency Period. However, if the Wind QF is outside of PGE's Balancing Authority Area as contemplated in the Commission's Order No. 14-058, the Seller is paid the wind integration charges in Table 7, in addition to the prices listed in Tables 5a and 5b.

Prices paid to the Seller under the Renewable Fixed Price Option for Solar QFs (Tables 6a and 6b) include a reduction for the Solar integration costs in Table 7. However, if the Solar QF is outside of PGE's Balancing Authority Area as contemplated in the Commission's Order No. 14-058, the Seller is paid the solar integration charges in Table 7, in addition to the prices listed in Tables 6a and 6b.

**SCHEDULE 201 (Continued)**

**PRICING OPTIONS FOR STANDARD PPA (Continued)**  
**Renewable Fixed Price Option (Continued)**

Sellers with terms exceeding 15 years from the commercial operation date will receive pricing equal to the Mid-C Index Price for all years up to five in excess of the initial 15 years following the commercial operation date selected by the Seller and memorialized in the PPA.

<b>TABLE 4a</b>												
<b>Renewable Avoided Costs</b>												
<b>Renewable Fixed Price Option for Base Load QF</b>												
<b>On-Peak Forecast (\$/MWH)</b>												
<b>Year</b>	<b>Jan</b>	<b>Feb</b>	<b>Mar</b>	<b>Apr</b>	<b>May</b>	<b>Jun</b>	<b>Jul</b>	<b>Aug</b>	<b>Sep</b>	<b>Oct</b>	<b>Nov</b>	<b>Dec</b>
2023	0.00	0.00	0.00	0.00	70.99	73.54	153.56	252.44	204.53	82.20	97.49	135.21
2024	133.27	109.83	68.03	61.92	53.76	58.86	175.07	215.84	167.93	81.29	94.54	137.35
2025	70.54	62.76	48.89	46.86	44.15	45.85	84.41	97.94	82.04	53.29	57.69	71.90
2026	71.99	64.05	49.89	47.82	45.06	46.79	86.14	99.95	83.72	54.38	58.87	73.37
2027	73.46	65.36	50.91	48.80	45.98	47.74	87.91	102.00	85.44	55.49	60.07	74.87
2028	74.84	66.59	51.89	49.74	46.87	48.67	89.54	103.88	87.03	56.55	61.21	76.27
2029	76.50	68.06	53.02	50.82	47.89	49.72	91.54	106.22	88.98	57.79	62.56	77.97
2030	78.07	69.46	54.11	51.86	48.87	50.74	93.42	108.40	90.80	58.98	63.84	79.57
2031	79.67	70.88	55.22	52.92	49.87	51.78	95.33	110.62	92.66	60.18	65.15	81.20
2032	80.97	72.03	56.08	53.75	50.64	52.59	96.91	112.46	94.19	61.14	66.19	82.53
2033	82.97	73.82	57.50	55.12	51.93	53.92	99.28	115.20	96.50	62.68	67.85	84.56
2034	84.77	75.43	58.78	56.35	53.10	55.13	101.42	117.66	98.57	64.06	69.34	86.39
2035	86.40	76.87	59.88	57.40	54.08	56.15	103.39	119.96	100.49	65.27	70.66	88.06
2036	87.92	78.22	60.93	58.40	55.02	57.13	105.20	122.07	102.25	66.41	71.89	89.60
2037	89.98	80.05	62.36	59.77	56.32	58.48	107.67	124.93	104.65	67.97	73.58	91.70
2038	91.82	81.69	63.64	61.00	57.47	59.68	109.88	127.49	106.79	69.36	75.09	93.58
2039	93.70	83.37	64.94	62.25	58.65	60.90	112.13	130.10	108.98	70.78	76.63	95.50
2040	95.46	84.94	66.19	63.45	59.79	62.07	114.21	132.50	111.01	72.13	78.08	97.29
2041	97.58	86.82	67.63	64.82	61.08	63.42	116.77	135.49	113.49	73.71	79.80	99.45
2042	99.58	88.60	69.02	66.15	62.33	64.72	119.16	138.26	115.82	75.22	81.43	101.49
2043	101.62	90.41	70.43	67.51	63.61	66.04	121.60	141.09	118.19	76.77	83.10	103.57
2044	103.40	91.99	71.66	68.68	64.72	67.20	123.74	143.57	120.26	78.11	84.55	105.38
2045	105.95	94.28	73.47	70.43	66.37	68.90	126.76	147.06	123.21	80.07	86.67	107.98
2046	107.99	96.08	74.85	71.74	67.60	70.19	129.23	149.94	125.60	81.58	88.31	110.07
2047	110.21	98.05	76.38	73.21	68.98	71.63	131.88	153.02	128.18	83.25	90.12	112.32
2048	112.14	99.77	77.71	74.49	70.18	72.87	134.19	155.71	130.43	84.71	91.70	114.29

**SCHEDULE 201 (Continued)**PRICING OPTIONS FOR STANDARD PPA (Continued)  
Renewable Fixed Price Option (Continued)

<b>TABLE 4b</b>												
<b>Renewable Avoided Costs</b>												
<b>Renewable Fixed Price Option for Base Load QF</b>												
<b>Off-Peak Forecast (\$/MWH)</b>												
<b>Year</b>	<b>Jan</b>	<b>Feb</b>	<b>Mar</b>	<b>Apr</b>	<b>May</b>	<b>Jun</b>	<b>Jul</b>	<b>Aug</b>	<b>Sep</b>	<b>Oct</b>	<b>Nov</b>	<b>Dec</b>
<b>2023</b>	0.00	0.00	0.00	0.00	58.76	43.46	69.97	101.57	92.39	74.05	83.22	109.72
<b>2024</b>	108.81	90.46	59.88	55.80	43.57	43.57	79.25	111.36	84.34	60.90	75.17	109.83
<b>2025</b>	36.11	30.02	19.87	18.52	14.46	14.46	26.30	36.96	27.99	20.21	24.95	36.45
<b>2026</b>	36.85	30.64	20.28	18.90	14.76	14.76	26.84	37.71	28.56	20.62	25.46	37.19
<b>2027</b>	37.60	31.26	20.69	19.29	15.06	15.06	27.39	38.49	29.15	21.05	25.98	37.96
<b>2028</b>	38.27	31.82	21.06	19.63	15.32	15.32	27.87	39.17	29.67	21.42	26.44	38.63
<b>2029</b>	39.16	32.56	21.55	20.08	15.68	15.68	28.52	40.08	30.36	21.92	27.05	39.53
<b>2030</b>	39.96	33.22	21.99	20.49	16.00	16.00	29.11	40.90	30.98	22.37	27.61	40.34
<b>2031</b>	40.78	33.91	22.44	20.91	16.33	16.33	29.70	41.74	31.61	22.83	28.17	41.16
<b>2032</b>	41.50	34.51	22.84	21.28	16.62	16.62	30.23	42.48	32.17	23.23	28.67	41.89
<b>2033</b>	42.47	35.31	23.37	21.78	17.01	17.01	30.93	43.47	32.92	23.77	29.34	42.87
<b>2034</b>	43.34	36.03	23.85	22.23	17.35	17.35	31.57	44.36	33.60	24.26	29.94	43.75
<b>2035</b>	44.23	36.77	24.34	22.68	17.71	17.71	32.21	45.26	34.28	24.75	30.55	44.64
<b>2036</b>	45.01	37.42	24.77	23.08	18.02	18.02	32.78	46.07	34.89	25.19	31.10	45.43
<b>2037</b>	46.06	38.29	25.35	23.62	18.44	18.44	33.55	47.14	35.70	25.78	31.82	46.49
<b>2038</b>	47.00	39.08	25.87	24.10	18.82	18.82	34.23	48.10	36.43	26.31	32.47	47.44
<b>2039</b>	47.97	39.88	26.40	24.60	19.21	19.21	34.93	49.09	37.18	26.85	33.14	48.41
<b>2040</b>	48.81	40.58	26.86	25.03	19.55	19.55	35.55	49.96	37.84	27.32	33.72	49.27
<b>2041</b>	49.95	41.53	27.49	25.62	20.00	20.00	36.38	51.12	38.72	27.96	34.51	50.42
<b>2042</b>	50.97	42.38	28.05	26.14	20.41	20.41	37.13	52.17	39.51	28.53	35.22	51.45
<b>2043</b>	52.02	43.25	28.63	26.68	20.83	20.83	37.89	53.24	40.32	29.11	35.94	52.51
<b>2044</b>	52.94	44.01	29.13	27.15	21.20	21.20	38.56	54.18	41.04	29.63	36.57	53.44
<b>2045</b>	54.17	45.04	29.81	27.78	21.69	21.69	39.45	55.44	41.99	30.32	37.42	54.68
<b>2046</b>	55.28	45.96	30.42	28.35	22.14	22.14	40.26	56.58	42.85	30.94	38.19	55.80
<b>2047</b>	56.41	46.90	31.05	28.93	22.59	22.59	41.09	57.74	43.73	31.57	38.97	56.94
<b>2048</b>	57.41	47.73	31.59	29.44	22.99	22.99	41.81	58.76	44.50	32.13	39.66	57.95

**SCHEDULE 201 (Continued)**PRICING OPTIONS FOR STANDARD PPA (Continued)  
Renewable Fixed Price Option (Continued)

TABLE 5a												
Renewable Avoided Costs												
Renewable Fixed Price Option for Wind QF												
On-Peak Forecast (\$/MWH)												
Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2023	0.00	0.00	0.00	0.00	70.64	73.19	153.21	252.09	204.18	81.86	97.15	134.86
2024	132.92	109.47	67.68	61.56	53.41	58.51	174.71	215.49	167.58	80.93	94.18	137.00
2025	59.34	51.56	37.69	35.66	32.95	34.64	73.21	86.74	70.84	42.09	46.48	60.69
2026	60.56	52.62	38.46	36.39	33.63	35.35	74.71	88.52	72.29	42.95	47.44	61.94
2027	61.80	53.69	39.25	37.14	34.32	36.08	76.24	90.33	73.77	43.83	48.41	63.21
2028	62.93	54.69	39.99	37.84	34.97	36.76	77.63	91.98	75.12	44.65	49.31	64.37
2029	64.35	55.92	40.87	38.67	35.74	37.57	79.40	94.07	76.83	45.64	50.41	65.82
2030	65.67	57.06	41.71	39.46	36.47	38.34	81.02	96.00	78.40	46.58	51.45	67.17
2031	67.02	58.23	42.57	40.27	37.22	39.13	82.68	97.97	80.01	47.53	52.50	68.55
2032	68.14	59.20	43.25	40.92	37.81	39.75	84.08	99.63	81.36	48.31	53.36	69.69
2033	69.79	60.64	44.33	41.94	38.76	40.75	86.11	102.02	83.32	49.50	54.67	71.38
2034	71.28	61.94	45.30	42.86	39.61	41.64	87.93	104.17	85.09	50.57	55.85	72.91
2035	72.68	63.15	46.16	43.68	40.36	42.43	89.67	106.24	86.77	51.55	56.94	74.34
2036	73.96	64.26	46.97	44.44	41.07	43.17	91.25	108.11	88.29	52.45	57.93	75.64
2037	75.69	65.77	48.07	45.48	42.03	44.19	93.38	110.64	90.36	53.68	59.29	77.42
2038	77.24	67.11	49.06	46.42	42.89	45.10	95.29	112.91	92.21	54.78	60.51	79.00
2039	78.82	68.49	50.06	47.37	43.77	46.02	97.25	115.22	94.10	55.91	61.75	80.62
2040	80.27	69.76	51.01	48.26	44.60	46.89	99.02	117.32	95.82	56.95	62.90	82.10
2041	82.09	71.32	52.14	49.33	45.58	47.92	101.27	119.99	98.00	58.22	64.30	83.96
2042	83.77	72.78	53.20	50.34	46.52	48.91	103.35	122.45	100.00	59.41	65.62	85.68
2043	85.48	74.27	54.29	51.37	47.47	49.91	105.46	124.96	102.05	60.63	66.96	87.43
2044	86.98	75.58	55.24	52.27	48.30	50.78	107.32	127.16	103.85	61.69	68.14	88.97
2045	89.10	77.42	56.62	53.57	49.51	52.05	109.90	130.20	106.35	63.21	69.81	91.13
2046	90.85	78.93	57.70	54.59	50.45	53.04	112.08	132.80	108.45	64.43	71.16	92.92
2047	92.71	80.55	58.88	55.71	51.48	54.12	114.38	135.52	110.68	65.75	72.62	94.82
2048	94.33	81.96	59.91	56.68	52.38	55.07	116.39	137.90	112.62	66.90	73.90	96.49

**SCHEDULE 201 (Continued)**

PRICING OPTIONS FOR STANDARD PPA (Continued)  
Renewable Fixed Price Option (Continued)

TABLE 5b												
Renewable Avoided Costs												
Renewable Fixed Price Option for Wind QF												
Off-Peak Forecast (\$/MWH)												
Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2023	0.00	0.00	0.00	0.00	58.41	43.12	69.62	101.22	92.05	73.70	82.87	109.38
2024	108.46	90.11	59.53	55.45	43.22	43.22	78.89	111.00	83.99	60.55	74.82	109.47
2025	35.75	29.66	19.51	18.16	14.10	14.10	25.94	36.60	27.63	19.85	24.59	36.09
2026	36.48	30.27	19.91	18.53	14.39	14.39	26.47	37.35	28.20	20.26	25.09	36.83
2027	37.23	30.89	20.32	18.91	14.68	14.68	27.01	38.11	28.77	20.67	25.60	37.58
2028	37.89	31.43	20.68	19.24	14.94	14.94	27.49	38.78	29.28	21.04	26.06	38.25
2029	38.77	32.17	21.16	19.69	15.29	15.29	28.13	39.69	29.97	21.53	26.66	39.14
2030	39.57	32.83	21.59	20.10	15.60	15.60	28.71	40.50	30.58	21.97	27.21	39.94
2031	40.38	33.50	22.04	20.51	15.92	15.92	29.30	41.33	31.21	22.42	27.77	40.76
2032	41.09	34.09	22.43	20.87	16.20	16.20	29.81	42.06	31.76	22.81	28.26	41.48
2033	42.05	34.89	22.95	21.36	16.58	16.58	30.51	43.04	32.50	23.35	28.92	42.44
2034	42.91	35.60	23.42	21.79	16.92	16.92	31.13	43.92	33.16	23.82	29.51	43.31
2035	43.79	36.33	23.90	22.24	17.27	17.27	31.77	44.82	33.84	24.31	30.11	44.20
2036	44.56	36.97	24.32	22.63	17.57	17.57	32.33	45.62	34.44	24.74	30.65	44.98
2037	45.60	37.83	24.89	23.16	17.98	17.98	33.09	46.68	35.24	25.32	31.36	46.03
2038	46.53	38.61	25.40	23.64	18.35	18.35	33.76	47.63	35.97	25.84	32.00	46.97
2039	47.49	39.40	25.92	24.12	18.73	18.73	34.46	48.61	36.70	26.37	32.66	47.94
2040	48.33	40.09	26.38	24.55	19.06	19.06	35.06	49.47	37.35	26.83	33.23	48.78
2041	49.45	41.03	26.99	25.12	19.50	19.50	35.88	50.62	38.22	27.46	34.01	49.92
2042	50.47	41.87	27.54	25.63	19.90	19.90	36.62	51.66	39.00	28.02	34.71	50.94
2043	51.50	42.73	28.11	26.16	20.31	20.31	37.37	52.72	39.80	28.60	35.42	51.99
2044	52.41	43.48	28.60	26.62	20.67	20.67	38.03	53.65	40.51	29.10	36.04	52.91
2045	53.63	44.50	29.27	27.24	21.15	21.15	38.91	54.90	41.45	29.78	36.88	54.14
2046	54.73	45.41	29.87	27.80	21.58	21.58	39.71	56.03	42.30	30.39	37.64	55.25
2047	55.85	46.34	30.48	28.37	22.03	22.03	40.52	57.17	43.17	31.01	38.41	56.38
2048	56.84	47.16	31.02	28.87	22.42	22.42	41.24	58.18	43.93	31.56	39.09	57.38

**SCHEDULE 201 (Continued)**PRICING OPTIONS FOR STANDARD PPA (Continued)  
Renewable Fixed Price Option (Continued)

<b>TABLE 6a</b>												
<b>Renewable Avoided Costs</b>												
<b>Renewable Fixed Price Option for Solar QF</b>												
<b>On-Peak Forecast (\$/MWH)</b>												
<b>Year</b>	<b>Jan</b>	<b>Feb</b>	<b>Mar</b>	<b>Apr</b>	<b>May</b>	<b>Jun</b>	<b>Jul</b>	<b>Aug</b>	<b>Sep</b>	<b>Oct</b>	<b>Nov</b>	<b>Dec</b>
2023	0.00	0.00	0.00	0.00	69.55	72.10	152.12	251.00	203.08	80.76	96.05	133.77
2024	131.80	108.36	66.56	60.45	52.29	57.39	173.60	214.37	166.46	79.82	93.07	135.88
2025	48.43	40.65	26.78	24.75	22.05	23.74	62.30	75.83	59.93	31.18	35.58	49.79
2026	49.42	41.48	27.33	25.26	22.50	24.22	63.58	77.39	61.16	31.82	36.31	50.81
2027	50.44	42.33	27.89	25.78	22.96	24.72	64.88	78.97	62.42	32.47	37.05	51.85
2028	51.34	43.10	28.40	26.24	23.38	25.17	66.04	80.38	63.53	33.06	37.72	52.78
2029	52.52	44.09	29.04	26.84	23.91	25.74	67.57	82.24	65.00	33.81	38.58	53.99
2030	53.60	44.99	29.64	27.39	24.40	26.27	68.95	83.93	66.33	34.51	39.37	55.10
2031	54.70	45.91	30.25	27.95	24.90	26.81	70.36	85.65	67.69	35.21	40.18	56.23
2032	55.64	46.70	30.75	28.42	25.31	27.25	71.58	87.13	68.86	35.81	40.86	57.19
2033	56.96	47.81	31.50	29.11	25.93	27.92	73.28	89.19	70.49	36.67	41.84	58.55
2034	58.15	48.81	32.17	29.73	26.48	28.51	74.80	91.04	71.96	37.44	42.72	59.78
2035	59.32	49.79	32.80	30.32	27.00	29.07	76.31	92.88	73.41	38.19	43.58	60.98
2036	60.36	50.66	33.37	30.84	27.47	29.58	77.65	94.52	74.70	38.86	44.34	62.05
2037	61.78	51.85	34.16	31.57	28.12	30.28	79.47	96.73	76.45	39.77	45.38	63.50
2038	63.04	52.91	34.86	32.22	28.70	30.90	81.10	98.71	78.01	40.58	46.31	64.80
2039	64.33	54.00	35.57	32.88	29.28	31.53	82.76	100.73	79.61	41.42	47.26	66.13
2040	65.49	54.97	36.22	33.48	29.82	32.10	84.24	102.53	81.04	42.16	48.11	67.32
2041	67.00	56.23	37.05	34.24	30.50	32.83	86.18	104.90	82.91	43.13	49.21	68.87
2042	68.37	57.39	37.81	34.94	31.12	33.51	87.95	107.05	84.61	44.01	50.22	70.28
2043	69.77	58.56	38.58	35.66	31.76	34.19	89.75	109.24	86.34	44.92	51.25	71.72
2044	70.99	59.59	39.25	36.28	32.31	34.79	91.33	111.17	87.86	45.70	52.15	72.98
2045	72.68	61.01	40.20	37.16	33.10	35.64	93.49	113.79	89.94	46.80	53.40	74.71
2046	74.15	62.23	41.00	37.89	33.75	36.34	95.38	116.10	91.75	47.73	54.47	76.22
2047	75.66	63.51	41.84	38.67	34.44	37.08	97.33	118.47	93.63	48.71	55.58	77.78
2048	76.99	64.62	42.57	39.34	35.04	37.73	99.05	120.56	95.28	49.56	56.55	79.14

**SCHEDULE 201 (Continued)**PRICING OPTIONS FOR STANDARD PPA (Continued)  
Renewable Fixed Price Option (Continued)

<b>TABLE 6b</b>												
<b>Renewable Avoided Costs</b>												
<b>Renewable Fixed Price Option for Solar QF</b>												
<b>Off-Peak Forecast (\$/MWH)</b>												
<b>Year</b>	<b>Jan</b>	<b>Feb</b>	<b>Mar</b>	<b>Apr</b>	<b>May</b>	<b>Jun</b>	<b>Jul</b>	<b>Aug</b>	<b>Sep</b>	<b>Oct</b>	<b>Nov</b>	<b>Dec</b>
2023	0.00	0.00	0.00	0.00	57.32	42.02	68.53	100.13	90.95	72.61	81.78	108.28
2024	107.34	88.99	58.41	54.33	42.10	42.10	77.78	109.89	82.87	59.43	73.70	108.36
2025	34.61	28.52	18.37	17.02	12.96	12.96	24.80	35.46	26.49	18.71	23.45	34.95
2026	35.32	29.10	18.75	17.37	13.22	13.22	25.31	36.18	27.03	19.09	23.93	35.66
2027	36.04	29.70	19.13	17.72	13.50	13.50	25.83	36.92	27.59	19.48	24.42	36.39
2028	36.68	30.22	19.47	18.03	13.73	13.73	26.28	37.57	28.07	19.83	24.84	37.03
2029	37.53	30.93	19.92	18.46	14.05	14.05	26.89	38.45	28.73	20.29	25.43	37.90
2030	38.30	31.56	20.33	18.83	14.34	14.34	27.45	39.24	29.32	20.71	25.95	38.68
2031	39.09	32.21	20.75	19.22	14.64	14.64	28.01	40.04	29.92	21.13	26.48	39.47
2032	39.78	32.78	21.11	19.56	14.89	14.89	28.50	40.75	30.44	21.50	26.94	40.16
2033	40.71	33.54	21.61	20.02	15.24	15.24	29.17	41.70	31.16	22.01	27.58	41.10
2034	41.54	34.23	22.05	20.43	15.55	15.55	29.77	42.56	31.80	22.46	28.14	41.95
2035	42.39	34.93	22.50	20.84	15.87	15.87	30.37	43.43	32.45	22.92	28.72	42.81
2036	43.14	35.55	22.90	21.21	16.15	16.15	30.91	44.19	33.02	23.32	29.22	43.56
2037	44.15	36.38	23.43	21.71	16.53	16.53	31.63	45.22	33.79	23.87	29.91	44.58
2038	45.05	37.12	23.91	22.15	16.87	16.87	32.28	46.15	34.48	24.35	30.52	45.49
2039	45.97	37.88	24.40	22.61	17.21	17.21	32.94	47.10	35.19	24.85	31.14	46.42
2040	46.78	38.55	24.83	23.00	17.51	17.51	33.52	47.92	35.81	25.29	31.69	47.24
2041	47.88	39.45	25.41	23.54	17.93	17.93	34.31	49.05	36.64	25.88	32.43	48.34
2042	48.86	40.26	25.93	24.02	18.29	18.29	35.01	50.05	37.40	26.41	33.10	49.33
2043	49.86	41.09	26.47	24.52	18.67	18.67	35.73	51.08	38.16	26.95	33.78	50.35
2044	50.73	41.81	26.93	24.94	18.99	18.99	36.35	51.97	38.83	27.42	34.37	51.23
2045	51.92	42.79	27.56	25.53	19.44	19.44	37.20	53.19	39.74	28.07	35.17	52.43
2046	52.99	43.66	28.13	26.05	19.84	19.84	37.97	54.28	40.56	28.64	35.89	53.50
2047	54.07	44.56	28.70	26.59	20.25	20.25	38.74	55.39	41.39	29.23	36.63	54.60
2048	55.02	45.34	29.20	27.05	20.60	20.60	39.42	56.37	42.11	29.74	37.27	55.56

SCHEDULE 201 (Continued)

WIND INTEGRATION

TABLE 7		
Integration Costs		
Year	Wind	Solar
2023	0.35	1.44
2024	0.35	1.47
2025	0.36	1.50
2026	0.37	1.53
2027	0.37	1.56
2028	0.38	1.59
2029	0.39	1.63
2030	0.40	1.66
2031	0.41	1.69
2032	0.41	1.73
2033	0.42	1.76
2034	0.43	1.80
2035	0.44	1.84
2036	0.45	1.87
2037	0.46	1.91
2038	0.47	1.95
2039	0.48	1.99
2040	0.49	2.03
2041	0.50	2.07
2042	0.51	2.12
2043	0.52	2.16
2044	0.53	2.21
2045	0.54	2.25
2046	0.55	2.30
2047	0.56	2.34
2048	0.57	2.39

**3. As-Available Rate**

The As-Available Rate is based on the Avoided Energy Cost for surplus energy at the time of delivery. The As-Available Rate is equal to the Avoided Energy Cost. The Company will purchase As-Available Energy at the As-Available Rate.

**SCHEDULE 201 (Continued)****MONTHLY SERVICE CHARGE**

Each separately metered QF not associated with a retail Customer account will be charged \$10.00 per month.

**INSURANCE REQUIREMENTS**

The following insurance requirements are applicable to Sellers with a Standard PPA:

- 1) QFs with nameplate capacity ratings greater than 200 kW are required to secure and maintain a prudent amount of general liability insurance. The Seller must certify to the Company that it is maintaining general liability insurance coverage for each QF at prudent amounts. A prudent amount will be deemed to mean liability insurance coverage for both bodily injury and property damage liability in the amount of not less than \$1,000,000 each occurrence combined single limit, which limits may be required to be increased or decreased by the Company as the Company determines in its reasonable judgment, that economic conditions or claims experience may warrant.
- 2) Such insurance will include an endorsement naming the Company as an additional insured insofar as liability arising out of operations under this schedule and a provision that such liability policies will not be canceled or their limits reduced without 30 days' written notice to the Company. The Seller will furnish the Company with certificates of insurance together with the endorsements required herein. The Company will have the right to inspect the original policies of such insurance.
- 3) QFs with a design capacity of 200 kW or less are encouraged to pursue liability insurance on their own. The Oregon Public Utility Commission in Order No. 05-584 determined that it is inappropriate to require QFs that have a design capacity of 200 kW or less to obtain general liability insurance.

**TRANSMISSION AGREEMENTS**

If the QF is located outside the Company's service territory, the Seller is responsible for the transmission of power at its cost to the Company's service territory.

**INTERCONNECTION REQUIREMENTS**

Except as otherwise provided in a generation Interconnection Agreement between the Company and Seller, if the QF is located within the Company's service territory, switching equipment capable of isolating the QF from the Company's system will be accessible to the Company at all times. At the Company's option, the Company may operate the switching equipment described above if, in the sole opinion of the Company, continued operation of the QF in connection with the utility's system may create or contribute to a system emergency.

**SCHEDULE 201 (Continued)****INTERCONNECTION REQUIREMENTS (Continued)**

The QF owner interconnecting with the Company's distribution system must comply with all requirements for interconnection as established pursuant to Commission rule, in the Company's Rules and Regulations (Rule C) or the Company's Interconnection Procedures contained in its FERC Open Access Transmission Tariff (OATT), as applicable. The Seller will bear full responsibility for the installation and safe operation of the interconnection facilities.

**DEFINITION OF A SMALL COGENERATION FACILITY OR SMALL POWER PRODUCTION FACILITY ELIGIBLE TO RECEIVE THE STANDARD FIXED PRICE OPTION OR THE RENEWABLE FIXED PRICE OPTION UNDER THE STANDARD PPA**

A QF will be eligible to receive the Standard Fixed Price Option or the Renewable Fixed Price Option (as appropriate) under the Standard PPA if the nameplate capacity of the QF, together with any other electric generating facility using the same motive force, owned or controlled by the Same Person(s) or Affiliated Person(s), and located at the Same Site, does not exceed 3 MW for solar QF projects or 10 MW for all other types of QF projects. Solar QF projects with nameplate capacity (as calculated in this paragraph) that exceed 3 MW but do not exceed 10 MW are eligible for a Standard PPA containing negotiated prices under Schedule 202. A Community-Based or Family-Owned QF is exempt from these restrictions.

**Definition of Community-Based**

- a. A community project (or a community sponsored project) must have a recognized and established organization located within the county of the project or within 50 miles of the project that has a genuine role in helping the project be developed and must have some not insignificant continuing role with or interest in the project after it is completed and placed in service.
- b. After excluding the passive investor whose ownership interests are primarily related to green tag values and tax benefits as the primary ownership benefit, the equity (ownership) interests in a community sponsored project must be owned in substantial percentage (80 percent or more) by the following persons (individuals and entities): (i) the sponsoring organization, or its controlled affiliates; (ii) members of the sponsoring organization (if it is a membership organization) or owners of the sponsorship organization (if it is privately owned); (iii) persons who live in the county in which the project is located or who live a county adjoining the county in which the project is located; or (iv) units of local government, charities, or other established nonprofit organizations active either in the county in which the project is located or active in a county adjoining the county in which the project is located.

**Definition of Family-Owned**

After excluding the ownership interest of the passive investor whose ownership interests are primarily related to green tag values and tax benefits as the primary ownership benefit, five or fewer individuals own 50 percent or more of the equity of the project entity, or fifteen or fewer individuals own 90 percent or more of the project entity. A "look through" rule applies to closely held entities that hold the project entity, so that equity held by LLCs, trusts, estates, corporations, partnerships or other similar entities is considered

**SCHEDULE 201 (Continued)****DEFINITION OF A SMALL COGENERATION FACILITY OR SMALL POWER PRODUCTION FACILITY ELIGIBLE TO RECEIVE THE STANDARD FIXED PRICE OPTION OR THE RENEWABLE FIXED PRICE OPTION UNDER THE STANDARD PPA (Continued)**

held by the equity owners of the look through entity. An individual is a natural person. In counting to five or fifteen, spouses or children of an equity owner of the project owner who also have an equity interest are aggregated and counted as a single individual.

**Definition of Person(s) or Affiliated Person(s)**

As used above, the term "Same Person(s)" or "Affiliated Person(s)" means a natural person or persons or any legal entity or entities sharing common ownership, management or acting jointly or in concert with or exercising influence over the policies or actions of another person or entity. However, two facilities will not be held to be owned or controlled by the Same Person(s) or Affiliated Person(s) solely because they are developed by a single entity.

Furthermore, two facilities will not be held to be owned or controlled by the Same Person(s) or Affiliated Person(s) if such common person or persons is a "passive investor" whose ownership interest in the QF is primarily related to utilizing production tax credits, green tag values and MACRS depreciation as the primary ownership benefit and the facilities at issue are independent family-owned or community-based projects. A unit of Oregon local government may also be a "passive investor" in a community-based project if the local governmental unit demonstrates that it will not have an equity ownership interest in or exercise any control over the management of the QF and that its only interest is a share of the cash flow from the QF, which share will not exceed 20%. The 20% cash flow share limit may only be exceeded for good cause shown and only with the prior approval of the Commission.

**Definition of Same Site**

For purposes of the foregoing, generating facilities are considered to be located at the same site as the QF for which qualification for standard pricing or negotiated pricing under the Standard PPA is sought if they are located within a five-mile radius of any generating facilities or equipment providing fuel or motive force associated with the QF for which qualification for standard pricing or negotiated pricing under the Standard PPA is sought.

**Definition of Shared Interconnection and Infrastructure**

QFs otherwise meeting the above-described separate ownership test and thereby qualified for entitlement to standard pricing or negotiated pricing under the Standard PPA will not be disqualified by utilizing an interconnection or other infrastructure not providing motive force or fuel that is shared with other QFs qualifying for standard pricing or negotiated pricing under the Standard PPA so long as the use of the shared interconnection complies with the interconnecting utility's safety and reliability standards, interconnection agreement requirements and Prudent Electrical Practices as that term is defined in the interconnecting utility's approved Standard PPA.

## SCHEDULE 201 (Continued)

## OTHER DEFINITIONS

**As-Available Energy**

As-Available Energy means 1) all Net Output delivered to PGE if Seller elected the As-Available Rate option within a Standard PPA, or 2) (a) all Net Output delivered prior to the Commercial Operation Date; (b) all Net Output deliveries greater than Maximum Net Output in any Contract Year as defined under the Standard PPA year; and (c) for deliveries above the nameplate capacity in any hour.

Deliveries pursuant to an Off-System PPA that are above the nameplate capacity in any hour solely for the purpose of accommodating hourly scheduling in whole megawatts by a third-party transmission provider will not be subject to the As-Available Rate.

**Mid-C Index Price**

As used in this schedule, the daily Mid-C Index Price shall be the applicable day-ahead Intercontinental Exchange ("ICE") Mid-C Physical Peak (bilateral) or Mid-C Physical Off-Peak (bilateral) indices representative of the OTC market for WSPP Schedule-C physical Firm Energy transactions at the Mid-C trading hub. Product details for the Mid-C Physical Peak (bilateral) or Mid-C Physical Off-Peak (bilateral) are found on the following website: <https://www.theice.com/products/OTC/Physical-Energy/Electricity>. In the event ICE no longer publishes this index, PGE and the Seller agree to select an alternative successor index representative of the Mid-C trading hub.

**Avoided Energy Cost:**

The Avoided Energy Cost means eighty-two and four tenths percent (82.4%) of the monthly arithmetic average of each day's ICE Mid-C Physical Peak (bilateral) and Mid-C Physical Off-Peak (bilateral) average index prices. Each day's index prices will reflect the relative proportions of peak hours and off-peak hours in the month as follows:

$$.824 * \left( \sum_{x=1}^n \{(\text{ICE Mid-C Physical Peak (bilateral) Avg}_x * \text{applicable peak index hours for day}) + (\text{ICE Mid-C Physical Off-Peak (bilateral) Avg}_x * \text{applicable off-peak index hours for day})\} / (n*24) \right)$$

where n = number of days in the month

**SCHEDULE 201 (Continued)**

## OTHER DEFINITIONS (Continued)

**Definition of RPS Attributes**

As used in this schedule, RPS Attributes means all attributes related to the Net Output generated by the Facility that are required in order to provide PGE with “qualifying electricity,” as that term is defined in Oregon’s Renewable Portfolio Standard Act, Ore. Rev. Stat. 469A.010, in effect at the time of execution of this Agreement. RPS Attributes do not include Environmental Attributes that are greenhouse gas offsets from methane capture not associated with the generation of electricity and not needed to ensure that there are zero net emissions associated with the generation of electricity.

**Definition of Environmental Attributes**

As used in this schedule, Environmental Attributes shall mean any and all claims, credits, benefits, emissions reductions, offsets, and allowances, howsoever entitled, resulting from the avoidance of the emission of any gas, chemical, or other substance to the air, soil or water. Environmental Attributes include but are not limited to: (1) any avoided emissions of pollutants to the air, soil, or water such as (subject to the foregoing) sulfur oxides (SOx), nitrogen oxides (NOx), carbon monoxide (CO), and other pollutants; and (2) any avoided emissions of carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>), and other greenhouse gases (GHGs) that have been determined by the United Nations Intergovernmental Panel on Climate Change to contribute to the actual or potential threat of altering the Earth’s climate by trapping heat in the atmosphere.

**Definition of Resource Sufficiency Period**

This is the period from the current year through 2024.

**Definition of Resource Deficiency Period**

This is the period from 2025.

**Definition of Renewable Resource Sufficiency Period**

This is the period from the current year through 2024.

**Definition of Renewable Resource Deficiency Period**

This is the period from 2025.

**DISPUTE RESOLUTION**

Upon request, the QF will provide the purchasing utility with documentation verifying the ownership, management and financial structure of the QF in reasonably sufficient detail to allow the utility to make an initial determination of whether or not the QF meets the above-described criteria for entitlement to standard pricing or negotiated pricing under the Standard PPA.

**SCHEDULE 201 (Concluded)**

**DISPUTE RESOLUTION (Continued)**

The QF may present disputes to the Commission for resolution using the following process:

The QF may file a complaint asking the Commission to adjudicate disputes regarding the formation of the standard contract. The QF may not file such a complaint during any 15-day period in which the utility has the obligation to respond, but must wait until the 15-day period has passed.

The utility may respond to the complaint within ten days of service.

The Commission will limit its review to the issues identified in the complaint and response, and utilize a process similar to the arbitration process adopted to facilitate the execution of interconnection agreements among telecommunications carriers. See OAR 860, Division 016. The administrative law judge will not act as an arbitrator.

**SPECIAL CONDITIONS**

1. Delivery of energy by Seller will be at a voltage, phase, frequency, and power factor as specified by the Company.
2. If the Seller also receives retail Electricity Service from the Company at the same location, any payments under this schedule will be credited to the Seller's retail Electricity Service bill. At the option of the Customer, any net credit over \$10.00 will be paid by check to the Customer.
3. Unless required by state or federal law, if the 1978 Public Utility Regulatory Policies Act (PURPA) is repealed, PPAs entered into pursuant to this schedule will not terminate prior to the Standard or Negotiated PPA's termination date.

**TERM OF AGREEMENT**

Not less than one year and not to exceed 20 years from the commercial operation date selected by the Seller and memorialized in the PPA.

**Docket UM 2032**

**Attachment 9**

**to**

**JOINT UTILITIES' APPLICATION  
FOR APPROVAL OF COMPLIANCE FILING**

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*PGE's Schedule 202*

**SCHEDULE 202  
QUALIFYING FACILITIES GREATER THAN 10MW  
AVOIDED COST POWER PURCHASE INFORMATION**

**PURPOSE**

To provide information regarding procedures and timelines leading to a negotiated power purchase agreement between the Company and a Qualifying Facility (QF) ~~with an aggregate nameplate capacity greater than 10,000 kW.~~

**AVAILABLE**

To owners of QFs making sales of electricity to the Company in the State of Oregon (Seller).

**APPLICABLE**

To qualifying cogeneration facilities or qualifying small power production facilities within the meaning of section 201 and 210 of the Public Utility Regulatory Act of 1978 (PURPA), 16 U.S.C. 796 and 824a-3.

A QF with nameplate capacity greater than 10,000 kW will be required to enter into a negotiated written power purchase agreement (Negotiated Agreement) with the Company.

A QF with nameplate capacity less than 10,000 kW or less may elect the option of a Standard Contract with terms and pricing as defined in Schedule 201 if the QF meets the applicable eligibility requirements in Schedule 201.

A QF interconnecting directly to PGE's transmission or distribution system (i.e., an on-system QF) that obtains Energy Resource Interconnection Service will be required to enter into a Negotiated Agreement.

If the QF elects to be studied for Energy Resource Interconnection Service, the QF must provide an attestation to the Company that it intends to negotiate a contract, and the attestation must be provided to PGE's interconnection personnel before the QF executes an interconnection facilities study agreement.

To receive Energy Resource Interconnection Service, the QF must provide an attestation to PGE's interconnection personnel that the QF has executed a Negotiated Agreement. The attestation must be signed by the QF and the PGE personnel responsible for negotiating the power purchase agreement and must be delivered to PGE's interconnection personnel before the execution of an interconnection agreement. The attestation must be provided by the QF within 60 days of the QF receiving a final interconnection agreement or the interconnection application will be deemed withdrawn.

**POWER PURCHASE INFORMATION**

A QF may call the Power Production Coordinator at (503) 464-8000 to obtain more information about being a Seller or how to apply for service under this schedule.

**GUIDELINES**

The Company will purchase any Energy in excess of station service (power necessary to produce generation) and amounts attributable to conversion losses, that is made available to Company by the Seller, pursuant to a Negotiated Agreement with the Company executed prior to delivery of such power. The Negotiated Agreement will comply with the requirements of the Federal Energy Regulatory Commission (FERC) and the guidelines established by Commission Order No. 07-360.

The Negotiated Agreement may have a term of up to 20 years, as selected by the Seller.

**PROCEDURES TO DEVELOP A NEGOTIATED AGREEMENT**

1. The Seller may request indicative power purchase prices. To obtain an indicative pricing proposal for a proposed project, the Seller must provide in writing, general project information reasonably required for the development of indicative pricing, including, but not limited to:
  - Demonstration of ability to obtain QF status.
  - Design capacity (MW), station service requirements, and net amount of power to be delivered to the Company's electric system.
  - Generation technology and other related technology applicable to the site.
  - Quantity and timing of monthly power deliveries (including project ability to respond to dispatch orders from the Company).
  - Proposed site location and electrical interconnection point.
  - Status of interconnection and transmission arrangements.
  - Proposed on-line date and outstanding permitting requirements.
  - Motive force or fuel plan consisting of fuel type(s) and source(s).
  - Proposed contract term and pricing provisions.
  
2. The Company will not be obligated to provide an indicative pricing proposal until all the information described above has been received in writing from the Seller. Within 30 business days following receipt of all required information, the Company will provide the Seller with an indicative pricing proposal, which may include other terms and conditions, tailored to the individual characteristics of the proposed project. Such proposal may be used by the Seller to make determinations regarding project planning, financing and feasibility. However, such prices are indicative and are not final and binding. Prices and other terms and conditions are only final and binding to the extent contained in Negotiated Agreement, once executed by both parties. The Company will provide with the indicative prices a description of the methodology used to develop the prices.

## SCHEDULE 202 (Continued)

## PROCEDURES TO DEVELOP A NEGOTIATED AGREEMENT (Continued)

3. The Avoided Cost Prices specified in Schedule 201 provide a starting point for indicative prices, and will be modified to address the following specific factors established in OPUC Order No. 07-360 and FERC 18 § CFR 292.304(e):
- (e) Factors affecting rates for purchases. In determining avoided costs, the following factors will, to the extent practicable, be taken into account.*
- (1) The data provided pursuant to 18 CFR § 292.302(b), (c), or (d), including State review of any such data;*
  - (2) The availability of capacity or energy from a qualifying facility during the system daily and seasonal peak periods, including:*
    - (i) The ability of the Company to dispatch the qualifying facility;*
    - (ii) The expected or demonstrated reliability of the qualifying facility;*
    - (iii) The terms of any contract or other legally enforceable obligation, including the duration of the obligation, termination notice requirement and sanctions for non-compliance;*
    - (iv) The extent to which scheduled outages of the qualifying facility can be usefully coordinated with scheduled outages of the Company's facilities;*
    - (v) The usefulness of energy and capacity supplied from a qualifying facility during system emergencies, including its ability to separate its load from its generation;*
    - (vi) The individual and aggregate value of energy and capacity from qualifying facilities on the Company's system; and*
    - (vii) The smaller capacity increments and the shorter lead time available with additions of capacity from qualifying facilities; and*
  - (3) The relationship of the availability of energy or capacity from the qualifying facility as derived in part (e) (2) of this section, to the ability of the Company to avoid costs, including the deferral of capacity additions and the reduction of fossil fuel use; and*
  - (4) The costs or savings resulting from variations in line losses from those that would have existed in the absence of purchases from a qualifying facility, if the Company generated an equivalent amount of energy itself or purchased an equivalent amount of electric energy or capacity.*

**SCHEDULE 202 (Continued)****PROCEDURES TO DEVELOP A NEGOTIATED AGREEMENT (Continued)**

4. If the Seller desires to proceed with negotiations after reviewing the Company's indicative price proposal, the Seller must request in writing that the Company prepare a draft Negotiated Agreement to serve as the basis for negotiations between the parties. In connection with such request, the Seller must provide the Company with any additional project information that the Company reasonably determines to be necessary for the preparation of the Negotiated Agreement, which may include, but will not be limited to:
  - Updated information for the project information listed above in paragraphs 1 and 3.
  - Evidence of adequate control of proposed site.
  - Timelines for obtaining any necessary governmental permits, approvals or authorizations.
  - Assurance of fuel supply or motive force.
  - Anticipated timelines for completion of key project milestones.
  - Evidence that any necessary interconnection studies have been completed and assurance that the necessary interconnection arrangements have been executed or are under negotiation.
5. Within 30 days following receipt of updated information required by the Company, the Company will provide the Seller with a draft Negotiated Agreement. The draft agreement will contain proposed terms and conditions in addition to indicative pricing. The draft agreement is not binding; however, it will serve as the basis for subsequent negotiations.
6. After reviewing the draft Negotiated Agreement, the Seller will notify the Company in writing of its intent to proceed with negotiations. The Seller may prepare an initial set of written comments and proposals regarding the agreement and forward them to the Company. The Company will not be obligated to begin negotiations with a Seller until the Company has received an initial set of written comments. After the Company's receipt of comments and proposals, the Seller may contact the Company to schedule contract negotiations at such times and places as are mutually agreeable to the parties. In connection with such negotiations, the Company:
  - Will not unreasonably delay negotiations and will respond in good faith to any additions, deletions or modifications to the draft Negotiated Agreement that are proposed by the Seller.
  - May request to visit the site of the proposed project if such a visit has not previously occurred.
  - Will update its pricing proposals at appropriate intervals to accommodate any changes to the Company's avoided-cost calculations, the proposed project or proposed terms of the draft Negotiated Agreement.
  - May request any additional information from the Seller necessary to finalize the terms of the Negotiated Agreement and satisfy the Company's due diligence regarding the QF project.

**SCHEDULE 202 (Concluded)****PROCEDURES TO DEVELOP A NEGOTIATED AGREEMENT (Continued)**

7. When both parties are in full agreement as to all terms and conditions of the draft Negotiated Agreement, the Company will prepare and forward to the Seller a final, executable version of the agreement within 15 business days. Prices and other terms and conditions in the Negotiated Agreement will not be final and binding until the agreement has been executed by both parties.
8. If parties are not in full agreement within 60 days from the date of written notice, the Seller may file a complaint with the Commission asking the Commission to adjudicate the disputed contract terms.

**OFF SYSTEM POWER PURCHASE AGREEMENT**

A QF that interconnects with an electric system other than the Company's electric system may enter into a power purchase agreement with the Company after following the applicable negotiated contract guidelines and making the arrangements necessary for transmission of power to the Company's system.

**AS-AVAILABLE RATE**

The As-Available Rate is the price, as defined in Schedule 201, applicable to QFs requesting non-firm PPAs greater than 10 MW.

**Docket UM 2032**

**Attachment 10**

**to**

**JOINT UTILITIES' APPLICATION  
FOR APPROVAL OF COMPLIANCE FILING**

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*PacifiCorp's Standard Oregon Qualifying Facility Large  
Generator Interconnection Procedures*

## **Article 1. Definitions**

**Adverse System Impact** shall mean the negative effects due to technical or operational limits on conductors or equipment being exceeded that may compromise the safety and reliability of the electric system.

**Affected System** shall mean an electric system other than the Transmission Provider's Transmission System that may be affected by the proposed interconnection.

**Affected System Operator** shall mean the entity that operates an Affected System.

**Affiliate** shall mean, with respect to a corporation, partnership or other entity, each such other corporation, partnership or other entity that directly or indirectly, through one or more intermediaries, controls, is controlled by, or is under common control with, such corporation, partnership or other entity.

**Ancillary Services** shall mean those services that are necessary to support the transmission of capacity and energy from resources to loads while maintaining reliable operation of the Transmission Provider's Transmission System in accordance with Good Utility Practice.

**Applicable Laws and Regulations** shall mean all duly promulgated applicable federal, state and local laws, regulations, rules, ordinances, codes, decrees, judgments, directives, or judicial or administrative orders, permits and other duly authorized actions of any Governmental Authority.

**Applicable Reliability Council** shall mean the reliability council applicable to the Transmission System to which the Generating Facility is directly interconnected.

**Applicable Reliability Standards** shall mean the requirements and guidelines of NERC, the Applicable Reliability Council, and the Control Area of the Transmission System to which the Generating Facility is directly interconnected.

**Base Case** shall mean the base case power flow, short circuit, and stability data bases used for the Interconnection Studies by the Transmission Provider or Interconnection Customer.

**Breach** shall mean the failure of a Party to perform or observe any material term or condition of the QF-LGIA.

**Breaching Party** shall mean a Party that is in Breach of the QF-LGIA.

**Business Day** shall mean Monday through Friday, excluding Federal Holidays.

**Calendar Day** shall mean any day including Saturday, Sunday or a Federal Holiday.

**Cluster** shall mean a group of Interconnection Requests (one or more) that are studied together for the purpose of conducting the Cluster Study.

**Cluster Area** shall mean the areas of the Transmission Provider's Transmission System that are included together in a Cluster, as described further in Article 7.4 of this QF-LGIP.

**Cluster Request Window** shall have the meaning set forth in Article 4.2.1 of this QF-LGIP.

**Cluster Re-Study** shall mean a re-study of a Cluster Study conducted pursuant to Article 7.5 of this QF-LGIP.

**Cluster Re-Study Report** shall mean the report issued following completion of a Cluster Re-Study pursuant to Article 7.5 of this QF-LGIP.

**Cluster Re-Study Meeting** shall mean the meeting held to discuss the results of a Cluster Re-Study pursuant to Article 7.5 of this QF-LGIP.

**Cluster Study** shall mean an Interconnection Study evaluating one or more Interconnection Requests within a Cluster as described in more detail in Article 7.4 of this QF-LGIP.

**Cluster Study Agreement** shall mean the form of agreement contained in Appendix 3 to the Standard Large Generator Interconnection Procedures for conducting the Cluster Study.

**Cluster Study Report** shall mean the report issued following completion of a Cluster Study pursuant to Article 7.4 of this QF-LGIP.

**Cluster Study Report Meeting** shall mean the meeting held to discuss the results of a Cluster Study pursuant to Article 7.4 of this QF-LGIP.

**Clustering** shall mean the process whereby a group of Interconnection Requests is studied together, instead of serially, for the purpose of conducting the Interconnection System Impact Study as described in more detail in Article 7 of this QF-LGIP.

**Commercial Operation** shall mean the status of a Generating Facility that has commenced generating electricity for sale, excluding electricity generated during Trial Operation.

**Commercial Operation Date** of a unit shall mean the date on which the Generating Facility commences Commercial Operation as agreed to by the Parties pursuant to Appendix E to the QF-LGIA.

**Commission** shall mean the Public Utility Commission of Oregon.

**Confidential Information** shall mean any confidential, proprietary or trade secret information of a plan, specification, pattern, procedure, design, device, list, concept, policy or compilation relating to the present or planned business of a Party, which is designated as confidential by the Party supplying the information, whether conveyed orally, electronically, in writing, through inspection, or otherwise.

**Contingent Facilities** shall mean those unbuilt Interconnection Facilities and Network Upgrades upon which the Interconnection Request's costs, timing, and study findings are dependent, and if delayed or not built, could cause a need for Re-Studies of the Interconnection Request or a reassessment of the Interconnection Facilities and/or Network Upgrades and/or costs and timing.

**Control Area** shall mean an electrical system or systems bounded by interconnection metering and telemetry, capable of controlling generation to maintain its interchange schedule with other Control Areas and contributing to frequency regulation of the interconnection. A Control Area must be certified by an Applicable Reliability Council.

**Customer Engagement Window** shall have the meaning set forth in Article 7.2 of this LGIP.

**Default** shall mean the failure of a Breaching Party to cure its Breach in accordance with Article 17 of the QF-LGIA.

**Dispute Resolution** shall mean the procedure for resolution of a dispute between the Parties in which they will first attempt to resolve the dispute on an informal basis.

**Distribution System** shall mean the Transmission Provider's facilities and equipment used to transmit electricity to ultimate usage points such as homes and industries directly from nearby generators or from interchanges with higher voltage transmission networks which transport bulk power over longer distances. The voltage levels at which distribution systems operate differ among areas.

**Distribution Upgrades** shall mean the additions, modifications, and upgrades to the Transmission Provider's Distribution System at or beyond the Point of Interconnection to facilitate interconnection of the Generating Facility. Distribution Upgrades do not include Interconnection Facilities.

**Effective Date** shall mean the date on which the QF-LGIA becomes effective upon execution by the Parties.

**Emergency Condition** shall mean a condition or situation: (1) that in the judgment of the Party making the claim is imminently likely to endanger life or property; or (2) that, in the case of a Transmission Provider; is imminently likely (as determined in a non-discriminatory manner) to cause a material adverse effect on the security of, or damage to Transmission Provider's Transmission System, Transmission Provider's Interconnection Facilities or the electric systems of others to which the Transmission Provider's Transmission System is directly connected; or (3) that, in the case of Interconnection Customer, is imminently likely (as determined in a non-discriminatory manner) to cause a material adverse effect on the security of, or damage to, the Generating Facility or Interconnection Customer's Interconnection Facilities. System restoration and black start shall be considered Emergency Conditions; provided that Interconnection Customer is not obligated by the QF-LGIA to possess black start capability.

**Energy Resource Interconnection Service** shall mean an Interconnection Service that allows the Interconnection Customer to connect its Generating Facility to the Transmission Provider's Transmission System to be eligible to deliver the Generating Facility's electric output using the existing firm or non-firm capacity of the Transmission Provider's Transmission System on an "as available" basis. Energy Resource Interconnection Service in and of itself does not convey transmission service.

**Engineering & Procurement (E&P) Agreement** shall mean an agreement that authorizes the Transmission Provider to begin engineering and procurement of long lead-time items necessary for the establishment of the interconnection in order to advance the implementation of the Interconnection Request.

**Environmental Law** shall mean Applicable Laws or Regulations relating to pollution or protection of the environment or natural resources.

**Federal Power Act** shall mean the Federal Power Act, as amended, 16 U.S.C. §§ 791a et seq.

**FERC** shall mean the Federal Energy Regulatory Commission (FERC) or its successor.

**Financial Security** shall mean any of the forms of collateral or security listed in Article 11.5 of the QF-LGIA.

**Force Majeure** shall mean any act of God, labor disturbance, act of the public enemy, war, insurrection, riot, fire, storm or flood, explosion, breakage or accident to machinery or equipment, 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 acts of negligence or intentional wrongdoing by the Party claiming Force Majeure.

**Generating Facility** shall mean Interconnection Customer's device or devices for the production of electricity identified in the Interconnection Request, but shall not include the Interconnection Customer's Interconnection Facilities. The Generating Facility is and shall remain a Qualifying Facility.

**Generating Facility Capacity** shall mean the net capacity of the Generating Facility and the aggregate net capacity of the Generating Facility where it includes multiple energy production devices.

**Good Utility Practice** shall mean any of the practices, methods and acts engaged in or approved by a significant portion of the electric industry during the relevant time period, or any of the practices, methods and acts which, in the exercise of reasonable judgment in light of the facts known at the time the decision was made, could have been expected to accomplish the desired result at a reasonable cost consistent with good business practices, reliability, safety and expedition. Good Utility Practice is not intended to be limited to the optimum practice, method, or act to the exclusion of all others, but rather to be acceptable practices, methods, or acts generally accepted in the region.

**Governmental Authority** shall mean any federal, state, local or other governmental regulatory or administrative agency, court, commission, department, board, or other governmental subdivision, legislature, rulemaking board, tribunal, or other governmental authority having jurisdiction over the Parties, their respective facilities, or the respective services they provide, and exercising or entitled to exercise any administrative, executive, police, or taxing authority or power; provided, however, that such term does not include Interconnection Customer, Transmission Provider, or any Affiliate thereof.

**Hazardous Substances** shall mean any chemicals, materials or substances defined as or included in the definition of "hazardous substances," "hazardous wastes," "hazardous materials," "hazardous constituents," "restricted hazardous materials," "extremely hazardous substances," "toxic substances," "radioactive substances," "contaminants," "pollutants," "toxic pollutants" or words of similar meaning and regulatory effect under any applicable Environmental Law, or any other chemical, material or substance, exposure to which is prohibited, limited or regulated by any applicable Environmental Law.

**Informational Interconnection Study** shall mean an analysis based on assumptions specified by Interconnection Customer in the Informational Interconnection Study Agreement and conducted pursuant to Article 6 of this LGIP.

**Informational Interconnection Study Agreement** shall mean the form of agreement contained in Appendix 2A to this QF-LGIP for conducting the Informational Interconnection Study.

**Informational Interconnection Study Request** shall mean an Interconnection Customer's request in the form of Appendix 2 to this QF-LGIP.

**Initial Synchronization Date** shall mean the date upon which the Generating Facility is initially synchronized and upon which Trial Operation begins.

**In-Service Date** shall mean the date upon which the Interconnection Customer reasonably expects it will be ready to begin use of the Transmission Provider's Interconnection Facilities to obtain

back feed power.

**Interconnection Customer** shall mean the entity identified in the first paragraph of the QF-LGIA that proposes to interconnect its Generating Facility with the Transmission Provider's Transmission System. For purposes of the Transmission Provider's Cluster Study process conducted pursuant to Article 7 of this LGIP, "Interconnection Customer" shall also mean any Small Generating Facility that is participating in a Cluster.

**Interconnection Customer's Interconnection Facilities** or ICIF shall mean all facilities and equipment, as identified in of the QF-LGIA, that are located between the Generating Facility and the Point of Change of Ownership, including any modification, addition, or upgrades to such facilities and equipment necessary to physically and electrically interconnect the Generating Facility to the Transmission Provider's Transmission System. Interconnection Customer's Interconnection Facilities are sole use facilities.

**Interconnection Facilities** shall mean the Transmission Provider's Interconnection Facilities and the Interconnection Customer's Interconnection Facilities. Collectively, Interconnection Facilities include all facilities and equipment between the Generating Facility and the Point of Interconnection, including any modification, additions or upgrades that are necessary to physically and electrically interconnect the Generating Facility to the Transmission Provider's Transmission System. Interconnection Facilities are sole use facilities and shall not include Distribution Upgrades, Stand Alone Network Upgrades or Network Upgrades. Interconnection Facilities may be shared by more than one Generating Facility in a Cluster.

**Interconnection Facilities Study** shall mean a study conducted by the Transmission Provider or a third party consultant for the Interconnection Customer to determine a list of facilities (including Transmission Provider's Interconnection Facilities, Distribution Upgrades and Network Upgrades as identified in the Cluster Study), the cost of those facilities, and the time required to interconnect the Generating Facility with the Transmission Provider's Transmission System. The scope of the study is defined in Article 8 of the QF-LGIP.

**Interconnection Facilities Study Agreement** shall mean the form of agreement contained in Appendix 4 of the QF-LGIP for conducting the Interconnection Facilities Study.

**Interconnection Request** shall mean an Interconnection Customer's request, in the form of Appendix 1 to the QF-LGIP, to interconnect a new Generating Facility, or to increase the capacity of, or make a Material Modification to the operating characteristics of, an existing Generating Facility that is interconnected with the Transmission Provider's Transmission System. For purposes of the Transmission Provider's Cluster Study process conducted pursuant to Article 7 of this QF-LGIP, "Interconnection Request" shall also mean any interconnection request from a Small Generating Facility that is participating in a Cluster.

**Interconnection Service** shall mean the service provided by the Transmission Provider associated with interconnecting the Interconnection Customer's Generating Facility to the Transmission Provider's Transmission System and enabling it to receive electric energy and capacity from the Generating Facility at the Point of Interconnection, pursuant to the terms of the QF-LGIA and, if applicable, the Transmission Provider's OATT.

**Interconnection Study** shall mean any of the following studies: the Informational Interconnection Study, the Cluster Study, and the Interconnection Facilities Study described in the QF LGIP.

**IRS** shall mean the Internal Revenue Service.

**Large Generator Interconnection Agreement** or LGIA shall mean the form of interconnection agreement applicable to an Interconnection Request under the Transmission Provider's OATT pertaining to a Large Generating Facility that is not a Qualifying Facility.

**Large Generator Interconnection Procedures** or LGIP shall mean the interconnection procedures contained in the Transmission Provider's OATT that are applicable to an Interconnection Request pertaining to a Large Generating Facility.

**Large Generating Facility** shall mean a Generating Facility having a Generating Facility Capacity of more than 20 MW.

**Loss** shall mean any and all losses 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 performance, or non-performance of its obligations under the QF-LGIA on behalf of the indemnifying Party, except in cases of gross negligence or intentional wrongdoing by the indemnifying Party.

**Material Modification** shall mean those modifications that have a material impact on the cost or timing of any Interconnection Request with a later queue priority date.

**Metering Equipment** shall mean all metering equipment installed or to be installed at the Generating Facility pursuant to the QF-LGIA at the one or more metering points, including but not limited to instrument transformers, MWh-meters, data acquisition equipment, transducers, remote terminal unit, communications equipment, phone lines, other communications conductors, and fiber optics.

**NERC** shall mean the North American Electric Reliability Council or its successor organization.

**Net Output** shall mean all energy and capacity produced by the Generating Facility and delivered to the Point of Delivery, net of transformation, transmission, or other losses, if any, and less Station Power.

**Network Resource** shall mean any designated generating resource owned, purchased, or leased by a Network Customer under the Network Integration Transmission Service Tariff, Network Resources do not include any resource, or any portion thereof, that is committed for sale to third parties or otherwise cannot be called upon to meet the Network Customer's Network Load on a non-interruptible basis.

**Network Resource Interconnection Service** shall mean an Interconnection Service that allows the Interconnection Customer to integrate its Large Generating Facility with the Transmission Provider's Transmission System (1) in a manner comparable to that in which the Transmission Provider integrates its generating facilities to serve native load customers; or (2) in an RTO or ISO with market based congestion management, in the same manner as all other Network Resources. Network Resource Interconnection Service in and of itself does not convey transmission service.

**Network Upgrades** shall mean the additions, modifications, and upgrades to the Transmission Provider's Transmission System required at or beyond the point at which the Interconnection Facilities connect to the Transmission Provider's Transmission System to accommodate the interconnection of the Large Generating Facility to the Transmission Provider's Transmission System.

**Notice of Dispute** shall mean a written notice of a dispute or claim that arises out of or in connection with the QF-LGIA or its performance.

**Obligated Entity** shall mean the entity with a contractual obligation to construct Network Upgrades.

**OATT** shall mean the Transmission Provider's Open Access Transmission Tariff on file with the Federal Energy Regulatory Commission ("FERC").

**OPUC** shall mean the Public Utility Commission of Oregon.

**Party or Parties** shall mean Transmission Provider, Transmission Owner, Interconnection Customer or any combination of the above.

**Point of Change of Ownership** shall mean the point, as set forth in Appendix A to the QF-LGIA, where the Interconnection Customer's Interconnection Facilities connect to the Transmission Provider's Interconnection Facilities.

**Point of Delivery** shall mean the point on the Transmission Provider's Transmission System where capacity and energy will be made available to the Transmission Provider.

**Point of Interconnection** shall mean the point, as set forth in Appendix A to the QF-LGIA, where the Interconnection Facilities connect to the Transmission Provider's Transmission System.

**Power System Stabilizers** shall have the meaning designated in the guidelines and procedures established by the applicable Reliability Council.

**Power Purchase Agreement ("PPA")** shall mean a separate agreement between the Transmission Provider and Interconnection Customer, the terms of which govern the sale by the Interconnection Customer and the purchase by the Transmission Provider of the Net Output of the Interconnection Customer's Qualifying Facility, pursuant to the Public Utility Regulatory Policies Act of 1978 (PURPA), 16 U.S.C. 796 and 824a-3.

**QF-LGIA** shall mean the Qualifying Facility Large Generator Interconnection Agreement.

**QF-LGIP** shall mean the Qualifying Facility Large Generator Interconnection Procedures applicable to any large Generating Facility that is also a Qualifying Facility and which seeks to interconnect to the Transmission Provider's Transmission System or Distribution system in Oregon.

**Qualifying Facility** or QF shall mean a qualifying cogeneration facility or qualifying small power production facility within the meaning of Articles 201 and 210 of the Public Utility Regulatory Policies Act of 1978 (PURPA), 16 U.S.C. 796 and 824a-3.

**Queue Position** shall mean the order of a valid Interconnection Request, relative to all other pending valid Interconnection Requests, that is established based upon the date and time that Interconnection Customer satisfies all of the requirements of Articles 3, 4, and 7 to enter the Cluster Study Process.

**Reasonable Efforts** shall mean, with respect to an action required to be attempted or taken by a Party under the QF-LGIA, efforts that are timely and consistent with Good Utility Practice and are

otherwise substantially equivalent to those a Party would use to protect its own interests.

**Scoping Meeting** shall mean the meeting between representatives of the Interconnection Customer and Transmission Provider conducted for the purpose of discussing the proposed interconnection request, alternative interconnection options, to exchange information including any transmission data and earlier study evaluations that would be reasonably expected to affect such interconnection options, to analyze such information, and to determine the potential feasible Points of Interconnection.

**Site Control** shall mean the exclusive land right to develop, construct, operate, and maintain the Generating Facility over the term of expected operation of the Generating Facility. Site Control may be demonstrated by documentation establishing: (1) ownership of, a leasehold interest in, or a right to develop a site of sufficient size to construct and operate the Generating Facility; (2) an option to purchase or acquire a leasehold interest in a site of sufficient size to construct and operate the Generating Facility; or (3) any other documentation that clearly demonstrates the right of the Interconnection Customer to exclusively occupy a site of sufficient size to construct and operate the Generating Facility. Site Control for any co-located project is demonstrated by a contract or other agreement demonstrating shared land use for all co-located projects that meet the aforementioned provisions of this Site Control definition.

**Small Generating Facility** shall mean a Generating Facility that has a Generating Facility Capacity of no more than 20 MW.

**Stand Alone Network Upgrades** shall mean Network Upgrades that an Interconnection Customer may construct without affecting day-to-day operations of the Transmission System during their construction. Both the Transmission Provider and the Interconnection Customer must agree as to what constitutes Stand Alone Network Upgrades and identify them in to the QF-LGIA.

**Station Power** shall mean electric power used in the process of producing power at Interconnection Customer's Generating Facility, including but not limited to the electric power necessary for auxiliary equipment such as pumps, blowers, fans, fuel transportation systems, similar auxiliary systems that are a necessary and integral part of the power production process, and other parasitic loads involved in the generating process.

**System Protection Facilities** shall mean the equipment, including necessary protection signal communications equipment, required to protect (1) the Transmission Provider's Transmission System from faults or other electrical disturbances occurring at the Generating Facility and (2) the Generating Facility from faults or other electrical system disturbances occurring on the Transmission Provider's Transmission System or on other delivery systems or other generating systems to which the Transmission Provider's Transmission System is directly connected.

**Transmission Owner** shall mean an entity that owns, leases or otherwise possesses an interest in the portion of the Transmission System at the Point of Interconnection and may be a Party to the QF-LGIA to the extent necessary.

**Transmission Provider** shall mean the applicable Utility.

**Transmission Provider's Interconnection Facilities** shall mean all facilities and equipment owned, controlled, or operated by the Transmission Provider from the Point of Change of Ownership to the Point of Interconnection as identified in Appendix A to the QF-LGIA, including any modifications, additions or upgrades to such facilities and equipment. Transmission Provider's Interconnection Facilities are sole use facilities and shall not include Distribution Upgrades, Stand Alone Network Upgrades or

Network Upgrades. Transmission Provider's Interconnection Facilities may be shared by more than one Generating Facility in a given Cluster Study.

**Transmission System** shall mean the facilities owned, controlled or operated by the Transmission Provider or Transmission Owner that are used to provide transmission service under the OATT.

**Trial Operation** shall mean the period during which Interconnection Customer is engaged in on-site test operations and commissioning of the Generating Facility prior to Commercial Operation.

**Withdrawal Penalty** shall have the meaning set forth in Article 3.6.1 of this QF-LGIP.

## **Article 2. Scope and Application**

### **2.1 Application of Standard Large Generator Interconnection Procedures.**

This QF-LGIP applies to processing an Interconnection Request pertaining to a Qualifying Facility Large Generating Facility for a point of Interconnection in Oregon. Small Generating Facilities that are subject to Tier 4 interconnection review in accordance with OAR Chapter 860, Division 82 will be processed in a single study process with Large Generating Facilities. Interconnection requests for Small Generating Facilities may be studied together in Clusters with Interconnection Requests for Large Generating Facilities.

### **2.2 Comparability.**

Transmission Provider shall receive, process and analyze all Interconnection Requests in a timely manner as set forth in this QF-LGIP. Transmission Provider will use the same Reasonable Efforts in processing and analyzing Interconnection Requests from all Interconnection Customers, whether the Generating Facilities are owned by Transmission Provider, its subsidiaries or Affiliates or others.

### **2.3 Base Case Data.**

In accordance with the Applicable Reliability Council policies, Transmission Provider shall provide base power flow, short circuit and stability databases, including all underlying assumptions, and contingency list upon request subject to confidentiality provisions in QF-LGIP Article 13.1. Transmission Provider is permitted to require that Interconnection Customer sign a confidentiality agreement before the release of commercially sensitive information or Critical Energy Infrastructure Information in the Base Case data. Such databases and lists, hereinafter referred to as Base Cases, shall include all (1) generation projects and (ii) transmission projects, including merchant transmission projects that are proposed for the Transmission System for which a transmission expansion plan has been submitted and approved by the applicable authority.

### **2.4 No Applicability to Transmission Service.**

Nothing in this QF-LGIP shall constitute a request for transmission service or confer upon an Interconnection Customer any right to receive transmission service.

### **Article 3. Interconnection Requests and Informational Interconnection Study Requests**

#### **3.1 Interconnection Requests.**

An Interconnection Customer shall submit to Transmission Provider, at any time, including during a Cluster Request Window, an Interconnection Request in the form of Appendix 1 to this QF-LGIP and a refundable deposit of:

- a. \$75,000 for requests of less than 50 MW;
- b. \$150,000 for requests of 50 MW and greater, but less than 200 MW; or
- c. \$250,000 for requests of 200 MW and greater.

And evidence that Interconnection customer has initiated the certification process for the Large Generating Facility as a Qualifying Facility established by 18 C.F.R. § 292.207. Pursuant to Article 4.2.2, Transmission Provider shall apply the deposit toward the cost of a Cluster Study into which Interconnection Customer is admitted including such Interconnection Customer's individual Facilities Study, and shall be used to process Interconnection Customer's request. For Small Generating Facilities, the appropriate application fee or deposit shall be determined pursuant to OAR Chapter 860, Division 82. Interconnection Customer shall submit a separate Interconnection Request for each site and may submit multiple Interconnection Requests for a single site. Interconnection Customer must submit a deposit with each Interconnection Request even when more than one request is submitted for a single site. An Interconnection Request to evaluate one site at two different voltage levels shall be treated as two Interconnection Requests.

At Interconnection Customer's option, Transmission Provider and Interconnection Customer will identify alternative Point(s) of interconnection and configurations at the Scoping Meeting to evaluate in this process and attempt to eliminate alternatives in a reasonable fashion given resources and information available. Interconnection Customer will select the definitive Point of Interconnection to be studied no later than the execution of the Cluster Study Agreement. For purposes of clustering Interconnection Service requests, Transmission Provider may make reasonable changes to the requested Point of Interconnection to facilitate efficient interconnection of Interconnection Customers at common points of interconnection. Transmission Provider shall notify Interconnection Customers in writing of any intended changes to the requested Point of Interconnection and the Point of Interconnection shall only change upon mutual agreement.

Interconnection Customers can submit an Interconnection Request at any time but doing so before a Cluster Request Window does not confer any priority to the Interconnection Request. Transmission Provider will post a list showing the Interconnection Requests received, including location, point of interconnection, size, generator type, interconnection service, and applicable interconnection procedures.

Interconnection Customers are not required to submit an Interconnection Request for an existing Generating Facility unless the Interconnection Customers proposes to increase the capacity of, or make a Material Modification to the operating characteristics of, an existing Generating Facility that is interconnected with the Transmission Provider's Transmission System. If an existing Generating Facility that is interconnected with the Transmission Provider's Transmission System request a new interconnection agreement and does not propose to increase the capacity of, or make a Material Modification to the operating characteristics of, the existing Generating Facility,

then Transmission Provider will study the existing Generating Facility outside of the Cluster Study framework set forth in Article 7. The existing Generating Facility will be studied to determine if additional Interconnection Facilities and Network Upgrades are required to bring the existing Generating Facility into compliance with current requirements.

### **3.2 Type of Interconnection Services.**

At the time the Interconnection Request is submitted, Interconnection Customer must request either Energy Resource Interconnection Service or Network Resource Interconnection Service, as described; provided, however, Interconnection Customer requesting Network Resource Interconnection Service may also request that it be concurrently studied for Energy Resource Interconnection Service, up to the point when an Interconnection Facility Study Agreement is executed. Interconnection Customer may then elect to proceed with Network Resource Interconnection Service or to proceed under a lower level of interconnection service to the extent that only certain upgrades will be completed's will be processed for Network Resource Interconnection Service, as described below.

#### **3.2.1 Energy Resource Interconnection Service**

##### **3.2.1.1 The Product.**

Energy Resource Interconnection Service allows the Interconnection Customer to connect the Large Generating Facility to the Transmission System and be eligible to deliver the Large Generating Facility's output using the existing firm or non-firm capacity of the Transmission System on an "as available" basis. Energy Resource Interconnection Service does not in and of itself convey any right to deliver electricity to any specific customer or Point of Delivery.

##### **3.2.1.2 The Study.**

The Study consists of short circuit/fault duty, steady state (thermal and voltage) and stability analyses. The short circuit/fault duty analysis would identify direct Interconnection Facilities required and the Network Upgrades necessary to address short circuit issues associated with the Interconnection Facilities. The stability and steady state studies would identify necessary upgrades to allow full output of the proposed Large Generating Facility and would also identify the maximum allowed output, at the time the study is performed, of the interconnecting Large Generating Facility without requiring additional Network Upgrades.

#### **3.2.2 Network Resource Interconnection Service.**

##### **3.2.2.1 The Product.**

Transmission Provider must conduct the necessary studies and construct the Network Upgrades needed to integrate the Large Generating Facility in a manner comparable to that in which Transmission Provider integrates its generating facilities to serve native load customers in the same manner as all other Network Resources. Network Resource Interconnection Service Allows Interconnection Customer's Large Generating Facility to be designated as a Network Resource, up to the Large Generating Facility's full output, on the same basis as existing Network Resources interconnected to Transmission Provider's Transmission System, and to be studied as a Network Resource on the assumption that such a designation will occur.

### **3.2.2.2 The Study.**

The Interconnection Study for Network Resource Interconnection Service shall assure that Interconnection Customer's Large Generating Facility meets the requirements for Network Resource Interconnection Service and as a general matter, that such Large Generating Facility's interconnection is also studied with Transmission Provider's Transmission System at peak load, under a variety of severely stressed conditions, to determine whether, with the Large Generating Facility at full output, the aggregate of generation in the local area can be delivered to the aggregate of load on Transmission Provider's Transmission System, consistent with Transmission Provider's reliability criteria and procedures. This approach assumes that some portion of existing Network Resources are displaced by the output of Interconnection Customer's Large Generating Facility. Network Resource Interconnection Service in and of itself does not convey any right to deliver electricity to any specific customer or Point of Delivery. The Transmission Provider may also study the Transmission System under non-peak load conditions. However, upon request by the Interconnection Customer, the Transmission Provider must explain in writing to the Interconnection Customer why the study of non-peak load conditions is required for reliability purposes.

## **3.3 Valid Interconnection Request.**

### **3.3.1 Initiating an Interconnection Request.**

An Interconnection Customer wishing to join a Cluster shall submit its Interconnection Request to Transmission Provider no later than the close of the Cluster Request Window. To initiate an Interconnection Request, Interconnection Customer must submit all of the following:

- (i) applicable deposit amount, pursuant to Article 3.1,
- (ii) a completed application in the form of Appendix 1 (including applicable technical information),
- (iii) Site Control demonstration pursuant to Article 3.3.1(iii)(a) or (b) below:
  - a. Demonstration of actual Site Control. For demonstration of Site Control of Large Generating Facilities: Specifications for acceptable site size for the purposes of demonstrating Site Control are posted on Transmission Provider's OASIS website. Interconnection Customer may propose alternative specifications for site size to those posted on OASIS for Transmission Provider approval. In the event Transmission Provider and Interconnection Customer cannot reach agreement related to adequacy of site size, Transmission Provider will accept a Professional Engineer (licensed in the state of the Point of Interconnection) stamped site plan drawing that depicts the proposed generation arrangement and specifies the maximum facility output for that arrangement. Demonstration of Site Control for Small Generating Facilities shall be pursuant to OAR Chapter 860, Division 82.
  - b. Posting of an additional deposit of \$10,000 in lieu-of Site Control.

Deposits paid pursuant to this Article 3.3.1(iii) shall be refunded to the Interconnection Customer upon Commercial Operation or upon withdrawal pursuant to Article 3.6, subject to applicable Withdrawal Penalties.

- (iv) Generating Facility size (MW) (and requested Interconnection Service amount if the requested Interconnection Service is less than the Generating Facility Capacity);
- (v) A Point of Interconnection.

Interconnection Customer shall promptly inform Transmission Provider of any material change to Interconnection Customer's demonstration of Site Control under Article 3.3.1(iii). Upon Transmission Provider determining separately that Interconnection Customer no longer satisfies Site Control, Transmission Provider shall give Interconnection Customer ten (10) Business Days to demonstrate satisfaction with the applicable requirement to Transmission Provider's satisfaction. Absent such demonstration, Transmission Provider will deem the subject Interconnection Request withdrawn.

The expected In-Service Date of the new Large Generating Facility or increase in capacity of the existing Generating Facility shall be no more than the process window for the regional expansion planning period (or in the absence of a regional planning process, the process window for Transmission Provider's expansion planning period) not to exceed seven (7) years from the date the Interconnection Request is received by Transmission Provider, unless Interconnection Customer demonstrates that engineering, permitting and construction of the new Large Generating Facility or increase in capacity of the existing Generating Facility will take longer than the regional expansion planning period. The In-Service Date may succeed the date the Interconnection Request is received by Transmission Provider by a period up to ten (10) years, or longer where Interconnection Customer and Transmission Provider agree, such agreement not to be unreasonably withheld.

### **3.3.2 Acknowledgment of Interconnection Request.**

Transmission Provider shall acknowledge receipt of the Interconnection Request within five (5) Business Days of receipt of the request if submitted during the Cluster Request Window or fifteen (15) Business Days if submitted outside the Cluster Request Window and attach a copy of the received Interconnection Request to the acknowledgement.

### **3.3.3 Deficiencies in Interconnection Request.**

An Interconnection Request will not be considered to be a valid request until all items in Article 3.3.1 have been received by Transmission Provider. If an Interconnection Request fails to meet the requirements set forth in Article 3.3.1, Transmission Provider shall notify Interconnection Customer within five (5) Business Days of receipt of the initial Interconnection Request of the reasons for such failure and that the Interconnection Request does not constitute a valid request. Interconnection Customer shall provide Transmission Provider the additional requested information needed to constitute a valid request within ten (10) Business Days after receipt of such notice but no later than the close of the Cluster Request Window. At any time, if Transmission Provider identifies

issues with technical data provided by Interconnection Customer, Interconnection Customer and Transmission Provider shall work expeditiously and in good faith to remedy any data issues. Failure by Interconnection Customer to comply with this Article 3.3.3 shall be treated in accordance with Article 3.6.

Transmission Provider shall determine if the information contained in the Interconnection Request is sufficient to start the Cluster Study by the close of the Customer Engagement Window.

#### **3.3.4 Scoping Meeting.**

During the Customer Engagement Window, Transmission Provider shall hold a Scoping Meeting with all Interconnection Customers whose valid Interconnection Requests were received in that Cluster Request Window. If requested by an Interconnection Customer, Transmission Provider shall also hold individual customer-specific Scoping Meetings, which must be requested no later than fifteen (15) Business Days after the close of the Cluster Request Window.

The purpose of the Scoping Meeting shall be to discuss alternative interconnection options, to exchange information including any transmission data that would reasonably be expected to impact such interconnection options, to discuss the Cluster Area materials posted to OASIS pursuant to Article 7.4, and to analyze such information. Transmission Provider and Interconnection Customer will bring to the meeting such technical data, including, but not limited to: (i) general facility loadings, (ii) general instability issues, (iii) general short circuit issues, (iv) general voltage issues, and (v) general reliability issues as may be reasonably required to accomplish the purpose of the meeting. Transmission Provider and Interconnection Customer will also bring to the meeting personnel and other resources as may be reasonably required to accomplish the purpose of the meeting in the time allocated for the meeting. The duration of the meeting shall be sufficient to accomplish its purpose.

### **3.4 OASIS Posting.**

In addition to the Interconnection Requests that Transmission Provider is required to maintain on its OASIS under the requirements of the Transmission Provider's OATT, Transmission Provider will maintain on its same OASIS a list of all Interconnection Requests under this QF-LGIP. Interconnection Requests received under the QF-LGIP and the LGIP under the Transmission Provider's OATT shall be assigned Queue Positions in the same queue. The list will identify, for each Interconnection Request: (i) the maximum summer and winter megawatt electrical output; (ii) the location by county and state; (iii) the station or transmission line or lines where the interconnection will be made; (iv) the projected In-Service Date; (v) the status of the Interconnection Request, including Queue Position; (vi) the type of interconnection Service being requested; (vii) the availability of any studies related to the Interconnection Request; (viii) the date of the Interconnection Request; (ix) the type of Generating Facility to be constructed (combined cycle, base load or combustion turbine and fuel type); and (x) for Interconnection Requests that have not resulted in a completed interconnection, an explanation as to why it was not completed. Except in the case of an Affiliate, the list will not disclose the identity of Interconnection Customer until Interconnection Customer executes a QF-LGIA. Before holding a Scoping Meeting with its Affiliate, Transmission Provider shall post on OASIS an advance notice of its intent to do so. Transmission Provider shall post to its OASIS site any deviations from the

study timelines set forth herein. Interconnection Study reports shall be posted to Transmission Provider's OASIS site subsequent to the meeting between Interconnection Customer and Transmission Provider to discuss the applicable study results. Transmission Provider shall also post any known deviations in the Large Generating Facility's In-Service Date.

### **3.5 Coordination with Affected Systems.**

Transmission Provider will coordinate the conduct of any studies required to determine the impact of the Interconnection Request on Affected Systems with Affected System Operators and, if possible, include those results (if available) in its applicable Interconnection Study within the time frame specified in this QF- LGIP. Transmission Provider will include such Affected System Operators in all meetings held with Interconnection Customer as required by this QF-LGIP. Interconnection Customer will cooperate with Transmission Provider in all matters related to the conduct of studies and the determination of modifications to Affected Systems. A Transmission Provider which may be an Affected System shall cooperate with Transmission Provider with whom interconnection has been requested in all matters related to the conduct of studies and the determination of modifications to Affected Systems. It is the responsibility of the Affected System Owner to provide the requirements or potential impediments to providing the requested interconnection service, including a preliminary indication of the cost and length of time that would be necessary to (i) complete any interconnection studies and (ii) construct any necessary Interconnection Facilities and Network Upgrades needed to reliably interconnect at the requested service level.

### **3.6 Withdrawal.**

Interconnection Customer may withdraw its Interconnection Request at any time by written notice of such withdrawal to Transmission Provider. In addition, if Interconnection Customer fails to adhere to all requirements of this QF-LGIP, except as provided in Article 13.5 (Disputes), Transmission Provider shall deem the Interconnection Request to be withdrawn and shall provide written notice to Interconnection Customer of the deemed withdrawal and an explanation of the reasons for such deemed withdrawal. Upon receipt of such written notice, Interconnection Customer shall have fifteen (15) Business Days in which to either respond with information or actions that cures the deficiency or to notify Transmission Provider of its intent to pursue Dispute Resolution.

Withdrawal shall result in the loss of interconnection Customer's Queue Position, including any placement in a particular Cluster. If an Interconnection Customer disputes the withdrawal and loss of its Queue Position, then during Dispute Resolution, Interconnection Customer's Interconnection Request is eliminated from the queue until such time that the outcome of Dispute Resolution would restore its Queue Position. An Interconnection Customer that withdraws or is deemed to have withdrawn its Interconnection Request shall pay to Transmission Provider all costs that Transmission Provider prudently incurs with respect to that Interconnection Request prior to Transmission Provider's receipt of notice described above. Interconnection Customer must pay all monies due to Transmission Provider before it is allowed to obtain any Interconnection Study data or results.

In the case of a withdrawal, Transmission Provider shall:

- (i) update OASIS as appropriate, including any Queue Position changes;

- (ii) impose the applicable Withdrawal Penalty described in Article 3.6.1, if any; and
- (iii) issue any refund to Interconnection Customer pursuant to Article 13.3.2.

In the event of such withdrawal, Transmission Provider, subject to the confidentiality provisions of Article 13.1, shall provide, at Interconnection Customer's request, all information that Transmission Provider developed for any completed study conducted up to the date of withdrawal of the Interconnection Request.

### **3.6.1 Withdrawal Penalty.**

Except as provided in Appendix 8 of Transmission Provider's QF-LGIP, an Interconnection Customer shall be subject to a penalty ("Withdrawal Penalty") if it withdraws its Interconnection Request or the Generating Facility does not otherwise reach Commercial Operation unless (1) the withdrawal does not negatively affect the timing or cost of other projects within the same Cluster as determined by Transmission Provider; (2) the Interconnection Customer withdraws after receiving the most recent Cluster Study Report and the costs assigned to the Interconnection Request identified in that report have increased by more than twenty-five percent (25%) compared to costs identified in the previous Cluster Study Report; (3) the Interconnection Customer withdraws after receiving the individual Facilities Study report and the costs assigned to the Interconnection Request identified in that report have increased by more than 100 percent compared to costs identified in the most recent Cluster Study Report. For the avoidance of doubt, Small Generating Facilities participating in the Cluster Study process pursuant to Article 7 shall not be subject to Withdrawal Penalties.

#### **3.6.1.1 Calculation of the Withdrawal Penalty.**

If the withdrawing Interconnection Customer is withdrawing prior to executing a QF-LGIA, that Interconnection Customer's Withdrawal Penalty shall be as follows:

- a. If Interconnection Customer withdraws after receipt of a Cluster Study Report, the Interconnection Customer shall be charged two (2) times of its actual allocated cost of all studies performed for Interconnection Customers in the Cluster up until that point, regardless of any previous Withdrawal Penalty revenues received. This amount shall be capped at one (1) million dollars.
- b. If Interconnection Customer withdraws after receipt of any applicable restudy reports issued pursuant to Article 7.5, the Interconnection Customer shall be charged three (3) times of its actual allocated cost of all studies performed for Interconnection Customers in the Cluster up until that point, regardless of any previous Withdrawal Penalty revenues received. This amount shall be capped at one and one half (1.5) million dollars.
- c. If Interconnection Customer withdraws after receipt of the individual Facilities study report issued pursuant to Article 8, the Interconnection Customer shall be charged five (5) times of its actual allocated cost of all studies performed for Interconnection Customers in the Cluster up until

that point, regardless of any previous Withdrawal Penalty revenues received. This amount shall be capped at two (2) million dollars.

The Withdrawal Penalty for any Interconnection Customer that, before achieving Commercial Operation, withdraws after executing a QF-LGIA shall be nine (9) times of its actual allocated cost of all studies performed for Interconnection Customers in the Cluster up until that point, regardless of any previous Withdrawal Penalty revenues received. In the event that the Interconnection Customer suspends its interconnection agreement, the Interconnection Customer shall be obligated to pay for costs associated with any studies or restudies required as a result of the suspension of the interconnection agreement, including any restudies associated with any affected lower-queued customers.

### **3.6.1.2 Distribution of the Withdrawal Penalty.**

Any Withdrawal Penalty revenues shall be used to fund generation interconnection studies, including individual Interconnection Facility Studies. Withdrawal Penalty revenues shall first be applied, in the form of a bill credit, to not-yet-invoiced study costs for other Interconnection Customers in the same Cluster, and to the extent that such studies are fully credited, shall be applied to study costs of future Clusters in queue order. Withdrawn Interconnection Customers shall not receive a bill credit associated with Withdrawal Penalty revenues. Distribution of Withdrawal Penalty revenues to a specific study shall not exceed the total actual study costs. Allocation of Withdrawal Penalty revenues within a Cluster to a specific Interconnection Customer shall be (1) fifty percent (50%) on a per capita basis based on number of Interconnection Requests in the applicable Cluster; and (2) fifty percent (50%) to Interconnection Customers on a pro-rata basis based on requested megawatts included in the applicable Cluster. Distribution of Withdrawal Penalty revenue associated with Article 3.6.1.1(c) shall not be distributed to the remaining Interconnection Customers in that Cluster until all Interconnection Customers in that Cluster have reached Commercial Operation and thereafter shall be distributed as described above. Transmission Provider shall not change the distribution of Withdrawal Penalty revenue without authorization by the Commission. Transmission Provider shall post the Withdrawal Penalty balance on its OASIS site.

### **3.7. Informational Interconnection Study Requests.**

Interconnection Customers evaluating different options (such as different sizes, sites, or voltages) are encouraged but not required to use the Informational Interconnection Study Process in Article 6 before entering the Cluster Study process.

### **Article 4. Queue Position**

Once an Interconnection Customer has submitted a valid Interconnection Request pursuant to Article 3.3, such Interconnection Request shall be admitted into Transmission Provider's queue for further processing pursuant to the following procedures.

## **4.1 General.**

### **4.1.1 Assignment of Queue Position.**

Transmission Provider shall assign a Queue Position as follows: the Queue Position within the queue shall be assigned based upon the date and time of receipt of all items required pursuant to the provisions of Article 3.3. There is no queue for Informational Interconnection Studies.

### **4.1.2 Higher Queue Position.**

A higher Queue Position assigned to an Interconnection Request is one that has been placed “earlier” in the queue in relation to another Interconnection Request that is assigned a lower Queue Position. All requests studied in a single Cluster shall be considered equally queued but Clusters initiated earlier in time shall be considered to have a higher Queue Position than Clusters initiated later. The Queue Position of an Interconnection Request shall have no bearing on the allocation of the cost of the common upgrades identified in the applicable Cluster Study (such costs will be allocated among Interconnection Requests in accordance with Article 4.2.3). Moving a Point of Interconnection shall result in a loss of Queue Position if it is deemed a Material Modification under Article 4.4.

## **4.2 General Study Process.**

Cluster Studies performed within the Interconnection Study process shall be conducted in such a manner to ensure the efficient implementation of the applicable regional transmission expansion plan in light of the Transmission System’s capabilities at the time of each study.

### **4.2.1 Cluster Request Windows.**

Transmission Provider shall accept Interconnection Requests at any time including during a forty-five (45) Calendar Day period, hereinafter referred to as the “Cluster Request Window.” The initial Cluster Request Window shall open for Interconnection Requests beginning April 1 following commencement of the transition process set out in Appendix 8 to this QF-LGIP and successive Cluster Request Windows shall open annually every April 1 thereafter.

### **4.2.2 Study Cost Allocation.**

Transmission Provider shall determine each Interconnection Customer’s share of the costs of a Cluster Study by allocating: (1) fifty percent (50%) of the applicable study costs to Interconnection Customers on a per capita basis based on number of Interconnection Requests included in the applicable Cluster; and (2) fifty percent (50%) of the applicable study costs to Interconnection Customers on a pro-rata basis based on requested megawatts included in the applicable Cluster. For example, the cost of a Cluster Study consisting of a 100 MW request and a 900 MW request would be allocated 30% to the 100 MW request and 70% to the 900 MW request.

Any refunds of deposits paid in excess of Interconnection Customer costs allocated pursuant to this Article 4.2.2 shall be issued in accordance with Article 13.3.

#### **4.2.3 Transmission Provider's Interconnection Facilities and Network Upgrade Cost Allocation.**

For Transmission Provider's Interconnection Facilities and Network Upgrades identified in Cluster Studies, Transmission Provider shall calculate each Interconnection Customer's share of costs in the manner set forth below. If a Cluster Study includes one or more Cluster Areas, such costs shall be calculated and allocated among Interconnection Customers within the same Cluster Area. Interconnection Customer shall be responsible for funding the costs of any facilities identified by Transmission Provider in such Interconnection Customer's individual Facilities Study report.

- a. Station equipment Network Upgrades, including all switching stations, shall be allocated based on the number of Generating Facilities interconnecting at an individual station on a per capita basis (i.e. on a per Interconnection Request basis). If multiple Interconnection Customers are connecting to the Transmission Provider's System through a single Interconnection Customer's Interconnection Facility (i.e. sharing the Interconnection Customer's Interconnection Facility connecting to the Transmission Provider's Interconnection Facility(ies)), those Interconnection Customers shall be considered one Interconnection Customer for the per capita calculation described in the preceding sentence. Shared Transmission Provider's Interconnection Facilities shall be allocated based on the number of Generating Facilities sharing that Transmission Provider's Interconnection Facility on a per capita basis.
- b. The funding responsibility for Network Upgrades other than those identified in Article 4.2.3(a) shall be as follows: Interconnection Customers within a Cluster Study that have requested Energy Resource Interconnection Service shall bear their allocable share of the cost of Network Upgrades necessary to provide such service. Interconnection Customers within a Cluster Study that have requested Network Resource Interconnection Service shall bear their allocable share of the cost of Network Upgrades necessary to provide such service. Such allocation shall be based on the proportional capacity of each individual Generating Facility in the Cluster Studies requiring such Network Upgrades in accordance with the iterative process provided in Article 7.3.
- c. Costs of Transmission Provider's Interconnection Facilities are directly assigned to the Interconnection Customer(s) using such facilities.
- d. Notwithstanding any other provision of this Article 4.2.3, no Interconnection Customer shall be responsible for any Network Upgrade costs identified pursuant to this Article if such Interconnection Customer's Interconnection Request individually represents one (1) percent or less of the total requested megawatts included in the applicable Cluster.

#### **4.3 Transferability of Queue Position.**

An Interconnection Customer may transfer its Queue Position to another entity only if such entity acquires the specific Generating Facility identified in the Interconnection Request and the Point of Interconnection does not change.

#### **4.4 Modifications.**

Interconnection Customer shall submit to Transmission Provider, in writing, modifications to any information provided in the Interconnection Request. Interconnection Customer shall retain its Queue Position if the modifications are in accordance with Articles 4.4.1, 4.4.2, or 4.4.5, or are determined not to be Material Modifications pursuant to Article 4.4.3.

Notwithstanding the above, during the course of the Interconnection Studies, either Interconnection Customer or Transmission Provider may identify changes to the planned interconnection that may improve the costs and benefits (including reliability) of the interconnection, and the ability of the proposed change to accommodate the Interconnection Request. Subject to the forgoing sentence, and provided, however, they do not result in a Material Modification, to the extent the identified changes are acceptable to Transmission Provider and Interconnection Customer and potentially impacted Interconnection Customers in the same Cluster, such acceptance not to be unreasonably withheld, Transmission Provider shall modify the Point of Interconnection and/or configuration in accordance with such changes and proceed with any re-studies necessary to do so in accordance with Article 7.5(f) and Article 8.5 as applicable and Interconnection Customer shall retain its Queue Position.

##### **4.4.1**

Prior to the return of the executed Cluster Study Agreement to Transmission Provider, modifications permitted under this Article shall include specifically: (a) a decrease of up to 60 percent of electrical output (MW) of the proposed project; (b) modifying the technical parameters associated with the Large Generating Facility technology or the Large Generating Facility step-up transformer impedance characteristics; and (c) modifying the interconnection configuration. For plant increases, the incremental increase in plant output will go in the next Cluster Study Window for the purposes of cost allocation and study analysis.

##### **4.4.2**

Prior to the return of the executed Interconnection Facility Study Agreement to Transmission Provider, the modifications permitted under this Article shall include specifically: (a) additional 15 percent decrease of electrical output (MW), and (b) Large Generating Facility technical parameters associated with modifications to Large Generating Facility technology and transformer impedances; provided, however, the incremental costs associated with those modifications are the responsibility of the requesting Interconnection Customer.

##### **4.4.3**

Prior to making any modification other than those specifically permitted by Articles 4.4.1, 4.4.2, and 4.4.5, Interconnection Customer may first request that Transmission Provider evaluate whether such modification is a Material Modification. In response to Interconnection Customer's request, Transmission Provider shall evaluate the proposed modifications prior to making them and inform Interconnection Customer in writing of whether the modifications would constitute a Material Modification. Any change to the Point of Interconnection, except those deemed acceptable under Articles 3.1, 4.4.1, or so allowed elsewhere, shall constitute a Material Modification. Interconnection Customer may then withdraw the proposed modification or proceed with a new Interconnection

Request for such modification.

#### **4.4.4**

Upon receipt of interconnection Customer's request for modification permitted under this Article 4.4, Transmission Provider shall commence and perform any necessary additional studies as soon as practicable, but in no event shall Transmission Provider commence such studies later than thirty (30) Calendar Days after receiving notice of Interconnection Customer's request. Any additional studies resulting from such modification shall be done at Interconnection Customer's cost.

#### **4.4.5**

Extensions of less than three (3) cumulative years in the Commercial Operation Date of the Large Generating Facility to which the Interconnection Request relates are not material and should be handled through construction sequencing; provided, however, that extensions may necessitate a determination of whether additional studies are required pursuant to Applicable Laws and Regulations and Applicable Reliability Standards. For purposes of this Article, the Commercial Operation Date reflected in the initial Interconnection Request shall be used. Such cumulative extensions are inclusive of extensions requested after execution of the QF-LGIA by Interconnection Customer.

### **Article 5. New Transmission Provider**

#### **5.1 [Reserved]**

#### **5.2 New Transmission Provider.**

If Transmission Provider transfers control of its Transmission System to a successor Transmission Provider during the period when an Interconnection Request is pending, the original Transmission Provider shall transfer to the successor Transmission Provider any amount of the deposit or payment with interest thereon that exceeds the cost that it incurred to evaluate the request for interconnection. Any difference between such net amount and the deposit or payment required by this QF-LGIP shall be paid by or refunded to the Interconnection Provider, as appropriate. The original Transmission Provider shall coordinate with the successor Transmission Provider to complete any Interconnection Study, as appropriate, that the original Transmission Provider has begun but has not completed. If Transmission Provider has tendered a draft QF-LGIA to Interconnection Customer but Interconnection Customer has not executed the QF-LGIA, unless otherwise provided, Interconnection Customer must complete negotiations with the successor Transmission Provider.

### **Article 6. Informational Interconnection Study.**

#### **6.1 Informational Interconnection Studies.**

##### **6.1.1 Informational Interconnection Study Request.**

Interconnection Customers may not submit requests for Informational Interconnection Studies until after the Transition Readiness Deadline, as defined in Appendix 8. Thereafter, at any time prior to submission of an Interconnection Request, an Interconnection Customer may request, and Transmission Provider (either itself or

through a consultant) shall perform a reasonable number of Informational Interconnection Studies pursuant to the terms of Article 6.

Interconnection Customer shall submit to Transmission Provider an Informational Interconnection Study Request in the form of Appendix 2 to this QF-LGIP and shall describe the assumptions that Interconnection Customer wishes Transmission Provider to study within the scope described in Article 6.1.3, including a proposed Point(s) of Interconnection and any reasonable alternative Point(s) of Interconnection.

Interconnection Customer must submit a deposit with each Informational Interconnection Request even when more than one request is submitted for a single site. An Informational Interconnection Request to evaluate one site at two different voltage levels shall be treated as two Informational Interconnection Requests.

At the request of either the Interconnection Customer or Transmission Provider, Transmission Provider and Interconnection Customer will schedule a scoping meeting at a mutually agreed-upon time.

### **6.1.2 Informational Interconnection Study Agreement**

Within five (5) Business Days after receipt of a request for an Informational Interconnection Study, Transmission Provider, shall provide to Interconnection Customer an Informational Interconnection Study Agreement in the form of Appendix 2A.

The Informational Interconnection Study Agreement shall: (i) include the scope of work for the Informational Interconnection Study, subject to other requirements in Article 6.1.3, (ii) specify the technical data that Interconnection Customer must provide, (iii) specify the Informational Interconnection Study case and assumptions, and (iv) identify the Transmission Provider's estimate of the cost of the Informational Interconnection Study. Notwithstanding the above, Transmission Provider shall not be required as a result of an Informational Interconnection Study request to conduct any additional Interconnection Studies with respect to any other Interconnection Request.

Interconnection Customer shall execute the Informational Interconnection Study Agreement within ten (10) Business Days of receipt of an agreed upon scope of work and deliver the Informational Interconnection Study Agreement, the technical data, and a \$10,000 study deposit to Transmission Provider. Interconnection Customer shall be responsible for actual study costs.

### **6.1.3 Scope of Informational Interconnection Study.**

The intent of the Informational Interconnection Study is to aid Interconnection Customer in its business decisions related to interconnection of generation facilities prior to submitting an Interconnection Request. The Informational Interconnection Study will consider the Base Case as well as all generating facilities (and with respect to (iii), any identified Network Upgrades) that, on the date the Informational Interconnection Study is commenced: (i) are directly interconnected to the Transmission System; (ii) are interconnected to Affected Systems and may have an impact on the Interconnection Request; (iii) have a pending higher queued Interconnection Request to interconnect to the Transmission System; and (iv) have no Queue Position but have executed a QF-LGIA

or, pursuant to the Transmission Provider's OATT, have executed an LGIA or requested that an unexecuted LGIA be filed with FERC. The Informational Interconnection-Study will consist of a power flow and short circuit analysis.

To the extent possible, the Informational Interconnection Study shall identify the potential Transmission Provider's Interconnection Facilities and the Network Upgrades, and the estimated cost thereof, that may be required to provide Interconnection Service based upon the results and assumptions of the Informational Interconnection Study.

The Informational Interconnection Study shall be performed solely for informational purposes and does not bind the Transmission Provider in any way or entitle the requesting Interconnection Customer to a Queue Position. Interconnection Customer requesting an Informational Interconnection Study shall not be assigned any cost responsibility for Network Upgrades. For the avoidance of doubt, neither the request for nor the performance of an Informational Interconnection Study shall be considered an Interconnection Request.

#### **6.1.4 Informational Interconnection Study Procedures**

The executed Informational Interconnection Study Agreement, the deposit, and technical and other data called for therein must be provided to Transmission Provider within ten (10) Business Days of Interconnection Customer receipt of the Informational Interconnection Study Agreement. Transmission Provider shall use Reasonable Efforts to complete the Informational Interconnection Study within 45 days or a mutually agreed upon time period specified within the Informational Interconnection Study Agreement. This time period shall take into account all previous requests for Informational Studies that have been submitted but not yet completed. If Transmission Provider is unable to complete the Informational Interconnection Study within such time period, it shall notify Interconnection Customer and provide an estimated completion date and an explanation of the reasons why additional time is required.

Any difference between the study payment and the actual cost of the study shall be paid to Transmission Provider or refunded to Interconnection Customer, as appropriate. Upon request, Transmission Provider shall provide Interconnection Customer supporting documentation-and work papers and databases or data developed in the preparation of the Informational Interconnection Study, subject to confidentiality arrangements consistent with Article 13.1.

Upon completion of any Informational Interconnection Study, the Transmission Provider will post the study results to its OASIS site.

## **Article 7. Cluster Study**

### **7.1 Cluster Study Agreement.**

No later than five (5) Business Days after the close of a Cluster Request Window, Transmission Provider shall tender to each Interconnection Customer that submitted a valid Interconnection Request a Cluster Study Agreement in the form of Appendix 3 to this QF-LGIP. The Cluster Study Agreement shall require the Interconnection Customer to compensate Transmission

Provider for the actual cost of the Cluster Study. The specifications, assumptions, or other provisions in the appendices of the Cluster System Impact Study Agreement provided pursuant to this Article 7.1 shall be subject to change by Transmission Provider following conclusion of the Scoping Meeting.

## **7.2 Customer Engagement Window.**

Upon the close of each Cluster Request Window, Transmission Provider will open a thirty (30) Calendar Day period (“Customer Engagement Window”). During the Customer Engagement Window, Transmission Provider shall hold a Scoping Meeting with all interested Interconnection Customers. Notwithstanding the preceding sentence and upon written consent of all Interconnection Customers within a specific Cluster, Transmission Provider may shorten the Customer Engagement Window in order to start the Cluster Study earlier. Within the first ten (10) Business Days following the close of the Cluster Request Window, Transmission Provider shall post on its OASIS site a list of Interconnection Requests for that Cluster. The list shall identify, for each Interconnection Request: (i) the requested amount of Interconnection Service; (ii) the location by county and state; (iii) the station or transmission line or lines where the interconnection will be made; (iv) the projected In-Service Date; (v) the type of Interconnection Service requested; (vi) the type of Generating Facility to be constructed including fuel type such as wind, natural gas, coal, or solar; and (vii) the Cluster Area assigned to each Interconnection Request. During the Customer Engagement Window, Transmission Provider will provide to Interconnection Customer a non-binding updated good faith estimate of the cost and timeframe for completing the Cluster Study.

At the end of the Customer Engagement Window, all Interconnection Requests deemed valid that have executed a Cluster Study Agreement in the form of Appendix 3 shall be included in that Cluster Study. Any Interconnection Requests not deemed valid or undergoing Dispute Resolution at the close of the Customer Engagement Window shall not be included in that Cluster. Immediately following the Customer Engagement Window, Transmission Provider shall initiate the Cluster Study described in more detail in Article 7.

## **7.3 Execution of Cluster Study Agreement and Scope of Cluster Study.**

Interconnection Customer shall execute the Cluster Study Agreement and deliver the executed Cluster Study Agreement to Transmission Provider no later than the close of the Customer Engagement Window.

The Cluster Study shall evaluate the impact of the proposed interconnection on the reliability of the Transmission System. The Cluster Study will consider the Base Case as well as all generating facilities (and with respect to (iii) below, any identified Network Upgrades associated with such higher queued interconnection) that, on the date the Cluster Request Window closes: (i) are existing and directly interconnected to the Transmission System; (ii) are existing and interconnected to Affected Systems and may have an impact on the Interconnection Request; (iii) have a pending higher queued or higher clustered Interconnection Request to interconnect to the Transmission System; and (iv) have no Queue Position but have executed a QF- LGIA, or pursuant to the transmission provider’s OATT, have executed a LGIA or have requested that an unexecuted LGIA be filed with FERC.

For purposes of determining necessary Interconnection Facilities and Network Upgrades, the Cluster Study shall consider the level of Interconnection Service of the Interconnection Customer,

unless otherwise required to study the full Generating Facility Capacity due to safety or reliability concerns.

The Cluster Study shall consist of power flow, stability, and short circuit analyses, the results of which are documented in a single Cluster Study Report, or Cluster Re-Study Report, as applicable.

For purposes of identifying Network Upgrades and other facilities caused by requests for Network Resource Interconnection Service, Transmission Provider will run two iterations of the Cluster Study. The first iteration of the Cluster Study shall assume all requests in the applicable Cluster Study have requested Energy Resource Interconnection Service, to establish a baseline of shared Network Upgrades. In the second iteration, the Transmission Provider shall update the study with any requests for Network Resource Interconnection Service, as applicable, to identify the incremental Network Upgrades caused by the requests for Network Resource Interconnection Service.

At the conclusion of the Cluster Study, Transmission Provider will issue a Cluster Study Report. The Cluster Study report will state the assumptions upon which it is based; state the results of the analyses; and provide the requirements or potential impediments to providing the requested interconnection service, including a preliminary indication of the cost and length of time that would be necessary to correct any problems identified in those analyses and implement the interconnection. The Cluster Study Report shall identify Transmission Provider's Interconnection Facilities and Network Upgrades expected to be required to reliably interconnect the Generating Facilities in that Cluster Study at the appropriate Interconnection Service level and shall provide non-binding estimates for required upgrades. The Cluster Study Report shall identify each Interconnection Customer's estimated allocated costs for Transmission Provider's Interconnection Facilities and Transmission Provider's Network Upgrades pursuant to the methodology in Article 4.2.3. Transmission Provider shall hold an open stakeholder meeting pursuant to Article 7.4 below.

The Cluster Study Report will provide a list of facilities that are required as a result of the Interconnection Requests and a non-binding good faith estimate of cost responsibility and a non-binding good faith estimated time to construct.

Upon issuance of a Cluster Study Report, or Cluster Re-Study Report, if any, Transmission Provider shall simultaneously tender a draft Facilities study Agreement, subject to the conditions in Article 8.1.

#### **7.4 Cluster Study Procedures.**

Transmission Provider shall coordinate Cluster Study with any Affected System that is affected by the Interconnection Request pursuant to Article 3.5 above. Transmission Provider shall utilize existing studies to the extent practicable when it performs the Cluster Study. Interconnection Requests for a Cluster Study may be submitted at any time but must be received before the close of the Cluster Request Window and Transmission Provider shall initiate the Cluster Study process pursuant to Article 4.2.1.

- a. Transmission Provider may segment and perform Cluster Studies according to geographically and/or electrically relevant areas on the Transmission Provider's Transmission System ("Cluster Area"). Cluster Areas shall be determined by the

Transmission Provider at the end of each Customer Engagement Window and shall be based on the valid Interconnection Requests that are submitted before the close of the Cluster Request Window. Before the Scoping Meeting, the Transmission Provider shall initially determine each Cluster Area and shall post on its OASIS website, for discussion during the Scoping Meeting, a draft plan for the Cluster Study, including a map and table defining the Cluster Areas assigned to each valid Interconnection Request received before the close of the Cluster Request Window. Transmission Provider shall post an updated Cluster Area map, table, and final Cluster Study plan on OASIS by no later than the end of the Customer Engagement Window. The Cluster Study shall consist of all valid Interconnection Requests in each respective Cluster Area that have executed a Cluster Study Agreement and have provided all required information before the close of the Customer Engagement Window.

- b. Unless restudies are required pursuant to Article 7.5, Transmission Provider shall use Reasonable Efforts to complete the Cluster Study within one hundred fifty (150) Calendar Days of the close of the Customer Engagement Window.
- c. Within ten (10) Business Days of simultaneously furnishing a Cluster Study Report (or, as applicable, Cluster Re-Study Report) and a draft Interconnection Facilities Study Agreement to Interconnection Customers and posting such report on OASIS, Transmission Provider shall convene an open meeting to discuss the study results (“Cluster Study Report Meeting” or “Cluster Re-Study Report Meeting”). Transmission Provider shall, upon request, also make itself available to meet with individual Interconnection Customers after the report is provided.

#### **7.5 Cluster Study Withdrawals and Re-Studies.**

- a. If no Interconnection Customer withdraws from the Cluster after completion of the Cluster Study or Cluster Re-Study or is deemed withdrawn pursuant to Article 3.6, Transmission Provider shall electronically notify Interconnection Customers in the Cluster that a Cluster Re-Study is not required.
- b. If one or more Interconnection Customer withdraw(s) from the Cluster, Transmission Provider shall determine if a Cluster Re-Study of the Cluster is necessary. If Transmission Provider determines a Cluster Re-Study is not necessary, Transmission Provider shall provide an updated Cluster Study Report within thirty (30) Calendar Days of such determination. When the updated Cluster Study Report is issued, Transmission Provider shall electronically notify Interconnection Customers in the Cluster that a Cluster Re-Study is not required.
- c. If one or more Interconnection Customers withdraws from the Cluster and Transmission Provider determines a restudy of the Cluster is necessary as a result, Transmission Provider will continue with such re-studies as described in Article 7.5(d) below, until Transmission Provider determines that no further re-studies are required. If an Interconnection Customer withdraws after Article 7.5(a), Article 7.5(c), during the Interconnection Facilities Study, or after other Interconnection Customers in the same Cluster have executed LGIAs, and Transmission Provider determines a restudy of the Cluster is necessary, the Cluster (including any Cluster Area) shall be restudied as described in Article 7.5(d) below. Transmission Provider shall electronically notify Interconnection Customers in the Cluster and post on OASIS that a re-study is required.

- d. The scope of any Cluster Re-study shall be consistent with the scope of an initial Cluster Study pursuant to Article 7.3. Transmission Provider shall use Reasonable Efforts to complete the Cluster Re-Study for all Cluster Areas within one hundred fifty (150) Calendar Days of the commencement of the first Cluster Area Re-Study. The results of the Cluster Re-Study shall be combined into a single report (“Cluster Re-Study Report”), and Transmission Provider shall hold an open stakeholder meeting (“Cluster Re-Study Report Meeting”) within ten (10) Business Days of publishing Cluster Re-Study Report on OASIS.

If additional re-studies are required, Interconnection Customer and Transmission Provider shall follow the procedures of this Article 7.5 until such time that Transmission Provider determines that no further re-studies are required. Transmission Provider shall electronically notify Interconnection Customers in the Cluster when no further re-studies are required.

- e. At the request of interconnection Customer or at any time Transmission Provider determines that it will not meet the required timeframe for completing the Cluster Study, Transmission Provider shall notify Interconnection Customers as to the schedule status of the Cluster Study. If Transmission Provider is unable to complete the Cluster Study within the time period, it shall notify Interconnection Customers and provide an estimated completion date with an explanation of the reasons why additional time is required. Upon request, Transmission Provider shall provide to Interconnection Customer all supporting documentation, workpapers, and relevant pre-Interconnection Request and post-Interconnection Request power flow, short circuit and stability databases for the Cluster Study, subject to confidentiality arrangements consistent with Article 13.1.
- f. If Re-Study of the Cluster Study other than the Re-Study described in Article 7.5(a)-(d) is required due to a higher or equal priority queued project dropping out of the queue, or a modification of a higher queued project subject to Article 4.4, Transmission Provider shall notify Interconnection Customer(s) in writing. The Transmission Provider shall make Reasonable Efforts to ensure such Re-Study takes no longer than one hundred fifty (150) Calendar Days from the date of notice. Except as provided in Article 3.6 in the case of withdrawing Interconnection Customers, any cost of Re-Study shall be borne by Interconnection Customer(s) being re-studied.

## **Article 8. Interconnection Facilities Study**

### **8.1 Interconnection Facilities Study Agreement.**

Simultaneously with the delivery of the final Cluster Study Report, or Cluster Re-Study Report if applicable, Transmission Provider shall provide to Interconnection Customer an Interconnection Facilities Study Agreement in the form of Appendix 4 to this QF-LGIP. The Interconnection Facilities Study Agreement shall provide that Interconnection Customer shall compensate Transmission Provider for the actual cost of the Interconnection Facilities Study. Transmission Provider shall provide to Interconnection Customer a non-binding good faith estimate of the cost and timeframe for completing the Interconnection Facilities Study. Interconnection Customer shall execute the Interconnection Facilities Study Agreement and deliver the executed Interconnection Facilities Study Agreement to Transmission Provider within thirty (30) Calendar Days after its receipt, together with:

- a. any required technical data;
- b. a demonstration of Site Control pursuant to Article 3.3.1(iii)(a); ~~and~~
- c. Financial Security payment equal to the lesser of (i) fifteen percent (15%) of the Network Upgrade costs allocated to Interconnection Customer in the most recent Cluster Study Report; (ii) \$20,000 per megawatt of electrical output of the Large Generating Facility or the amount of megawatt increase in the generating capacity of each existing Generating Facility as listed by the Interconnection Customer in its Interconnection Request, including any requested modifications thereto, or (iii) \$7,500,000, but in no event less than \$500,000. Such additional Financial Security shall be refunded in accordance with Article 13.3.3; and
- d. If the Interconnection Customer chooses to be studied for Energy Resource Interconnection Service, then the Interconnection Customer must provide to Transmission Provider an attestation that they intend to enter into a non-standard Qualifying Facility contract for the sale of electric energy or capacity from the Large Generating Facility.

## **8.2 Scope of Interconnection Facilities Study.**

The Interconnection Facilities Study shall be specific to each Interconnection Request and performed on an individual, i.e. non-clustered, basis. The Interconnection Facilities Study shall specify and provide a non-binding estimate of the cost of the equipment, engineering, procurement and construction work needed to implement the conclusions of the Cluster Study Report (and any associated restudies) in accordance with Good Utility Practice to physically and electrically connect the Interconnection Facilities to the Transmission System. The Interconnection Facilities Study shall also identify the electrical switching configuration of the connection equipment, including, without limitation: the transformer, switchgear, meters, and other station equipment; the nature and estimated cost of any Transmission Provider's Interconnection Facilities, Network Upgrades, and Distribution Upgrades necessary to accomplish the interconnection; and an estimate of the time required to complete the construction and installation of such facilities.

## **8.3 Interconnection Facilities Study Procedures.**

Transmission Provider shall coordinate the Interconnection Facilities Study with any Affected System pursuant to Article 3.5 above. Transmission Provider shall utilize existing studies to the extent practicable in performing the Interconnection Facilities Study. Transmission Provider shall use Reasonable Efforts to complete the study and issue a draft Interconnection Facilities Study report to Interconnection Customer within the following number of days after receipt of an executed Interconnection Facilities Study Agreement: ninety (90) Calendar Days, with no more than a +/- 20 percent cost estimate contained in the report; or one hundred eighty (180) Calendar Days, if interconnection Customer requests a +/- 10 percent cost estimate.

At the request of Interconnection Customer or at any time Transmission Provider determines that it will not meet the required time frame for completing the Interconnection Facilities Study, Transmission Provider shall notify Interconnection Customer as to the schedule status of the Interconnection Facilities Study. If Transmission Provider is unable to complete the

Interconnection Facilities Study and issue a draft Interconnection Facilities Study report within the time required, it shall notify Interconnection Customer and provide an estimated completion date and an explanation of the reasons why additional time is required.

Interconnection Customer may, within thirty (30) Calendar Days after receipt of the draft Interconnection Facilities Study report, provide written comments to Transmission Provider, which Transmission Provider shall include in completing the Interconnection Facilities Study final report. Transmission Provider shall issue the final Interconnection Facilities Study report within fifteen (15) Business Days of receiving Interconnection Customer's comments or promptly upon receiving Interconnection Customer's statement that it will not provide comments. Transmission Provider may reasonably extend such fifteen (15) Business Day period upon notice to Interconnection Customer if interconnection Customer's comments require Transmission Provider to perform additional analyses or make other significant modifications prior to the issuance of the final Interconnection Facilities Study Report. Upon request, Transmission Provider shall provide Interconnection Customer supporting documentation, workpapers, and databases or data developed in the preparation of the Interconnection Facilities Study, subject to confidentiality arrangements consistent with Article 13.1.

#### **8.4 Meeting with Transmission Provider.**

Within ten (10) Business Days of providing a draft Interconnection Facilities Study report to Interconnection Customer, Transmission Provider and Interconnection Customer shall meet to discuss the results of the Interconnection Facilities Study.

#### **8.5 Re-Study.**

If Re-Study of the Interconnection Facilities Study, or Facilities Study for a Small Generating Facility, is required due to a higher or equal priority queued project dropping out of the queue or a modification of a higher queued project pursuant to Article 4.4, Transmission Provider shall so notify Interconnection Customer in writing. Transmission Provider shall make Reasonable Efforts to ensure such Re-Study shall take no longer than sixty (60) Calendar Days from the date of notice. Re-Studies that require rerunning the Cluster Study analysis may take longer than sixty days. Except as provided in Article 3.6 in the case of withdrawing Interconnection Customers, any cost of Re-Study shall be borne by the Interconnection Customer being re-studied.

### **Article 9. Engineering & Procurement ('E&P') Agreement.**

Prior to executing a QF-LGIA, an Interconnection Customer may, in order to advance the implementation of its interconnection, request and Transmission Provider shall offer the Interconnection Customer, an E&P Agreement that authorizes Transmission Provider to begin engineering and procurement of long lead-time items necessary for the establishment of the interconnection. However, Transmission Provider shall not be obligated to offer an E&P Agreement if Interconnection Customer is in Dispute Resolution as a result of an allegation that Interconnection Customer has failed to meet any milestones or comply with any prerequisites specified in other parts of the QF-LGIP. The E&P Agreement is an optional procedure and it will not alter the Interconnection Customer's Queue Position or In-Service Date. The E&P Agreement shall provide for Interconnection Customer to pay the cost of all activities authorized by Interconnection Customer and to make advance payments or provide other satisfactory security for such costs.

Interconnection Customer shall pay the cost of such authorized activities and any cancellation costs for equipment that is already ordered for its interconnection, which cannot be mitigated as hereafter described, whether or not such items or equipment later become unnecessary. If Interconnection Customer withdraws from the Cluster or either Party terminates the E&P Agreement, to the extent the equipment ordered can be canceled under reasonable terms, Interconnection Customer shall be obligated to pay the associated cancellation costs. To the extent that the equipment cannot be reasonably canceled, Transmission Provider may elect: (i) to take title to the equipment, in which event Transmission Provider shall refund Interconnection Customer any amounts paid by Interconnection Customer for such equipment and shall pay the cost of delivery of such equipment, or (ii) to transfer title to and deliver such equipment to Interconnection Customer, in which event Interconnection Customer shall pay any unpaid balance and cost of delivery of such equipment.

**Article 10. [Reserved]**

**Article 11. Standard Oregon Qualifying Facility Large Generator Interconnection Agreement (QF-LGIA)**

**11.1 Tender.**

As provided in Article 8.3, Interconnection Customer shall tender comments on the draft Interconnection Facilities Study Report within thirty (30) Calendar Days of receipt of the report. Within thirty (30) Calendar Days after the Interconnection Customer's comments are submitted or after the Interconnection Customer notifies Transmission Provider that it will not provide comments, Transmission Provider shall tender a draft QF-LGIA, together with draft appendices completed to the extent practicable. The draft QF-LGIA shall be in the form of Transmission Provider's OPUC approved standard form QF-LGIA, which is in Appendix 5. Interconnection Customer shall execute and return the completed draft appendices within thirty (30) Calendar Days, unless the (60) Calendar Day negotiation period under Article 11.2 has commenced, or upon a later date agreed upon between the Parties.

**11.2 Negotiation.**

Notwithstanding Article 11.1, at the request of Interconnection Customer Transmission Provider shall begin negotiations with Interconnection Customer concerning the appendices to the QF-LGIA at any time after Interconnection Customer executes the Interconnection Facilities Study Agreement. Transmission Provider and Interconnection Customer shall negotiate concerning any disputed provisions of the appendices to the draft QF-LGIA for not more than sixty (60) Calendar Days after tender of the final Interconnection Facilities Study Report. If Interconnection Customer determines that negotiations are at an impasse, it may request termination of the negotiations at any time after tender of the draft QF-LGIA pursuant to Article 11.1 and initiate Dispute Resolution procedures pursuant to Article 13.5. If Interconnection Customer requests termination of the negotiations, but within sixty (60) Calendar Days thereafter fails to initiate Dispute Resolution, it shall be deemed to have withdrawn its Interconnection Request. Unless otherwise agreed by the Parties, if Interconnection Customer has not executed the QF-LGIA, or initiated Dispute Resolution procedures pursuant to Article 13.5 within sixty (60) Calendar Days of tender of draft QF-LGIA, it shall be deemed to have withdrawn its Interconnection Request. Transmission Provider shall provide to Interconnection Customer a final QF-LGIA within fifteen (15) Business Days after the completion of the negotiation process.

### **11.3 Execution and Filing.**

Within fifteen (15) Business Days after receipt of the final QF-LGIA, and prior to execution of the final QF-LGIA, Interconnection Customer shall provide Transmission Provider with (i) demonstration of continued Site Control pursuant to Article 3.3.1(iii)(a). At the same time, if the Interconnection Customer has selected Network Resource Interconnection Service, Interconnection Customer also shall provide reasonable evidence that one or more of the following milestones in the development of the Large Generating Facility, at Interconnection Customer election, has been achieved: (i) the execution of a contract for the supply or transportation of fuel to the Large Generating Facility; (ii) the execution of a contract for the supply of cooling water to the Large Generating Facility; (iii) execution of a contract for the engineering for, procurement of major equipment for, or construction of, the Large Generating Facility; (iv) execution of a contract (or comparable evidence) for the sale of electric energy or capacity from the Large Generating Facility; or (v) application for an air, water, or land use permit.

If the Interconnection Customer has selected Energy Resource Interconnection Service, Interconnection Customer shall provide reasonable evidence in the form of an attestation that it has executed a non-standard Qualifying Facility contract for the sale of electric energy or capacity from the Large Generating Facility. The attestation must be signed by the Interconnection Customer and the counterparty to the non-standard Qualifying Facility contract. If Interconnection Customer has not executed the QF-LGIA, or initiated Dispute Resolution procedures pursuant to Article 13.4 within (60) Calendar Days of tender of the final QF-LGIA, it shall be deemed to have withdrawn its Interconnection Request.

At the same time, Interconnection Customer also shall provide reasonable evidence that it has obtained certification as a Qualifying Facility pursuant to 18 C.F.R. § 292.207. Interconnection Customer shall execute two originals of the tendered QF-LGIA and return them to Transmission Provider. Interconnection Customer shall also file an executed original of the tendered QF-LGIA with the OPUC.

### **11.4 Commencement of Interconnection Activities.**

If Interconnection Customer executes the final QF-LGIA, Transmission Provider and Interconnection Customer shall perform their respective obligations in accordance with the terms of the QF-LGIA, subject to modification by OPUC.

## **Article 12. Construction of Transmission Provider's Interconnection Facilities, Distribution Upgrades, and Network Upgrades**

### **12.1 Schedule.**

Transmission Provider and Interconnection Customer shall negotiate in good faith concerning a schedule for the construction of Transmission Provider's Interconnection Facilities, Distribution Upgrades, and the Network Upgrades.

### **12.2 Construction Sequencing.**

#### **12.2.1 General.**

In general, the In-Service Date of an Interconnection Customers seeking interconnection to the Transmission System will determine the sequence of construction of Distribution

Upgrades and Network Upgrades. Construction sequencing may also apply to shared Transmission Provider's Interconnection Facilities in a similar manner as described below for Network Upgrades.

#### **12.2.2 Advance Construction of Network Upgrades that are an Obligation of an Entity other than Interconnection Customer.**

An Interconnection Customer with a QF-LGIA, in order to maintain its In-Service Date, may request that Transmission Provider advance to the extent necessary the completion of Network Upgrades that: (i) were assumed in the Interconnection Studies for such Interconnection Customer, (ii) are necessary to support such In-Service Date, and (iii) would otherwise not be completed, pursuant to a contractual obligation of an entity other than Interconnection Customer that is seeking interconnection to the Transmission System, in time to support such In-Service Date. Upon such request, Transmission Provider will use Reasonable Efforts to advance the construction of such Network Upgrades to accommodate such request; provided that Interconnection Customer commits to pay Transmission Provider: (i) any associated expediting costs and (ii) the cost of such Network Upgrades. The entity with a contractual obligation to construct such Network Upgrades ("Obligated Entity") shall be obligated to pay Transmission Provider for such Network Upgrades. Payment by the Obligated Entity shall be due on the date that it's payment would have been due had there been no request for advance construction. Transmission Provider shall forward to Interconnection Customer the amount paid by the Obligated Entity. If Transmission Provider's interconnection agreement, if any, with the Obligated Entity requires Transmission Provider to refund the Obligated Entity for amounts paid for Network Upgrades, Transmission Provider then shall refund to the Obligated Entity the amount that it paid for the Network Upgrades, in accordance with said interconnection agreement.

#### **12.2.3 Advancing Construction of Network Upgrades that are Part of an Expansion Plan of the Transmission Provider.**

An Interconnection Customer with an QF-LGIA, in order to maintain its In-Service Date, may request that Transmission Provider advance to the extent necessary the completion of Network Upgrades that: (i) are necessary to support such In- Service Date and (ii) would otherwise not be completed, pursuant to an expansion plan of Transmission Provider, in time to support such In-Service Date. Upon such request, Transmission Provider will use Reasonable Efforts to advance the construction of such Network Upgrades to accommodate such request; provided that Interconnection Customer commits to pay Transmission Provider any associated expediting costs.

#### **12.2.4 Amended Interconnection System Impact Study.**

If applicable, an interconnection system impact study will be amended to determine the facilities necessary to support the requested In- Service Date. This amended study will include those transmission and Large Generating Facilities that are expected to be in service on or before the requested In-Service Date.

## **Article 13. Miscellaneous**

### **13.1 Confidentiality.**

Confidential Information shall include, without limitation, all information relating to a Party's technology, research and development, business affairs, and pricing, and any information supplied by either of the Parties to the other prior to the execution of an QF-LGIA.

Information is Confidential Information only if it is clearly designated or marked in writing as confidential on the face of the document, or, if the information is conveyed orally or by inspection, if the Party providing the information orally informs the Party receiving the information that the information is confidential.

If requested by either Party, the other Party shall provide in writing, the basis for asserting that the information referred to in this Article warrants confidential treatment, and the requesting Party may disclose such writing to the appropriate Governmental Authority. Each Party shall be responsible for the costs associated with affording confidential treatment to its information. The release of Confidential Information shall be subject to Applicable Laws and Regulations and Applicable Reliability Standards.

#### **13.1.1 Scope.**

Confidential Information shall not include information that the receiving Party can demonstrate: (1) is generally available to the public other than as a result of a disclosure by the receiving Party; (2) was in the lawful possession of the receiving Party on a non-confidential basis before receiving it from the disclosing Party; (3) was supplied to the receiving Party without restriction by a third party, who, to the knowledge of the receiving Party after due inquiry, was under no obligation to the disclosing Party to keep such information confidential; (4) was independently developed by the receiving Party without reference to Confidential Information of the disclosing Party; (5) is, or becomes, publicly known, through no wrongful act or omission of the receiving Party or Breach of the QF-LGIA; or (6) is required, in accordance with Article 13.1.6, Order of Disclosure, to be disclosed by any Governmental Authority or is otherwise required to be disclosed by law or subpoena, or is necessary in any legal proceeding establishing rights and obligations under the QF-LGIA. Information designated as Confidential Information will no longer be deemed confidential if the Party that designated the information as confidential notifies the other Party that it no longer is confidential.

#### **13.1.2 Release of Confidential Information.**

Neither Party shall release or disclose Confidential Information to any other person, except to its Affiliates (limited by the Standards of Conduct requirements), employees, consultants, or to parties who may be or considering providing financing to or equity participation with Interconnection Customer, or to potential purchasers or assignees of Interconnection Customer, on a need-to-know basis in connection with these procedures, unless such person has first been advised of the confidentiality provisions of this Article 13.1 and has agreed to comply with such provisions. Notwithstanding the foregoing, a Party providing Confidential Information to any person shall remain primarily responsible for any release of Confidential Information in contravention of this Article 13.1.

### **13.1.3 Rights.**

Each Party retains all rights, title, and interest in the Confidential Information that each Party discloses to the other Party. The disclosure by each Party to the other Party of Confidential Information shall not be deemed a waiver by either Party or any other person or entity of the right to protect the Confidential Information from public disclosure.

### **13.1.4 No Warranties.**

By providing Confidential information, neither Party makes any warranties or representations as to its accuracy or completeness. In addition, by supplying Confidential Information, neither Party obligates itself to provide any particular information or Confidential Information to the other Party nor to enter into any further agreements or proceed with any other relationship or joint venture.

### **13.1.5 Standard of Care.**

Each Party shall use at least the same standard of care to protect Confidential Information it receives as it uses to protect its own Confidential Information from unauthorized disclosure, publication or dissemination. Each Party may use Confidential Information solely to fulfill its obligations to the other Party under these procedures or its regulatory requirements.

### **13.1.6 Order of Disclosure.**

If a court or a Government Authority or entity with the right, power, and apparent authority to do so requests or requires either Party, by subpoena, oral deposition, interrogatories, requests for production of documents, administrative order, or otherwise, to disclose Confidential Information, that Party shall provide the other Party with prompt notice of such request(s) or requirement(s) so that the other Party may seek an appropriate protective order or waive compliance with the terms of the QF-LGIA. Notwithstanding the absence of a protective order or waiver, the Party may disclose such Confidential Information which, in the opinion of its counsel, the Party is legally compelled to disclose. Each Party will use Reasonable Efforts to obtain reliable assurance that confidential treatment will be accorded any Confidential Information so furnished.

### **13.1.7 Remedies.**

The Parties agree that monetary damages would be inadequate to compensate a Party for the other Party's Breach of its obligations under this Article 13.1. Each Party accordingly agrees that the other Party shall be entitled to equitable relief, by way of injunction or otherwise, if the first Party Breaches or threatens to Breach its obligations under this Article 13.1, which equitable relief shall be granted without bond or proof of damages, and the receiving Party shall not plead in defense that there would be an adequate remedy at law. Such remedy shall not be deemed an exclusive remedy for the Breach of this Article 13.1, but shall be in addition to all other remedies available at law or in equity. The Parties further acknowledge and agree that the covenants contained herein are necessary for the protection of legitimate business interests and are reasonable in scope. No Party, however, shall be liable for indirect, incidental, or consequential or punitive damages of any nature or kind resulting from or arising in connection with this Article 13.1.

### **13.1.8 Disclosure to OPUC or its Staff.**

Notwithstanding anything in this Article 13.1 to the contrary, if the OPUC or its staff, during the course of an investigation or otherwise, requests information from one of the Parties that is otherwise required to be maintained in confidence pursuant to the QF-LGIP, the Party shall provide the requested information to the OPUC or its staff, within the time provided for in the request for information. In providing the information to the OPUC or its staff, the Party must, consistent with OAR 860-011-0080, request that the information be treated as confidential and non-public by the OPUC and its staff and that the information be withheld from public disclosure. Parties must notify the other Party prior to the release of the Confidential Information to the OPUC or its staff. The Party shall notify the other Party to the QF-LGIA when it is notified by the OPUC or its staff that a request to release Confidential Information has been received by the OPUC, at which time either of the Parties may respond before such information would be made public, pursuant to OAR 860-011-0080. Requests from FERC, in the course of conducting an investigation, shall be treated in a similar manner, consistent with applicable federal rules and regulations.

### **13.1.9**

Subject to the exception in Article 13.1.8, any information that a Party claims is competitively sensitive, commercial or financial information ("Confidential Information") shall not be disclosed by the other Party to any person not employed or retained by the other Party, except to the extent disclosure is (i) required by law; (ii) reasonably deemed by the disclosing Party to be required to be disclosed in connection with a dispute between or among the Parties, or the defense of litigation or dispute; (iii) otherwise permitted by consent of the other Party, such consent not to be unreasonably withheld; or (iv) necessary to fulfill its obligations under this QF-LGIP or as a transmission service provider or a Control Area operator including disclosing the Confidential Information to an RTO or ISO or to a subregional, regional or national reliability organization or planning group. The Party asserting confidentiality shall notify the other Party in writing of the information it claims is confidential. Prior to any disclosures of the other Party's Confidential Information under this subparagraph, or if any third party or Governmental Authority makes any request or demand for any of the information described in this subparagraph, the disclosing Party agrees to promptly notify the other Party in writing and agrees to assert confidentiality and cooperate with the other Party in seeking to protect the Confidential Information from public disclosure by confidentiality agreement, protective order or other reasonable measures.

### **13.1.10**

This provision shall not apply to any information that was or is hereafter in the public domain (except as a result of a Breach of this provision).

### **13.1.11**

Transmission Provider shall, at Interconnection Customer's election, destroy, in a confidential manner, or return the Confidential Information provided at the time of Confidential Information is no longer needed.

### **13.2 Delegation of Responsibility.**

Transmission Provider may use the services of subcontractors as it deems appropriate to perform its obligations under this QF-LGIP. Transmission Provider shall remain primarily liable to Interconnection Customer for the performance of such subcontractors and compliance with its obligations of this QF-LGIP. The subcontractor shall keep all information provided confidential and shall use such information solely for the performance of such obligation for which it was provided and no other purpose.

### **13.3 Obligation for Study Costs and Withdrawal Penalties; Refunds.**

#### **13.3.1**

Transmission Provider shall charge and Interconnection Customer shall pay the actual costs of the Interconnection Studies (or actual allocated costs, in the case of Cluster Studies pursuant to Article 4.2.2) and any Withdrawal Penalty, as applicable. Any difference between the study deposit and the actual cost of the applicable Interconnection Study shall be paid by or refunded, except as otherwise provided herein, to Interconnection Customer or offset against the cost of any future Interconnection Studies associated with the applicable Interconnection Request prior to beginning of any such future Interconnection Studies. If an Interconnection Customer's study deposit paid pursuant to Article 3.1 is greater than the Interconnection Customer's share of actual Cluster Study costs (including applicable restudies), any excess amounts shall be applied to the Interconnection Customer's individual Interconnection Facilities study costs, or refunded to the Interconnection Customer following Transmission Provider's issuance of the Interconnection Customer's final Interconnection Facilities Study report. Interconnection Customer shall be responsible for any Withdrawal Penalties pursuant to Article 3.6 in the event of withdrawal.

#### **13.3.2**

In the event of Interconnection Customer's Withdrawal pursuant to Article 3.6, Transmission provider shall refund to Interconnection Customer any of the refundable portion of the following charges: (a) any study deposit paid pursuant to Article 3.1; (b) any Site Control-related deposit paid pursuant to Article 3.3.1(iii); and (d) additional Financial Security payment for Network Upgrade costs paid pursuant to Article 8.1(c). Such refundable portion shall be any amount that exceeds Interconnection Customer's share of the costs that Transmission Provider has incurred (such as study costs) including interest calculated in accordance with Section 35.19a(a)(2) of FERC's regulations, and that exceed any Withdrawal Penalty imposed, if applicable.

#### **13.3.3**

Additional Financial Security paid by Interconnection Customer pursuant to Article 8.1(c) shall be refunded in whole or in part on the earlier of: (i) the Interconnection Request is withdrawn from the queue and pays any required Withdrawal Penalties; (ii) before achieving Commercial Operation the Interconnection Customer terminates its executed QF-LGIA pursuant to QF-LGIA Article 2.3 or applicable termination procedures and pays any required Withdrawal Penalties; or (iii) Interconnection Customer achieves Commercial Operation. Any partial or full refund pursuant to this Article shall include interest (if applicable) calculated in accordance with Section

35.19a(a)(2) of FERC's regulations, and that exceed any Withdrawal Penalty imposed.

#### **13.3.4**

Any invoices for Interconnection Studies shall include a detailed and itemized accounting of the cost of each Interconnection Study as well as the Withdrawal Penalty, if applicable. Interconnection Customer shall pay any such undisputed costs within thirty (30) Calendar Days of receipt of an invoice therefore. Transmission Provider shall not be obligated to perform or continue to perform any studies unless Interconnection Customer has paid all undisputed amounts in compliance herewith. If invoices are not paid within thirty (30) Calendar Days of receipt of an invoice, Transmission Provider shall draw upon any security and deposits provided under this QF-LGIP to settle all accounts, which shall include any offsets of amounts due and owing by Transmission Provider. After the final invoice is paid and all accounts are settled, Transmission Provider shall refund all remaining security and deposits.

#### **13.4 Third Parties Conducting Studies.**

If (i) at the time of the signing of an Interconnection Study Agreement there is disagreement as to the estimated time to complete an Interconnection Study, (ii) Interconnection Customer receives notice pursuant to Articles 6.1.4, 7.5(e) or 8.3 that Transmission Provider will not complete an Interconnection Study within the applicable timeframe for such Interconnection Study, or (iii) Interconnection Customer receives neither the Interconnection Study nor a notice under Articles 6.1.4, 7.5(e) or 8.3 within the applicable timeframe for such Interconnection Study, then Interconnection Customer may require Transmission Provider to utilize a third Party consultant reasonably acceptable to Interconnection Customer and Transmission Provider to perform such Interconnection Study under the direction of Transmission Provider. At other times, Transmission Provider may also utilize a third party consultant to perform such Interconnection Study, either in response to a general request of interconnection Customer, or on its own volition.

In all cases, use of a third party consultant shall be in accord with Article 26 of the QF-LGIA (Subcontractors) and limited to situations where Transmission Provider determines that doing so will help maintain or accelerate the study process for Interconnection Customer's pending Interconnection Request and not interfere with Transmission Provider's progress on Interconnection Studies for other pending Interconnection Requests. In cases where Interconnection Customer requests use of a third party consultant to perform such Interconnection Study, Interconnection Customer and Transmission Provider shall negotiate all of the pertinent terms and conditions, including reimbursement arrangements and the estimated study completion date and study review deadline. Transmission Provider shall convey all workpapers, data bases, study results and all other supporting documentation prepared to date with respect to the Interconnection Request as soon as soon as practicable upon Interconnection Customer's request subject to the confidentiality provision in Article 13.1. In any case, such third party contract may be entered into with either Interconnection Customer or Transmission Provider at Transmission Provider's discretion. In the case of (iii) Interconnection Customer maintains its right to submit a claim to Dispute Resolution to recover the costs of such third party study. Such third party consultant shall be required to comply with this QF-LGIP, Article 26 of the QF- LGIA (Subcontractors), and the relevant procedures and protocols as would apply if Transmission Provider were to conduct the Interconnection Study and shall use the information provided to it solely for purposes of performing such services and for no other purposes. Transmission Provider shall cooperate with such third party consultant and Interconnection Customer to

complete and issue the Interconnection Study in the shortest reasonable time.

## **13.5 Disputes.**

### **13.5.1 Submission.**

In the event either Party has a dispute, or asserts a claim, that arises out of or in connection with the QF-LGIA, the QF-LGIP, or their performance, such Party (the "disputing Party") shall provide the other Party with written notice of the dispute or claim ("Notice of Dispute"). Such dispute or claim shall be referred to a designated senior representative of each Party for resolution on an informal basis as promptly as practicable after receipt of the Notice of Dispute by the other Party. In the event the designated representatives are unable to resolve the claim or dispute through unassisted or assisted negotiations within thirty (30) Calendar Days of the other Party's receipt of the Notice of Dispute, such claim or dispute may, upon mutual agreement of the parties, be submitted to arbitration and resolved in accordance with the arbitration procedures set forth below. In the event the Parties do not agree to submit such claim or dispute to arbitration, each Party may exercise whatever rights and remedies it may have in equity or at law consistent with the terms of this QF-LGIA.

### **13.5.2 Arbitration of Disputes.**

(1) An interconnecting public utility or an interconnection applicant may petition the Commission for arbitration of disputes arising during review of an application to interconnect a large generator facility or during negotiation of an interconnection agreement. If the public utility or the applicant petitions the Commission to arbitrate their dispute, then the Commission will use an administrative law judge (ALJ) as arbitrator unless workload constraints necessitate the use of an outside arbitrator.

(2) A petition for arbitration of an interconnection agreement must contain: (a) A statement of all unresolved issues; (b) A description of each party's position on the unresolved issues; and (c) A proposed agreement addressing all issues, including those on which the parties have reached agreement and those that are in dispute.

(3) A petition for arbitration of a dispute arising during review of an application to interconnect a large generator facility must contain: (a) A statement of all unresolved issues; (b) A description of each party's position on the unresolved issues; and (c) A proposed resolution for each unresolved issue.

(4) Respondent may file a response within 25 calendar days of the petition for arbitration. In the response, the respondent must address each issue listed in the petition, describe the respondent's position on those issues, and present any additional issues for which the respondent seeks resolution.

(5) The filing of a petition for arbitration of a dispute arising during review of an application to interconnect a large generator facility does not affect the application's queue position.

(6) The arbitration is conducted in a manner similar to a contested case proceeding, and the arbitrator has the same authority to conduct the arbitration process as an ALJ has in

conducting hearings under the Commission's rules, but the arbitration process is streamlined. The arbitrator holds an early conference to discuss processing of the case. The arbitrator establishes the schedule and decides whether an oral hearing is necessary. After the oral hearing or other procedures (for example, rounds of comments), each party submits its final proposed interconnection agreement or resolution of disputed issues. The arbitrator chooses between the two final offers. If neither offer is consistent with applicable statutes, Commission rules, and Commission policies, then the arbitrator will make a decision that meets those requirements.

(7) The arbitrator may allow formal discovery only to the extent deemed necessary. Parties are required to make good faith attempts to exchange information relevant to any disputed issue in an informal, voluntary, and prompt manner. Unresolved discovery disputes are resolved by the arbitrator upon request of a party. The arbitrator will order a party to provide information if the arbitrator determines the requesting party has a reasonable need for the requested information and that the request is not overly burdensome.

(8) Only the two negotiating parties have full party status. The arbitrator may confer with Commission staff for assistance throughout the arbitration process.

(9) To keep the process moving forward, appeals to the Commission are not allowed during the arbitration process. An arbitrator may certify a question to the Commission if the arbitrator believes it is necessary.

(10) To accommodate the need for flexibility, the arbitrator may use different procedures so long as the procedures are fair, treat the parties equitably, and substantially comply with the procedures listed here.

(11) The arbitrator must serve the arbitration decision on the interconnecting public utility and the interconnection applicant. The parties may file comments on the arbitration decision with the Commission within 10 calendar days after service.

(12) The Commission must accept, reject, or modify an arbitration decision within 30 calendar days after service of the decision.

(13) Within 14 calendar days after the Commission issues an order on a petition for arbitration of an interconnection agreement, the petitioner must prepare an interconnection agreement complying with the terms of the decision and serve it on respondent. Respondent must either sign and file the interconnection agreement or file objections to it within 10 calendar days of service of the agreement. If objections are filed, respondent must state how the interconnection agreement fails to comply with the Commission order and offer substitute language complying with the decision. The Commission must approve or reject a filed interconnection agreement within 20 calendar days of its filing or the agreement is deemed approved.

(14) If petitioner, without respondent's consent, fails to timely prepare and serve an interconnection agreement on respondent, respondent may file a motion requesting the Commission dismiss the petition for arbitration with prejudice. The Commission may grant such motion if the petitioner's failure to timely prepare and serve the

interconnection agreement was the result of inexcusable neglect on the part of petitioner.

(15) The public utility and the applicant may agree to hire an outside arbitrator rather than file a petition with the Commission pursuant to article 13.5.3.

### **13.5.3 External Arbitration Procedures.**

An external arbitration initiated under these procedures shall be conducted before a single neutral arbitrator appointed by the Parties. If the Parties fail to agree upon a single arbitrator within ten (10) Calendar Days of the submission of the dispute to arbitration, each Party shall choose one arbitrator who shall sit on a three-member arbitration panel. The two arbitrators so chosen shall within twenty (20) Calendar Days select a third arbitrator to chair the arbitration panel. In either case, the arbitrators shall be knowledgeable in electric utility matters, including electric transmission and bulk power issues, and shall not have any current or past substantial business or financial relationships with any party to the arbitration (except prior arbitration). The arbitrator(s) shall provide each of the Parties an opportunity to be heard and, except as otherwise provided herein, shall conduct the arbitration in accordance with the Commercial Arbitration Rules of the American Arbitration Association ("Arbitration Rules"); provided, however, in the event of a conflict between the Arbitration Rules and the terms of this Article 13, the terms of this Article 13 shall prevail.

### **13.5.4 Arbitration Decisions.**

Unless otherwise agreed by the Parties, the arbitrator(s) shall render a decision within ninety (90) Calendar Days of appointment and shall notify the Parties in writing of such decision and the reasons therefore. The arbitrator(s) shall be authorized only to interpret and apply the provisions of the QF-LGIA and QF-LGIP and shall have no power to modify or change any provision of the QF-LGIA and QF-LGIP in any manner. The decision of the arbitrator(s) shall be final and binding upon the Parties, and judgment on the award may be entered in any court having jurisdiction. The decision of the arbitrator(s) may be appealed solely on the grounds that the conduct of the arbitrator(s), or the decision itself, violated the standards set forth in the ORS 36.600 to ORS 36.740.

### **13.5.5 Costs.**

Each Party shall be responsible for its own costs incurred during the arbitration process and for the following costs, if applicable: the cost of the arbitrator chosen by the Party to sit on the three member panel and one half of the cost of the third arbitrator chosen; or (2) one half the cost of the single arbitrator jointly chosen by the Parties.

## **13.6 Local Furnishing Bonds.**

### **13.6.1 Transmission Providers That Own Facilities Financed by Local Furnishing Bonds.**

This provision is applicable only to a Transmission Provider that has financed facilities for the local furnishing of electric energy with tax-exempt bonds, as described in Article 142(f) of the Internal Revenue Code ("local furnishing bonds"). Notwithstanding any other provision of this QF-LGIA and QF-LGIP, Transmission Provider shall not be required to provide Interconnection Service to Interconnection Customer pursuant to this

QF-LGIA and QF-LGIP if the provision of such Interconnection Service would jeopardize the tax-exempt status of any local furnishing bond(s) used to finance Transmission Provider's facilities that would be used in providing such Interconnection Service.

**13.6.2 Alternative Procedures for Requesting Interconnection Service.**

If Transmission Provider determines that the provision of Interconnection Service requested by Interconnection Customer would jeopardize the tax-exempt status of any local furnishing bond(s) used to finance its facilities that would be used in providing such Interconnection Service, it shall advise the Interconnection Customer within thirty (30) Calendar Days of receipt of the Interconnection Request.

Interconnection Customer thereafter may renew its request for interconnection using the process specified in Article 5.2(ii) of the Transmission Provider's OATT.

**Docket UM 2032**

**Attachment 11**

**to**

**JOINT UTILITIES' APPLICATION  
FOR APPROVAL OF COMPLIANCE FILING**

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*PacifiCorp's Standard Oregon Qualifying Facility Large  
Generator Interconnection Agreement*

**STANDARD QUALIFYING FACILITY LARGE GENERATOR INTERCONNECTION  
AGREEMENT**

**THIS STANDARD QUALIFYING FACILITY LARGE GENERATOR INTERCONNECTION AGREEMENT** ("Agreement" or "QF-LGIA") is made and entered into this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_ by and between \_\_, a \_\_\_\_\_ organized and existing under the laws of the State/Commonwealth of \_\_\_\_\_ ("Interconnection Customer" with a Large Generating Facility), and \_\_\_\_\_, a \_\_\_\_\_ organized and existing under the laws of the State/Commonwealth of \_\_\_\_\_, ("Transmission Provider" and/or "Transmission Owner"). Interconnection Customer and Transmission Provider each may be referred to singly as a "Party," or collectively as the "Parties."

**Recitals**

**WHEREAS**, Transmission Provider operates the Transmission System; and

**WHEREAS**, Interconnection Customer intends to own, lease and/or control and operate the Generating Facility identified as a Large Generating Facility in Appendix C to this Agreement; and,

**WHEREAS**, Interconnection Customer has completed the certification process for the Generating Facility as a qualifying cogeneration facility or qualifying small power production facility ("Qualifying Facility" or "QF") within the meaning of sections 201 and 210 of the Public Utility Regulatory Policies Act of 1978 (PURPA), 16 U.S.C. 796 and 824a-3; and

**WHEREAS**, the Oregon Public Utility Commission has jurisdiction to establish minimum criteria that a qualifying cogeneration facility or qualifying small power production facility must meet in order to operate in Oregon; and

**WHEREAS**, Interconnection Customer and Transmission Provider have agreed to enter into this QF-LGIA for the purpose of interconnecting the Large Generating Facility with the Transmission System;

**NOW, THEREFORE**, in consideration of and subject to the mutual covenants contained herein, it is agreed:

When used in this QF-LGIA, terms with initial capitalization that are not defined in Article 1 shall have the meanings specified in the Article in which they are used.

**Article 1. Definitions**

**Adverse System Impact** shall mean the negative effects due to technical or operational limits on conductors or equipment being exceeded that may compromise the safety and reliability of the electric system.

**Affected System** shall mean an electric system other than the Transmission Provider's Transmission System that may be affected by the proposed interconnection.

**Affected System Operator** shall mean the entity that operates an Affected System.

**Affiliate** shall mean, with respect to a corporation, partnership or other entity, each such other corporation, partnership or other entity that directly or indirectly, through one or more intermediaries, controls, is controlled by, or is under common control with, such corporation, partnership or other entity.

**Agreement** shall mean this QF-LGIA entered into by and between Interconnection Customer and Transmission Provider.

**Ancillary Services** shall mean those services that are necessary to support the transmission of capacity and energy from resources to loads while maintaining reliable operation of the Transmission Provider's Transmission System in accordance with Good Utility Practice.

**Applicable Laws and Regulations** shall mean all duly promulgated applicable federal, state and local laws, regulations, rules, ordinances, codes, decrees, judgments, directives, or judicial or administrative orders, permits and other duly authorized actions of any Governmental Authority.

**Applicable Reliability Council** shall mean the reliability council applicable to the Transmission System to which the Generating Facility is directly interconnected.

**Applicable Reliability Standards** shall mean the requirements and guidelines of NERC, the Applicable Reliability Council, and the Control Area of the Transmission System to which the Generating Facility is directly interconnected.

**Base Case** shall mean the base case power flow, short circuit, and stability data bases used for the Interconnection Studies by the Transmission Provider or Interconnection Customer.

**Breach** shall mean the failure of a Party to perform or observe any material term or condition of the QF-LGIA.

**Breaching Party** shall mean a Party that is in Breach of the QF-LGIA.

**Business Day** shall mean Monday through Friday, excluding Federal Holidays.

**Calendar Day** shall mean any day including Saturday, Sunday or a Federal Holiday.

**Cluster** shall mean a group of Interconnection Requests (one or more) that are studied together for the purpose of conducting the Cluster Study.

**Cluster Area** shall mean the areas of the Transmission Provider's Transmission System that are included together in a Cluster, as described further in Article 7.4 of the QF-LGIP.

**Cluster Request Window** shall have the meaning set forth in Article 4.2.1 of the QF-LGIP.

**Cluster Re-Study** shall mean a re-study of a Cluster Study conducted pursuant to Article 7.5 of the QF-LGIP.

**Cluster Re-Study Report** shall mean the report issued following completion of a Cluster Re-Study pursuant to Article 7.5 of the QF-LGIP.

**Cluster Re-Study Meeting** shall mean the meeting held to discuss the results of a Cluster Re-Study pursuant to Article 7.5 of the QF-LGIP.

**Cluster Study** shall mean an Interconnection Study evaluating one or more Interconnection Requests within a Cluster as described in more detail in Article 7.4 of the QF-LGIP.

**Cluster Study Agreement** shall mean the form of agreement contained in Appendix 3 to the Standard Large Generator Interconnection Procedures for conducting the Cluster Study.

**Cluster Study Report** shall mean the report issued following completion of a Cluster Study pursuant to Article 7.4 of the QF-LGIP.

**Cluster Study Report Meeting** shall mean the meeting held to discuss the results of a Cluster Study pursuant to Article 7.4 of the QF-LGIP.

**Clustering** shall mean the process whereby a group of Interconnection Requests is studied together, instead of serially, as described in more detail in Article 7 of the QF-LGIP.

**Commercial Operation** shall mean the status of a Generating Facility that has commenced generating electricity for sale, excluding electricity generated during Trial Operation.

**Commercial Operation Date** of a unit shall mean the date on which the Generating Facility commences Commercial Operation as agreed to by the Parties pursuant to Appendix E to the QF-LGIA.

**Commission** shall mean the Public Utility Commission of Oregon.

**Confidential Information** shall mean any confidential, proprietary or trade secret information of a plan, specification, pattern, procedure, design, device, list, concept, policy or compilation relating to the present or planned business of a Party, which is designated as confidential by the Party supplying the information, whether conveyed orally, electronically, in writing, through inspection, or otherwise.

**Control Area** shall mean an electrical system or systems bounded by interconnection metering and telemetry, capable of controlling generation to maintain its interchange schedule with other Control Areas and contributing to frequency regulation of the interconnection. A Control Area must be certified by an Applicable Reliability Council.

**Customer Engagement Window** shall have the meaning set forth in Article 7.2 of the QF-LGIP.

**Default** shall mean the failure of a Breaching Party to cure its Breach in accordance with Article 17 of the QF-LGIA.

**Dispute Resolution** shall mean the procedure for resolution of a dispute between the Parties in which they will first attempt to resolve the dispute on an informal basis.

**Distribution System** shall mean the Transmission Provider's facilities and equipment used to transmit electricity to ultimate usage points such as homes and industries directly from nearby generators or from interchanges with higher voltage transmission networks which transport bulk power over longer distances. The voltage levels at which distribution systems operate differ among areas.

**Distribution Upgrades** shall mean the additions, modifications, and upgrades to the Transmission Provider's Distribution System at or beyond the Point of Interconnection to facilitate interconnection of the Generating Facility. Distribution Upgrades do not include Interconnection Facilities.

**Effective Date** shall mean the date on which the QF-LGIA becomes effective upon execution by the Parties.

**Emergency Condition** shall mean a condition or situation: (1) that in the judgment of the Party making the claim is imminently likely to endanger Life or property; or (2) that, in the case of a Transmission Provider, is imminently likely (as determined in a non-discriminatory manner) to cause a material adverse effect on the security of, or damage to Transmission Provider's Transmission System, Transmission Provider's Interconnection Facilities or the electric systems of others to which the Transmission Provider's Transmission System is directly connected; or (3) that, in the case of interconnection Customer, is imminently likely (as determined in a non-discriminatory manner) to cause a material adverse effect on the security of, or damage to, the Generating Facility or Interconnection Customer's Interconnection Facilities. System restoration and black start shall be considered Emergency Conditions; provided that Interconnection Customer is not obligated by the QF-LGIA to possess black start capability.

Energy Resource Interconnection Service shall mean an Interconnection Service that allows the Interconnection Customer to connect its Generating Facility to the Transmission Provider's Transmission System to be eligible to deliver the Generating Facility's electric output using the existing firm or nonfirm capacity of the Transmission Provider's Transmission System on an as-available basis. Energy Resource Interconnection Service in and of itself does not convey transmission service.

**Engineering & Procurement (E&P) Agreement** shall mean an agreement that authorizes the Transmission Provider to begin engineering and procurement of long lead-time items necessary for the establishment of the interconnection in order to advance the implementation of the Interconnection Request.

**Environmental Law** shall mean Applicable Laws or Regulations relating to pollution or protection of the environment or natural resources.

**Federal Power Act** shall mean the Federal Power Act, as amended, 16 U.S.C. §§ 791a et seq.

**FERC** shall mean the Federal Energy Regulatory Commission (FERC) or its successor.

**Financial Security** shall mean any of the forms of collateral or security listed in **Article 11.5** of this QF-LGIA.

**Force Majeure** shall mean any act of God, labor disturbance, act of the public enemy, war, insurrection, riot, fire, storm or flood, explosion, breakage or accident to machinery or equipment, 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 acts of negligence or intentional wrongdoing by the Party claiming Force Majeure.

**Generating Facility** shall mean Interconnection Customer's device or devices for the production of electricity identified in the Interconnection Request, but shall not include the Interconnection Customer's Interconnection Facilities. The Generating Facility is and shall remain a Qualifying Facility.

**Generating Facility Capacity** shall mean the net capacity of the Generating Facility and the aggregate net capacity of the Generating Facility where it includes multiple energy production devices.

**Good Utility Practice** shall mean any of the practices, methods and acts engaged in or approved by a significant portion of the electric industry during the relevant time period, or any of the practices,

methods and acts which, in the exercise of reasonable judgment in light of the facts known at the time the decision was made, could have been expected to accomplish the desired result at a reasonable cost consistent with good business practices, reliability, safety and expedition. Good Utility Practice is not intended to be limited to the optimum practice, method, or act to the exclusion of all others, but rather to be acceptable practices, methods, or acts generally accepted in the region.

**Governmental Authority** shall mean any federal, state, local or other governmental regulatory or administrative agency, court, commission, department, board, or other governmental subdivision, legislature, rulemaking board, tribunal, or other governmental authority having jurisdiction over the Parties, their respective facilities, or the respective services they provide, and exercising or entitled to exercise any administrative, executive, police, or taxing authority or power; provided, however, that such term does not include Interconnection Customer, Transmission Provider, or any Affiliate thereof.

**Hazardous Substances** shall mean any chemicals, materials or substances defined as or included in the definition of "hazardous substances," "hazardous wastes," "hazardous materials," "hazardous constituents," "restricted hazardous materials," "extremely hazardous substances," "toxic substances," "radioactive substances," "contaminants," "pollutants," "toxic pollutants" or words of similar meaning and regulatory effect under any applicable Environmental Law, or any other chemical, material or substance, exposure to which is prohibited, limited or regulated by any applicable Environmental Law.

**Informational Interconnection Study** shall mean an analysis based on assumptions specified by Interconnection Customer in the Informational Interconnection Study Agreement and conducted pursuant to Article 6 of the QF-LGIP.

**Informational Interconnection Study Agreement** shall mean the form of agreement contained in Appendix 2A to the QF-LGIP for conducting the Informational Interconnection Study.

**Informational Interconnection Study Request** shall mean an Interconnection Customer's request in the form of Appendix 2 to the QF-LGIP.

**Initial Synchronization Date** shall mean the date upon which the Generating Facility is initially synchronized and upon which Trial Operation begins.

**In-Service Date** shall mean the date upon which the Interconnection Customer reasonably expects it will be ready to begin use of the Transmission Provider's Interconnection Facilities to obtain back feed power.

**Interconnection Customer** shall mean the entity identified in the first paragraph of this QF-LGIA that proposes to interconnect its Generating Facility with the Transmission Provider's Transmission System. For purposes of the Transmission Provider's Cluster Study process conducted pursuant to Article 7 of the QF-LGIP, "Interconnection Customer" shall also mean any Small Generating Facility that is participating in a Cluster.

**Interconnection Customer's Interconnection Facilities** or ICIF shall mean all facilities and equipment, as identified in of the QF-LGIA, that are located between the Generating Facility and the Point of Change of Ownership, including any modification, addition, or upgrades to such facilities and equipment necessary to physically and electrically interconnect the Generating Facility to the Transmission Provider's Transmission System. Interconnection Customer's Interconnection Facilities are sole use facilities.

**Interconnection Facilities** shall mean the Transmission Provider's Interconnection Facilities and the Interconnection Customer's Interconnection Facilities. Collectively, Interconnection Facilities include all facilities and equipment between the Generating Facility and the Point of Interconnection, including any modification, additions or upgrades that are necessary to physically and electrically interconnect the Generating Facility to the Transmission Provider's Transmission System. Interconnection Facilities are sole use facilities and shall not include Distribution Upgrades, Stand Alone Network Upgrades or Network Upgrades. Interconnection Facilities may be shared by more than one Generating Facility in a Cluster.

**Interconnection Facilities Study** shall mean a study conducted by the Transmission Provider or a third party consultant for the Interconnection Customer to determine a list of facilities (including Transmission Provider's Interconnection Facilities, Distribution Upgrades and Network Upgrades as identified in the Cluster Study), the cost of those facilities, and the time required to interconnect the Generating Facility with the Transmission Provider's Transmission System. The scope of the study is defined in Article 8 of the QF-LGIP.

**Interconnection Facilities Study Agreement** shall mean the form of agreement contained in Appendix 4 of the QF-LGIP for conducting the Interconnection Facilities Study.

**Interconnection Request** shall mean an Interconnection Customer's request, in the form of Appendix 1 to the QF-LGIP, to interconnect a new Generating Facility, or to increase the capacity of, or make a Material Modification to the operating characteristics of, an existing Generating Facility that is interconnected with the Transmission Provider's Transmission System. For purposes of the Transmission Provider's Cluster Study process conducted pursuant to Article 7 "Interconnection Request" shall also mean any interconnection request from a Small Generating Facility that is participating in a Cluster.

**Interconnection Service** shall mean the service provided by the Transmission Provider associated with interconnecting the Interconnection Customer's Generating Facility to the Transmission Provider's Transmission System and enabling it to receive electric energy and capacity from the Generating Facility at the Point of Interconnection, pursuant to the terms of the QF-LGIA and, if applicable, the Transmission Provider's OATT.

**Interconnection Study** shall mean any of the following studies: the Informational Interconnection Study, the Cluster Study, and the Interconnection Facilities Study described in the QF-LGIP.

**IRS** shall mean the Internal Revenue Service.

**Large Generator Interconnection Agreement** or LGIA shall mean the form of interconnection agreement applicable to an Interconnection Request under the Transmission Provider's OATT pertaining to a Large Generating Facility that is not a Qualifying Facility.

**Large Generator Interconnection Procedures** or LGIP shall mean the interconnection procedures contained in the Transmission Provider's OATT that are applicable to an Interconnection Request pertaining to a Large Generating Facility.

**Large Generating Facility** shall mean a Generating Facility having a Generating Facility Capacity of more than 20 MW.

**Loss** shall mean any and all losses 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 performance, or non-performance of its obligations under the QF-LGIA on behalf of the indemnifying Party, except in cases of gross negligence or intentional wrongdoing by the indemnifying Party.

**Material Modification** shall mean those modifications that have a material impact on the cost or timing of any Interconnection Request with a later queue priority date.

**Metering Equipment** shall mean all metering equipment installed or to be installed at the Generating Facility pursuant to the QF-LGIA at the one or more metering points, including but not limited to instrument transformers, MWh-meters, data acquisition equipment, transducers, remote terminal unit, communications equipment, phone lines, other communications conductors, and fiber optics.

**NERC** shall mean the North American Electric Reliability Council or its successor organization.

**Net Output** shall mean all energy and capacity produced by the Generating Facility and delivered to the Point of Delivery, net of transformation, transmission, or other losses, if any, and less Station Power.

**Network Resource** shall mean any designated generating resource owned, purchased, or leased by a Network Customer under the Network Integration Transmission Service Tariff. Network Resources do not include any resource, or any portion thereof, that is committed for sale to third parties or otherwise cannot be called upon to meet the Network Customer's Network Load on a non-interruptible basis.

**Network Resource Interconnection Service** shall mean an Interconnection Service that allows the Interconnection Customer to integrate its Large Generating Facility with the Transmission Provider's Transmission System (1) in a manner comparable to that in which the Transmission Provider integrates its generating facilities to serve native load customers; or (2) in an RTO or ISO with market based congestion management, in the same manner as all other Network Resources. Network Resource Interconnection Service in and of itself does not convey transmission service.

**Network Upgrades** shall mean the additions, modifications, and upgrades to the Transmission Provider's Transmission System required at or beyond the point at which the Interconnection Facilities connect to the Transmission Provider's Transmission System to accommodate the interconnection of the Large Generating Facility to the Transmission Provider's Transmission System.

**Notice of Dispute** shall mean a written notice of a dispute or claim that arises out of or in connection with the QF-LGIA or its performance.

**Obligated Entity** shall mean the entity with a contractual obligation to construct Network Upgrades.

**OATT** shall mean the Transmission Provider's Open Access Transmission Tariff on file with the Federal Energy Regulatory Commission ("FERC").

**OPUC** shall mean the Public Utility Commission of Oregon.

**Party or Parties** shall mean Transmission Provider, Transmission Owner, Interconnection Customer or any combination of the above.

**Point of Change of Ownership** shall mean the point, as set forth in to the QF-LGIA, where the Interconnection Customer's Interconnection Facilities connect to the Transmission Provider's Interconnection Facilities.

**Point of Delivery** shall mean the point on the Transmission Provider's Transmission System where capacity and energy will be made available to the Transmission Provider.

**Point of Interconnection** shall mean the point, as set forth in to the QF-LGIA, where the Interconnection Facilities connect to the Transmission Provider's Transmission System.

**Power System Stabilizers** shall have the meaning designated in the guidelines and procedures established by the applicable Reliability Council.

**Power Purchase Agreement** ("PPA") shall mean a separate agreement between the Transmission Provider and Interconnection Customer, the terms of which govern the sale by the Interconnection Customer and the purchase by the Transmission Provider of the Net Output of the Interconnection Customer's Qualifying Facility, pursuant to the Public Utility Regulatory Policies Act of 1978 (PURPA), 16 U.S.C. 796 and 824a-3.

**QF-LGIA** shall mean the Qualifying Facility Large Generator Interconnection Agreement.

**QF-LGIP** shall mean the Qualifying Facility Large Generator Interconnection Procedures applicable to any large Generating Facility that is also a Qualifying Facility and which seeks to interconnect to the Transmission Provider's Transmission System or Distribution system in Oregon.

**Qualifying Facility** or QF shall mean a qualifying cogeneration facility or qualifying small power production facility within the meaning of sections 201 and 210 of the Public Utility Regulatory Policies Act of 1978 (PURPA), 16 U.S.C. 796 and 824a-3.

**Queue Position** shall mean the order of a valid Interconnection Request, relative to all other pending valid Interconnection Requests, that is established based upon the date and time of that Interconnection Customer satisfies all of the requirements of Articles 3, 4, and 7 of Transmission Provider's QF-LGIP to enter the Cluster Study Process.

**Reasonable Efforts** shall mean, with respect to an action required to be attempted or taken by a Party under the QF-LGIA, efforts that are timely and consistent with Good Utility Practice and are otherwise substantially equivalent to those a Party would use to protect its own interests.

**Scoping Meeting** shall mean the meeting between representatives of the Interconnection Customer and Transmission Provider conducted for the purpose of discussing the proposed interconnection request, alternative interconnection options, to exchange information including any transmission data and earlier study evaluations that would be reasonably expected to affect such interconnection options, to analyze such information, and to determine the potential feasible Points of interconnection.

**Site Control** shall mean the exclusive land right to develop, construct, operate, and maintain the Generating Facility over the term of expected operation of the Generating Facility. Site Control may be demonstrated by documentation establishing: (1) ownership of, a leasehold interest in, or a right to develop a site of sufficient size to construct and operate the Generating Facility; (2) an option to purchase or acquire a leasehold interest in a site of sufficient size to construct and operate the Generating Facility; or (3) any other documentation that clearly demonstrates the right of the Interconnection Customer to

exclusively occupy a site of sufficient size to construct and operate the Generating Facility. Site Control for any co-located project is demonstrated by a contract or other agreement demonstrating shared land use for all co-located projects that meet the aforementioned provisions of this Site Control definition.

**Small Generating Facility** shall mean a Generating Facility that has a Generating Facility Capacity of no more than 20 MW.

**Stand Alone Network Upgrades** shall mean Network Upgrades that an Interconnection Customer may construct without affecting day-to-day operations of the Transmission System during their construction. Both the Transmission Provider and the Interconnection Customer must agree as to what constitutes Stand Alone Network Upgrades and identify them in to the QF-LGIA.

**Station Power** shall mean electric power used in the process of producing power at Interconnection Customer's Generating Facility, including but not limited to the electric power necessary for auxiliary equipment such as pumps, blowers, fans, fuel transportation systems, similar auxiliary systems that are a necessary and integral part of the power production process, and other parasitic loads involved in the generating process.

**System Protection Facilities** shall mean the equipment, including necessary protection signal communications equipment, required to protect (1) the Transmission Provider's Transmission System from faults or other electrical disturbances occurring at the Generating Facility and (2) the Generating Facility from faults or other electrical system disturbances occurring on the Transmission Provider's Transmission System or on other delivery systems or other generating systems to which the Transmission Provider's Transmission System is directly connected.

**Transmission Owner** shall mean an entity that owns, leases or otherwise possesses an interest in the portion of the Transmission System at the Point of interconnection and may be a Party to the QF-LGIA to the extent necessary.

**Transmission Provider** shall mean the applicable Utility.

**Transmission Provider's Interconnection Facilities** shall mean all facilities and equipment owned, controlled, or operated by the Transmission Provider from the Point of Change of Ownership to the Point of Interconnection as identified in to the QF-LGIA, including any modifications, additions or upgrades to such facilities and equipment. Transmission Provider's Interconnection Facilities are sole use facilities and shall not include Distribution Upgrades, Stand Alone Network Upgrades or Network Upgrades. Transmission Provider's Interconnection Facilities may be shared by more than one Generating Facility in a given Cluster Study.

**Transmission System** shall mean the facilities owned, controlled or operated by the Transmission Provider or Transmission Owner that are used to provide transmission service under the OATT.

**Trial Operation** shall mean the period during which Interconnection Customer is engaged in on-site test operations and commissioning of the Generating Facility prior to Commercial Operation.

**Withdrawal Penalty** shall have the meaning set forth in Article 3.7.1 of the QF-LGIP.

## **Article 2. Effective Date, Term, and Termination**

### **2.1 Effective Date.**

This QF-LGIA shall become effective upon execution by the Parties.

### **2.2 Term of Agreement.**

Subject to the provisions of Article 2.3, this QF-LGIA shall remain in effect for a period of ten (10) years from the Effective Date or such other longer period as agreed upon by the parties and shall be automatically renewed for each successive one-year period thereafter provided:

Interconnection Customer gives Transmission Provider written notice no less than 90 calendar days in advance of the end of the initial ten year term and no less than 90 calendar days before the end of each successive one year renewal term of Interconnection Customer's desire to renew; and (2) Transmission Provider reasonably determines that no material change has occurred to the specific circumstances surrounding the individual QF-LGIA, including government regulation of the subject matter of the QF-LGIA and Transmission Provider's interconnection standards. If Interconnection Customer gives notice of desire to renew in accordance with this Article 2.2, Transmission Provider shall give Interconnection Customer notice of Transmission Provider's determination regarding the existence of material change, made in accordance with this Article 2.2, no later than 60 calendar days after receipt of the Interconnection Customer's notice of desire to renew. If Transmission Provider reasonably determines that there has been a material change in the circumstances surrounding the QF-LGIA, then the Interconnection Customer must initiate a new interconnection request under the QF-LGIP in order to pursue a successor interconnection agreement to this QF-LGIA.

### **2.3 Termination Procedures.**

#### **2.3.1 Written Notice.**

This QF-LGIA may be terminated by Interconnection Customer after giving Transmission Provider ninety (90) Calendar Days advance written notice, or by Transmission Provider notifying OPUC after the Generating Facility permanently ceases Commercial Operation. This QF-LGIA shall be terminated by Transmission Provider if the Generating Facility or a portion of the Generating Facility fails to achieve Commercial Operation by the Commercial Operation Date established in accordance with Article 4.4.5 of the QF-LGIP, including any extension provided thereunder, or, having previously achieved Commercial Operation, has ceased Commercial Operation for three (3) consecutive years, beginning with the last date of Commercial Operation for the Generating Facility, after giving Interconnection Customer ninety (90) Calendar Days advance written notice. When only a portion of the Generating Facility fails to achieve Commercial Operation by the Commercial Operation Date established in accordance with Article 4.4.5 of the QF-LGIP, including any extension provided thereunder, Transmission Provider shall terminate only that portion of the QF-LGIA. Notwithstanding the foregoing, in the limited circumstance that the Interconnection Request is served by a Contingent Facility with an in-service date that is later than the Commercial Operation Date permitted under Article 4.4.5 of the QF-LGIP, Transmission Provider shall terminate this QF-LGIA only for failure to achieve Commercial Operation by ninety (90) Calendar Days after that later in-service date of the Contingent Facility. The Generating Facility will not be deemed to have ceased Commercial Operation for purposes of this

Article 2.3.1 if Interconnection Customer can document that it has taken other significant steps to maintain or restore operational readiness of the Generating Facility for the purpose of returning the Generating Facility to Commercial Operation as soon as possible

### **2.3.2 Default.**

Either Party may terminate this QF-LGIA in accordance with Article 17.

### **2.3.3**

Notwithstanding Articles 2.3.1 and 2.3.2, no termination shall become effective until the Parties have complied with all Applicable Laws and Regulations applicable to such termination.

### **2.3.4 Change in Qualifying Facilities Status.**

Interconnection Customer has represented that its Generating Facility is a Qualifying Facility. As a Qualifying Facility selling its Net Output exclusively to Transmission Provider, the OPUC has regulatory authority over the interconnection of the Generating Facility with Transmission Provider's Transmission System. If, at any time during the term of this QF-LGIA, all or a portion of the output of the Qualifying Facility is scheduled to be, or is, sold to someone other than Transmission Provider, then regulatory authority for this interconnection will fall under the jurisdiction of the FERC and this QF-LGIA shall terminate upon the date such electric output from the Generating Facility is first produced for sale to such other party, and no later than sixty (60) days prior to such termination date, Interconnection Customer shall enter into a new Large Generator Interconnection Agreement with Transmission Provider pursuant to Transmission Provider's OATT. Interconnection Customer acknowledges and agrees that it may take substantially more than sixty (60) days to submit an interconnection request and complete any required portions of the interconnection process under the Transmission Provider's OATT before the Transmission Provider can offer the Interconnection Customer a new Large Generator Interconnection Agreement under the OATT. Interconnection Customer is responsible for initiating the interconnection process under the Transmission Provider's OATT early enough to allow for completion of the interconnection process before the Interconnection Customer requires a new Large Generator Interconnection Agreement under this Article 2.3.4.

## **2.4 Termination Costs.**

If a Party elects to terminate this QF-LGIA pursuant to Article 2.3 above, each Party shall pay all costs incurred on its behalf (including any cancellation costs relating to orders or contracts for Interconnection Facilities and equipment) or charges assessed by the other Party, as of the date of the other Party's receipt of such notice of termination, that are the responsibility of the Terminating Party under this QF-LGIA. In the event of termination by a Party, the Parties shall use commercially Reasonable Efforts to mitigate the costs, damages and charges arising as a consequence of termination. Upon termination of this QF-LGIA, unless otherwise ordered or approved by the OPUC:

### **2.4.1**

With respect to any portion of Transmission Provider's Interconnection Facilities that have not yet been constructed or installed, Transmission Provider shall to the extent

possible and with Interconnection Customer's authorization cancel any pending orders of, or return, any materials or equipment for, or contracts for construction of, such facilities; provided that in the event Interconnection Customer elects not to authorize such cancellation, Interconnection Customer shall assume all payment obligations with respect to such materials, equipment, and contracts, and Transmission Provider shall deliver such material and equipment, and, if necessary, assign such contracts, to Interconnection Customer as soon as practicable, at Interconnection Customer's expense. To the extent that Interconnection Customer has already paid Transmission Provider for any or all such costs of materials or equipment not taken by Interconnection Customer, Transmission Provider shall promptly refund such amounts to Interconnection Customer, less any costs, including penalties incurred by Transmission Provider to cancel any pending orders of or return such materials, equipment, or contracts.

If an Interconnection Customer terminates this QF-LGIA, it shall be responsible for all costs incurred in association with that Interconnection Customer's interconnection, including any cancellation costs relating to orders or contracts for Interconnection Facilities and equipment, and other expenses including any Network Upgrades for which Transmission Provider has incurred expenses and has not been reimbursed by Interconnection Customer.

Transmission Provider may, at its option, retain any portion of such materials, equipment, or facilities that Interconnection Customer chooses not to accept delivery of, in which case Transmission Provider shall be responsible for all costs associated with procuring such materials, equipment, or Facilities.

With respect to any portion of the Interconnection Facilities, and any other facilities already installed or constructed pursuant to the terms of this QF-LGIA, Interconnection Customer shall be responsible for all costs associated with the removal, relocation or other disposition or retirement of such materials, equipment, or facilities.

## **2.5 Disconnection.**

Upon termination of this QF-LGIA, the Parties will take all appropriate steps to disconnect the Large Generating Facility from the Transmission System. All costs required to effectuate such disconnection shall be borne by the terminating Party, unless such termination resulted from the non-terminating Party's Default of this QF-LGIA or such nonterminating Party otherwise is responsible for these costs under this QF-LGIA.

## **2.6 Survival.**

This QF-LGIA shall continue in effect after termination to the extent necessary to provide for final billings and payments and for costs incurred hereunder, including billings and payments pursuant to this QF-LGIA; to permit the determination and enforcement of liability and indemnification obligations arising from acts or events that occurred while this QF-LGIA was in effect; and to permit each Party to have access to the lands of the other Party pursuant to this QF-LGIA or other applicable agreements, to disconnect, remove or salvage its own facilities and equipment.

## Article 3. Regulatory Filings

### 3.1 Filing.

Transmission Provider shall file this QF-LGIA (and any amendment hereto) with the OPUC. Interconnection Customer may request that any information so provided be subject to the confidentiality provisions of Article 22. If Interconnection Customer has executed this QF-LGIA, or any amendment thereto, Interconnection Customer shall reasonably cooperate with Transmission Provider with respect to such filing and to provide any information reasonably requested by Transmission Provider needed to comply with applicable regulatory requirements.

### 3.2 Recordkeeping and Reporting Requirements.

(1) The public utility must maintain a record of the following information for at least two years: (a) The number of complete large generator interconnection applications received; (b) The time required to complete the review process for each application; and (c) The reasons for the approval or denial of each application.

(2) For as long as an interconnection customer's large generator facility is interconnected to a public utility's transmission or distribution system, the interconnecting public utility must maintain copies of the interconnection application, interconnection agreement, and certificate of completion for the large generator facility. The public utility must provide a copy of the interconnection customer's records to the interconnection customer within 15 business days after receipt of a written request.

(3) The public utility must submit an annual report to the Commission summarizing the public utility's interconnection activities for the previous calendar year. The annual report must be filed by May 30 and must include the following information: (a) The number of complete large generator interconnection applications received; (b) The number of large generator facility interconnections completed; (c) The types of large generator facilities applying for interconnection and the nameplate capacity of the facilities; (d) The interconnection facilities required to accommodate the interconnection of a large generator facility and the estimated costs of those facilities; and (e) The system upgrades required to accommodate the interconnection of a large generator facility and the estimated costs of those upgrades.

## Article 4. Scope of Service

### 4.1 Interconnection Product Options. Interconnection Customer has selected the following (checked) type of Interconnection Service:

#### 4.1.1 Energy Resource Interconnection Service.

##### 4.1.1.1 The Product.

Energy Resource Interconnection Service allows Interconnection Customer to connect the Large Generating Facility to the Transmission System and be eligible to deliver the Large Generating Facility's output using the existing firm or non-firm capacity of the Transmission System on an "as available" basis. To the extent Interconnection Customer wants to receive Energy Resource

Interconnection Service, Transmission Provider shall construct facilities identified in Appendix A.

#### **4.1.1.2 Transmission Delivery Service Information.**

Under Energy Resource Interconnection Service, Interconnection Customer will be eligible to inject power from the Large Generating Facility into and deliver power across the interconnecting Transmission Provider's Transmission System on an "as available" basis up to the amount of megawatts identified in the applicable stability and steady state studies to the extent the upgrades initially required to qualify for Energy Resource Interconnection Service have been constructed. No transmission delivery service from the Large Generating Facility is assured, but Interconnection Customer may obtain Point-to-Point Transmission Service, Network Integration Transmission Service, or be used for secondary network transmission service, pursuant to Transmission Provider's OATT, up to the maximum output identified in the stability and steady state studies. In those instances, in order for Interconnection Customer to obtain the right to deliver or inject energy beyond the Large Generating Facility Point of Interconnection or to improve its ability to do so, transmission delivery service must be obtained pursuant to the provisions of Transmission Provider's OATT. The Interconnection Customer's ability to inject its Large Generating Facility output beyond the Point of Interconnection, therefore, will depend on the existing capacity of Transmission Provider's Transmission System at such time as a transmission service request is made that would accommodate such delivery. The provision of firm Point-to-Point Transmission Service or Network Integration Transmission Service may require the construction of additional Network Upgrades.

#### **4.1.2 Network Resource Interconnection Service.**

~~Interconnection Customer will be provided Network Resource Interconnection Service under this QF-LGIA.~~

##### **4.1.2.1 The Product.**

Transmission Provider must conduct the necessary studies and construct the Network Upgrades needed to integrate the Large Generating Facility in a manner comparable to that in which Transmission Provider integrates its generating facilities to serve native load customers in the same manner as all other Network Resources. To the extent Interconnection Customer wants to receive Network Resource Interconnection Service, Transmission Provider shall construct the facilities identified in Appendix A.

##### **4.1.2.2 Transmission Delivery Service Implications.**

Network Resource Interconnection Service allows Interconnection Customer's Large Generating Facility to be designated by any Network Customer under the OATT on Transmission Provider's Transmission System as a Network Resource, up to the Large Generating Facility's Net Output, on the same basis as existing Network Resources interconnected to Transmission Provider's Transmission System, and to be studied as a Network Resource on the assumption that such a designation will occur. Although Network Resource Interconnection Service does not convey a reservation of transmission service, any Network Customer under the OATT can utilize its network service under the OATT to obtain

delivery of energy from the interconnected Interconnection Customer's Large Generating Facility in the same manner as it accesses Network Resources. A Large Generating Facility receiving Network Resource Interconnection Service may also be used to provide Ancillary Services after technical studies and/or periodic analyses are performed with respect to the Large Generating Facility's ability to provide any applicable Ancillary Services, provided that such studies and analyses have been or would be required in connection with the provision of such Ancillary Services by any existing Network Resource. However, if an Interconnection Customer's Large Generating Facility has not been designated as a Network Resource by any load, it cannot be required to provide Ancillary Services except to the extent such requirements extend to all generating facilities that are similarly situated. The provision of Network Integration Transmission Service or firm Point-to-Point Transmission Service may require additional studies and the construction of additional upgrades. Because such studies and upgrades would be associated with a request for delivery service under the Tariff, cost responsibility for the studies and upgrades would be in accordance with FERC's policy for pricing transmission delivery services.

Network Resource Interconnection Service does not necessarily provide Interconnection Customer with the capability to physically deliver the output of its Large Generating Facility to any particular load on Transmission Provider's Transmission System without incurring congestion costs. In the event of transmission constraints on Transmission Provider's Transmission System, Interconnection Customer's Large Generating Facility shall be subject to the applicable congestion management procedures in Transmission Provider's Transmission System in the same manner as Network Resources.

#### **4.2 Provision of Service.**

Transmission Provider shall provide ~~Network Resource~~ Interconnection Service for the Large Generating Facility at the Point of Interconnection.

#### **4.3 Performance Standards.**

Each Party shall perform all of its obligations under this QF-LGIA in accordance with Applicable Laws and Regulations, Applicable Reliability Standards, and Good Utility Practice, and to the extent a Party is required or prevented or limited in taking any action by such regulations and standards, such Party shall not be deemed to be in Breach of this QF-LGIA for its compliance therewith. If such Party is a Transmission Provider or Transmission Owner, then that Party shall amend the QF-LGIA and if required by the OPUC, submit the amendment to the OPUC for approval.

#### **4.4 No Transmission Delivery Service; No Agreement to Purchase Output.**

The execution of this QF-LGIA does not constitute a request for, nor the provision of, any transmission delivery service under Transmission Provider's OATT, and does not convey any right to deliver electricity to any specific customer or Point of Delivery. Additionally, the execution of the QF-LGIA does not constitute an agreement to purchase the Net Output or any portion of the output of the Large Generating Facility

#### **4.5 Interconnection Customer Provided Services.**

The services provided by Interconnection Customer under this QF-LGIA are set forth in Article 9.6 and Article 13.4.1. Interconnection Customer shall be paid for such services in accordance with Article 11.6.

### **Article 5. Interconnection Facilities Engineering, Procurement, and Construction**

#### **5.1 Options.**

Unless otherwise mutually agreed to between the Parties, Interconnection Customer shall select the In-Service Date, Initial Synchronization Date, and Commercial Operation Date; and either Standard Option or Alternate Option set forth below, for completion of Transmission Provider's Interconnection Facilities and Network Upgrades as set forth in Appendix A, Interconnection Facilities and Network Upgrades, and such dates and selected option shall be set forth in Appendix B, Milestones.

##### **5.1.1 Standard Option.**

Transmission Provider shall design, procure, and construct Transmission Provider's Interconnection Facilities and Network Upgrades, using Reasonable Efforts to complete Transmission Provider's Interconnection Facilities and Network Upgrades by the dates set forth in Appendix B, Milestones. Transmission Provider shall not be required to undertake any action which is inconsistent with its standard safety practices, its material and equipment specifications, its design criteria and construction procedures, its labor agreements, and Applicable Laws and Regulations. In the event Transmission Provider reasonably expects that it will not be able to complete Transmission Provider's Interconnection Facilities and Network Upgrades by the specified dates, Transmission Provider shall promptly provide written notice to Interconnection Customer and shall undertake Reasonable Efforts to meet the earliest dates thereafter.

##### **5.1.2 Alternate Option.**

If the dates designated by Interconnection Customer are acceptable to Transmission Provider, Transmission Provider shall so notify Interconnection Customer within thirty (30) Calendar Days, and shall assume responsibility for the design, procurement and construction of Transmission Provider's Interconnection Facilities by the designated dates.

If Transmission Provider subsequently fails to complete Transmission Provider's Interconnection Facilities by the In-Service Date, to the extent necessary to provide back feed power; or fails to complete Network Upgrades by the Initial Synchronization Date to the extent necessary to allow for Trial Operation at full power output, unless other arrangements are made by the Parties for such Trial Operation; or fails to complete the Network Upgrades by the Commercial Operation Date, as such dates are reflected in Appendix B, Milestones; Transmission Provider shall pay Interconnection Customer liquidated damages in accordance with Article 5.3, Liquidated Damages, provided, however, the dates designated by Interconnection Customer shall be extended day for day for each day that the applicable RTO or ISO refuses to grant clearances to install equipment.

### **5.1.3 Option to Build.**

If the dates designated by Interconnection Customer are not acceptable to Transmission Provider, Transmission Provider shall so notify Interconnection Customer within thirty (30) Calendar Days, and unless the Parties agree otherwise, Interconnection Customer shall have the option to assume responsibility for the design, procurement and construction of Transmission Provider's Interconnection Facilities and Stand Alone Network Upgrades on the dates specified in Article 5.1.2. Transmission Provider and Interconnection Customer must agree as to what constitutes Stand Alone Network Upgrades and identify such Stand Alone Network Upgrades in Appendix A. Except for Stand Alone Network Upgrades, Interconnection Customer shall have no right to construct Network Upgrades under this option.

### **5.1.4 Negotiated Option.**

If Interconnection Customer elects not to exercise its option under Article 5.1.3, Option to Build, Interconnection Customer shall so notify Transmission Provider within thirty (30) Calendar Days, and the Parties shall in good faith attempt to negotiate terms and conditions (including revision of the specified dates and liquidated damages, the provision of incentives or the procurement and construction of a portion of Transmission Provider's Interconnection Facilities and Stand Alone Network Upgrades by Interconnection Customer) pursuant to which Transmission Provider is responsible for the design, procurement and construction of Transmission Provider's Interconnection Facilities and Network Upgrades. If the Parties are unable to reach agreement on such terms and conditions, Transmission Provider shall assume responsibility for the design, procurement and construction of Transmission Provider's Interconnection Facilities and Network Upgrades pursuant to 5.1.1, Standard Option.

## **5.2 General Conditions Applicable to Option to Build.**

If Interconnection Customer assumes responsibility for the design, procurement and construction of Transmission Provider's Interconnection Facilities and Stand Alone Network Upgrades,

(1) Interconnection Customer shall engineer, procure equipment, and construct Transmission Provider's Interconnection Facilities and Stand Alone Network Upgrades (or portions thereof) using Good Utility Practice and using standards and specifications provided in advance by Transmission Provider;

(2) Interconnection Customer's engineering, procurement and construction of Transmission Provider's Interconnection Facilities and Stand Alone Network Upgrades shall comply with all requirements of law and Applicable Reliability Standards to which Transmission Provider would be subject in the engineering, procurement or construction of Transmission Provider's Interconnection Facilities and Stand Alone Network Upgrades;

(3) Transmission Provider shall review and approve the engineering design, equipment acceptance tests, and the construction of Transmission Provider's Interconnection Facilities and Stand Alone Network Upgrades;

(4) prior to commencement of construction, Interconnection Customer shall provide to Transmission Provider a schedule for construction of Transmission Provider's Interconnection

Facilities and Stand Alone Network Upgrades, and shall promptly respond to requests for information from Transmission Provider;

(5) at any time during construction, Transmission Provider shall have the right to gain unrestricted access to Transmission Provider's Interconnection Facilities and Stand Alone Network Upgrades and to conduct inspections of the same;

(6) at any time during construction, should any phase of the engineering, equipment procurement, or construction of Transmission Provider's Interconnection Facilities and Stand Alone Network Upgrades not meet the standards and specifications provided by Transmission Provider, upon a rigorous showing of cause, Interconnection Customer shall be obligated to remedy deficiencies in that portion of Transmission Provider's Interconnection Facilities and Stand Alone Network Upgrades;

(7) Interconnection Customer shall indemnify Transmission Provider for claims arising from Interconnection Customer's construction of Transmission Provider's Interconnection Facilities and Stand Alone Network Upgrades under the terms and procedures applicable to Article 18.1 Indemnity;

(8) Interconnection Customer shall transfer control of Transmission Provider's Interconnection Facilities and Stand Alone Network Upgrades to Transmission Provider;

(9) Unless Parties otherwise agree, Interconnection Customer shall transfer ownership of Transmission Provider's Interconnection Facilities and Stand-Alone Network Upgrades to Transmission Provider;

(10) Transmission Provider shall approve and accept for operation and maintenance Transmission Provider's Interconnection Facilities and Stand Alone Network Upgrades to the extent engineered, procured, and constructed in accordance with this Article 5.2; and

(11) Interconnection Customer shall deliver to Transmission Provider "as-built" drawings, information, and any other documents that are reasonably required by Transmission Provider to assure that the Interconnection Facilities and Stand-Alone Network Upgrades are built to the standards and specifications required by Transmission Provider.

### **5.3 Liquidated Damages.**

The actual damages to Interconnection Customer, in the event Transmission Provider's Interconnection Facilities or Network Upgrades are not completed by the dates designated by Interconnection Customer and accepted by Transmission Provider pursuant to Article 5.1.2 or 5.1.4, above, may include Interconnection Customer's fixed operation and maintenance costs and lost opportunity costs. Such actual damages are uncertain and impossible to determine at this time. Because of such uncertainty, any liquidated damages paid by Transmission Provider to Interconnection Customer in the event that Transmission Provider does not complete any portion of Transmission Provider's Interconnection Facilities or Network Upgrades by the applicable dates, shall be an amount equal to 1/2 of 1 percent per day of the actual cost of Transmission Provider's Interconnection Facilities and Network Upgrades, in the aggregate, for which Transmission Provider has assumed responsibility to design, procure and construct.

However, in no event shall the total liquidated damages exceed 20 percent of the actual cost of Transmission Provider's Interconnection Facilities and Network Upgrades for which Transmission Provider has assumed responsibility to design, procure, and construct. The foregoing payments will be made by Transmission Provider to Interconnection Customer as just compensation for the damages caused to Interconnection Customer, which actual damages are uncertain and impossible to determine at this time, and as reasonable liquidated damages, but not as a penalty or a method to secure performance of this QF-LGIA. Liquidated damages, when the Parties agree to them, are the exclusive remedy for the Transmission Provider's failure to meet its schedule.

No liquidated damages shall be paid to Interconnection Customer if: (1) Interconnection Customer is not ready to commence use of Transmission Provider's Interconnection Facilities or Network Upgrades to take the delivery of power for the Large Generating Facility's Trial Operation or to export power from the Large Generating Facility on the specified dates, unless Interconnection Customer would have been able to commence use of Transmission Provider's Interconnection Facilities or Network Upgrades to take the delivery of power for Large Generating Facility's Trial Operation or to export power from the Large Generating Facility, but for Transmission Provider's delay; (2) Transmission Provider's failure to meet the specified dates is the result of the action or inaction of Interconnection Customer or any other Interconnection Customer who has entered into an LGIA or QF-LGIA with Transmission Provider or any cause beyond Transmission Provider's reasonable control or reasonable ability to cure; (3) the Interconnection Customer has assumed responsibility for the design, procurement and construction of Transmission Provider's Interconnection Facilities and Stand Alone Network Upgrades; or (4) the Parties have otherwise agreed.

#### **5.4 Power System Stabilizers.**

The Interconnection Customer shall procure, install, maintain and operate Power System Stabilizers in accordance with the guidelines and procedures established by the Applicable Reliability Council. Transmission Provider reserves the right to reasonably establish minimum acceptable settings for any installed Power System Stabilizers, subject to the design and operating limitations of the Large Generating Facility. If the Large Generating Facility's Power System Stabilizers are removed from service or not capable of automatic operation, Interconnection Customer shall immediately notify Transmission Provider's system operator, or its designated representative. The requirements of this paragraph shall not apply to wind generators.

#### **5.5 Equipment Procurement.**

If responsibility for construction of Transmission Provider's Interconnection Facilities or Network Upgrades is to be borne by Transmission Provider, then Transmission Provider shall commence design of Transmission Provider's Interconnection Facilities or Network Upgrades and procure necessary equipment as soon as practicable after all of the following conditions are satisfied, unless the Parties otherwise agree in writing:

##### **5.5.1**

Transmission Provider has completed the Facilities Study pursuant to the Facilities Study Agreement;

### **5.5.2**

Transmission Provider has received written authorization to proceed with design and procurement from Interconnection Customer by the date specified in Appendix B, Milestones; and

### **5.5.3**

Interconnection Customer has provided security to Transmission Provider in accordance with Article 11.5 by the dates specified in Appendix B, Milestones.

## **5.6 Construction Commencement.**

Transmission Provider shall commence construction of Transmission Provider's Interconnection Facilities and Network Upgrades for which it is responsible as soon as practicable after the following additional conditions are satisfied:

### **5.6.1**

Approval of the appropriate Governmental Authority has been obtained for any facilities requiring regulatory approval;

### **5.6.2**

Necessary real property rights and rights-of-way have been obtained, to the extent required for the construction of a discrete aspect of Transmission Provider's Interconnection Facilities and Network Upgrades;

### **5.6.3**

Transmission Provider has received written authorization to proceed with construction from Interconnection Customer by the date specified in Appendix B, Milestones; and

### **5.6.4**

Interconnection Customer has provided security to Transmission Provider in accordance with Article 11.5 by the dates specified in Appendix B, Milestones.

## **5.7 Work Progress.**

The Parties will keep each other advised periodically as to the progress of their respective design, procurement and construction efforts. Either Party may, at any time, request a progress report from the other Party. If, at any time, Interconnection Customer determines that the completion of Transmission Provider's Interconnection Facilities will not be required until after the specified In-Service Date, Interconnection Customer will provide written notice to Transmission Provider of such later date upon which the completion of Transmission Provider's Interconnection Facilities will be required.

## **5.8 Information Exchange.**

As soon as reasonably practicable after the Effective Date, the Parties shall exchange information regarding the design and compatibility of the Parties' Interconnection Facilities and compatibility of the Interconnection Facilities with Transmission Provider's Transmission System, and shall work diligently and in good faith to make any necessary design changes.

## **5.9 Limited Operation.**

If any of Transmission Provider's Interconnection Facilities or Network Upgrades are not reasonably expected to be completed prior to the Commercial Operation Date of the Large Generating Facility, Transmission Provider shall, upon the request and at the expense of Interconnection Customer, perform operating studies on a timely basis to determine the extent to which the Large Generating Facility and Interconnection Customer's Interconnection Facilities may operate prior to the completion of Transmission Provider's Interconnection Facilities or Network Upgrades consistent with Applicable Laws and Regulations, Applicable Reliability Standards, Good Utility Practice, and this QF-LGIA. Transmission Provider shall permit Interconnection Customer to operate the Large Generating Facility and Interconnection Customer's Interconnection Facilities in accordance with the results of such studies.

## **5.10 Interconnection Customer's Interconnection Facilities ('ICIF').**

Interconnection Customer shall, at its expense, design, procure, construct, own and install the ICIF, as set forth in Appendix A, Interconnection Facilities, Network Upgrades and Distribution Upgrades.

### **5.10.1 Interconnection Customer's Interconnection Facility Specifications.**

Interconnection Customer shall submit initial specifications for the ICIF, including System Protection Facilities, to Transmission Provider at least one hundred eighty (180) Calendar Days prior to the Initial Synchronization Date; and final specifications for review and comment at least ninety (90) Calendar Days prior to the Initial Synchronization Date. Transmission Provider shall review such specifications to ensure that the ICIF are compatible with the technical specifications, operational control, and safety requirements of Transmission Provider and comment on such specifications within thirty (30) Calendar Days of Interconnection Customer's submission. All specifications provided hereunder shall be deemed confidential.

### **5.10.2 Transmission Provider's Review.**

Transmission Provider's review of Interconnection Customer's final specifications shall not be construed as confirming, endorsing, or providing a warranty as to the design, fitness, safety, durability or reliability of the Large Generating Facility, or the ICIF. Interconnection Customer shall make such changes to the ICIF as may reasonably be required by Transmission Provider, in accordance with Good Utility Practice, to ensure that the ICIF are compatible with the technical specifications, operational control, and safety requirements of Transmission Provider.

### **5.10.3 ICIF Construction.**

The ICIF shall be designed and constructed in accordance with Good Utility Practice. Within one hundred twenty (120) Calendar Days after the Commercial Operation Date, unless the Parties agree on another mutually acceptable deadline, Interconnection Customer shall deliver to Transmission Provider "as-built" drawings, information and documents for the ICIF, such as: a one-line diagram, a site plan showing the Large Generating Facility and the ICIF, plan and elevation drawings showing the layout of the ICIF, a relay functional diagram, relaying AC and DC schematic wiring diagrams and relay settings for all facilities associated with Interconnection Customer's step-up transformers, the facilities connecting the Large Generating Facility to the step-up transformers and the ICIF, and the impedances (determined by factory tests) for the associated step-up transformers and the Large Generating Facility. The Interconnection Customer shall provide Transmission Provider specifications for the excitation system, automatic voltage regulator, Large Generating Facility control and protection settings, transformer tap settings, and communications, if applicable.

### **5.11**

Transmission Provider's Interconnection Facilities Construction. Transmission Provider's Interconnection Facilities shall be designed and constructed in accordance with Good Utility Practice. Upon request, within one hundred twenty (120) Calendar Days after the Commercial Operation Date, unless the Parties agree on another mutually acceptable deadline, Transmission Provider shall deliver to Interconnection Customer the "as-built" drawings, information and documents for Transmission Provider's Interconnection Facilities if requested by the Interconnection Customer.

Transmission Provider will obtain control of Transmission Provider's Interconnection Facilities and Stand Alone Network Upgrades upon completion of such facilities.

### **5.12 Access Rights.**

Upon reasonable notice and supervision by a Party, and subject to any required or necessary regulatory approvals, a Party ("Granting Party") shall furnish at no cost to the other Party ("Access Party") any rights of use, licenses, rights of way and easements with respect to lands owned or controlled by the Granting Party, its agents (if allowed under the applicable agency agreement), or any Affiliate, that are necessary to enable the Access Party to obtain ingress and egress to construct, operate, maintain, repair, test (or witness testing), inspect, replace or remove facilities and equipment to: (i) interconnect the Large Generating Facility with the Transmission System; (ii) operate and maintain the Large Generating Facility, the Interconnection Facilities and the Transmission System; and (iii) disconnect or remove the Access Party's facilities and equipment upon termination of this QF-LGIA. In exercising such licenses, rights of way and easements, the Access Party shall not unreasonably disrupt or interfere with normal operation of the Granting Party's business and shall adhere to the safety rules and procedures established in advance, as may be changed from time to time, by the Granting Party and provided to the Access Party.

### **5.13 Lands of Other Property Owners.**

If any part of Transmission Provider or Transmission Owner's Interconnection Facilities and/or Network Upgrades is to be installed on property owned by persons other than Interconnection Customer or Transmission Provider or Transmission Owner, Transmission Provider or Transmission Owner shall at Interconnection Customer's expense use efforts, similar in nature and extent to those that it typically undertakes on its own behalf or on behalf of its Affiliates, including use of its eminent domain authority, and to the extent consistent with state law, to procure from such persons any rights of use, licenses, rights of way and easements that are necessary to construct, operate, maintain, test, inspect, replace or remove Transmission Provider or Transmission Owner's Interconnection Facilities and/or Network Upgrades upon such property.

### **5.14 Permits.**

Transmission Provider or Transmission Owner and Interconnection Customer each shall be responsible for obtaining all permits, licenses and authorizations that are necessary to construct the Interconnection Facilities, Distribution Facilities, Stand Alone Network Upgrades, or Network Upgrades for which it has construction responsibility under this QF-LGIA in compliance with Applicable Laws and Regulations. Transmission Provider or Transmission Owner and Interconnection Customer shall cooperate with each other in good faith in obtaining any such permits, licenses and authorizations.

### **5.15 Early Construction of Base Case Facilities.**

Interconnection Customer may request Transmission Provider to construct, and Transmission Provider shall construct, using Reasonable Efforts to accommodate Interconnection Customer's In-Service Date, all or any portion of any Network Upgrades required for Interconnection Customer to be interconnected to the Transmission System which are included in the Base Case of the Facilities Study for Interconnection Customer, and which also are required to be constructed for another Interconnection Customer, but where such construction is not scheduled to be completed in time to achieve Interconnection Customer's In-Service Date.

### **5.16 Suspension.**

Interconnection Customer reserves the right, upon written notice to Transmission Provider, to suspend at any time all work by Transmission Provider associated with the construction and installation of Transmission Provider's Interconnection Facilities and/or Network Upgrades required under this QF-LGIA with the condition that Transmission System shall be left in a safe and reliable condition in accordance with Good Utility Practice and Transmission Provider's safety and reliability criteria. In such event, Interconnection Customer shall be responsible for all reasonable and necessary costs which Transmission Provider (i) has incurred pursuant to this QF-LGIA prior to the suspension and (ii) incurs in suspending such work, including any costs incurred to perform such work as may be necessary to ensure the safety of persons and property and the integrity of the Transmission System during such suspension and, if applicable, any costs incurred in connection with the cancellation or suspension of material, equipment and labor contracts which Transmission Provider cannot reasonably avoid; provided, however, that prior to canceling or suspending any such material, equipment or labor contract, Transmission Provider shall obtain Interconnection Customer's authorization to do so. Interconnection Customer shall

also be obligated to pay any applicable penalties associated with the suspension, pursuant to Article 3.6 of the QF-LGIP.

Transmission Provider shall invoice Interconnection Customer for such costs pursuant to Article 12 and shall use due diligence to minimize its costs. Except as provided in Article 5.16.2 below, in the event Interconnection Customer suspends work by Transmission Provider required under this QF-LGIA pursuant to this Article 5.16, and has not requested Transmission Provider to recommence the work required under this QF-LGIA on or before the expiration of three (3) years following commencement of such suspension, this QF-LGIA shall be deemed terminated. The three-year period shall begin on the date the suspension is requested, or the date of the written notice to Transmission Provider, if no effective date is specified.

#### **5.16.1 Effect of Missed Interconnection Customer QF-LGIA Milestones.**

If Interconnection Customer fails to provide notice of suspension pursuant to Article 5.16, and Interconnection Customer fails to fulfill or complete any Interconnection Customer QF-LGIA Milestone provided in Appendix B ("LGIA Milestone"), this constitutes a Breach under this QF-LGIA. Depending upon the consequences of the Breach and effectiveness of the cure pursuant to Article 17, Transmission Provider's QF-LGIA Milestones may be revised, following consultation with Interconnection Customer, consistent with Reasonable Efforts, and in consideration of all relevant circumstances. Parties shall employ Reasonable Efforts to maintain their remaining respective QF-LGIA Milestones.

#### **5.16.2 Effect of Suspension; Parties Obligations.**

In the event that Interconnection Customer suspends work pursuant to this Article 5.16, the applicable construction duration, timelines and schedules set forth in Appendix B shall be suspended during the period of suspension. Should Interconnection Customer thereafter request that work be recommenced, Appendix A and Appendix B may be revised to account for construction sequencing and modified milestones. If the Commercial Operation Date is extended beyond three (3) cumulative years described in Article 4.4.5 of the QF-LGIP and Article 2.3.1 of this QF-LGIA, such an extension may be considered a Material Modification and result in the termination of the QF-LGIA under Article 2.3.1. Interconnection Customer is required to maintain Site Control while this QF-LGIA is in effect, including during suspension.

### **5.17 Taxes.**

#### **5.17.1 Interconnection Customer Payments Not Taxable.**

The Parties intend that all payments or property transfers made by Interconnection Customer to Transmission Provider for the installation of Transmission Provider's Interconnection Facilities and the Network Upgrades shall be non-taxable, either as contributions to capital, or as an advance, in accordance with the Internal Revenue Code and any applicable state income tax laws and shall not be taxable as contributions in aid of construction or otherwise under the Internal Revenue Code and any applicable state income tax laws.

### **5.17.2 Representations and Covenants.**

In accordance with IRS Notice 2001-82 and IRS Notice 88-129, Interconnection Customer represents and covenants that (i) ownership of the electricity generated at the Large Generating Facility will pass to another party prior to the transmission of the electricity on the Transmission System, (ii) for income tax purposes, the amount of any payments and the cost of any property transferred to Transmission Provider for Transmission Provider's Interconnection Facilities will be capitalized by Interconnection Customer as an intangible asset and recovered using the straight-line method over a useful life of twenty (20) years, and (iii) any portion of Transmission Provider's Interconnection Facilities that is a "dual-use intertie," within the meaning of IRS Notice 88-129, is reasonably expected to carry only a de minimis amount of electricity in the direction of the Large Generating Facility. For this purpose, "de minimis amount" means no more than 5 percent of the total power flows in both directions, calculated in accordance with the "5 percent test" set forth in IRS Notice 88-129. This is not intended to be an exclusive list of the relevant conditions that must be met to conform to IRS requirements for non-taxable treatment.

At Transmission Provider's request, Interconnection Customer shall provide Transmission Provider with a report from an independent engineer confirming its representation in clause (iii), above. Transmission Provider represents and covenants that the cost of Transmission Provider's Interconnection Facilities paid for by Interconnection Customer will have no net effect on the base upon which rates are determined. Of IRS Notice 88-129, is reasonably expected to carry only a de minimis amount of electricity in the direction of the Large Generating Facility. For this purpose, "de minimis amount" means no more than 5 percent of the total power flows in both directions, calculated in accordance with the "5 percent test" set forth in IRS Notice 88-129. This is not intended to be an exclusive list of the relevant conditions that must be met to conform to IRS requirements for non-taxable treatment.

At Transmission Provider's request, Interconnection Customer shall provide Transmission Provider with a report from an independent engineer confirming its representation in clause (iii), above. Transmission Provider represents and covenants that the cost of Transmission Provider's Interconnection Facilities paid for by Interconnection Customer will have no net effect on the base upon which rates are determined.

### **5.17.3 Indemnification for the Cost Consequences of Current Tax Liability Imposed Upon the Transmission Provider.**

Notwithstanding Article 5.17.1, Interconnection Customer shall protect, indemnify and hold harmless Transmission Provider from the cost consequences of any current tax liability imposed against Transmission Provider as the result of payments or property transfers made by Interconnection Customer to Transmission Provider under this QF-LGIA for Interconnection Facilities, as well as any interest and penalties, other than interest and penalties attributable to any delay caused by Transmission Provider.

Transmission Provider shall not include a gross-up for the cost consequences of any current tax liability in the amounts it charges Interconnection Customer under this QF-LGIA unless (i) Transmission Provider has determined, in good faith, that the payments or property transfers made by Interconnection Customer to Transmission Provider should be reported as income subject to taxation or (ii) any Governmental Authority directs Transmission Provider to report payments or property as income subject to taxation;

provided, however, that Transmission Provider may require Interconnection Customer to provide security for Interconnection Facilities, in a form reasonably acceptable to Transmission Provider (such as a parental guarantee or a letter of credit), in an amount equal to the cost consequences of any current tax liability under this Article 5.17. Interconnection Customer shall reimburse Transmission Provider for such costs on a fully grossed-up basis, in accordance with Article 5.17.4, within thirty (30) Calendar Days of receiving written notification from Transmission Provider of the amount due, including detail about how the amount was calculated.

The indemnification obligation shall terminate at the earlier of (1) the expiration of the ten year testing period and the applicable statute of limitation, as it may be extended by Transmission Provider upon request of the IRS, to keep these years open for audit or adjustment, or (2) the occurrence of a subsequent taxable event and the payment of any related indemnification obligations as contemplated by this Article 5.17.

#### **5.17.4 Tax Gross-Up Amount.**

Interconnection Customer's liability for the cost consequences of any current tax liability under this Article 5.17 shall be calculated on a fully grossed-up basis. Except as may otherwise be agreed to by the parties, this means that Interconnection Customer will pay Transmission Provider, in addition to the amount paid for the Interconnection Facilities and Network Upgrades, an amount equal to (1) the current taxes imposed on Transmission Provider ("Current Taxes") on the excess of (a) the gross income realized by Transmission Provider as a result of payments or property transfers made by Interconnection Customer to Transmission Provider under this QF-LGIA (without regard to any payments under this Article 5.17) (the "Gross Income Amount") over (b) the present value of future tax deductions for depreciation that will be available as a result of such payments or property transfers (the "Present Value Depreciation Amount" , plus (2) an additional amount sufficient to permit Transmission Provider to receive and retain, after the payment of all Current Taxes, an amount equal to the net amount described in clause (1).

For this purpose, (i) Current Taxes shall be computed based on Transmission Provider's composite federal and state tax rates at the time the payments or property transfers are received and Transmission Provider will be treated as being subject to tax at the highest marginal rates in effect at that time (the "Current Tax Rate"), and (ii) the Present Value Depreciation Amount shall be computed by discounting Transmission Provider's anticipated tax depreciation deductions as a result of such payments or property transfers by Transmission Provider's current weighted average cost of capital. Thus, the formula for calculating Interconnection Customer's liability to Transmission Owner pursuant to this Article 5.17.4 can be expressed as follows:  $(\text{Current Tax Rate} \times (\text{Gross Income Amount} - \text{Present Value of Tax Depreciation})) / (1 - \text{Current Tax Rate})$ . Interconnection Customer's estimated tax liability in the event taxes are imposed shall be stated in Appendix A, Interconnection Facilities, Network Upgrades and Distribution Upgrades.

#### **5.17.5 Private Letter Ruling or Change or Clarification of Law.**

At Interconnection Customer's request and expense, Transmission Provider shall file with the IRS a request for a private letter ruling as to whether any property transferred or sums paid, or to be paid, by Interconnection Customer to Transmission Provider under this QF-LGIA are subject to federal income taxation. Interconnection Customer will prepare the

initial draft of the request for a private letter ruling, and will certify under penalties of perjury that all facts represented in such request are true and accurate to the best of Interconnection Customer's knowledge. Transmission Provider and Interconnection Customer shall cooperate in good faith with respect to the submission of such request.

Transmission Provider shall keep Interconnection Customer fully informed of the status of such request for a private letter ruling and shall execute either a privacy act waiver or a limited power of attorney, in a form acceptable to the IRS, that authorizes Interconnection Customer to participate in all discussions with the IRS regarding such request for a private letter ruling. Transmission Provider shall allow Interconnection Customer to attend all meetings with IRS officials about the request and shall permit Interconnection Customer to prepare the initial drafts of any follow-up letters in connection with the request.

#### **5.17.6 Subsequent Taxable Events.**

If, within 10 years from the date on which the relevant Transmission Provider's Interconnection Facilities are placed in service, (i) Interconnection Customer Breaches the covenants contained in Article 5.17.2, (ii) a "disqualification event" occurs within the meaning of IRS Notice 88-129, or (iii) this QF-LGIA terminates and Transmission Provider retains ownership of the Interconnection Facilities and Network Upgrades, Interconnection Customer shall pay a tax gross-up for the cost consequences of any current tax liability imposed on Transmission Provider, calculated using the methodology described in Article 5.17.4 and in accordance with IRS Notice 90-60.

#### **5.17.7 Contests.**

In the event any Governmental Authority determines that Transmission Provider's receipt of payments or property constitutes income that is subject to taxation, Transmission Provider shall notify Interconnection Customer, in writing, within thirty (30) Calendar Days of receiving notification of such determination by a Governmental Authority. Upon the timely written request by Interconnection Customer and at Interconnection Customer's sole expense, Transmission Provider may appeal, protest, seek abatement of, or otherwise oppose such determination. Upon Interconnection Customer's written request and sole expense, Transmission Provider may file a claim for refund with respect to any truces paid under this Article 5.17, whether or not it has received such a determination. Transmission Provider reserves the right to make all decisions with regard to the prosecution of such appeal, protest, abatement or other contest, including the selection of counsel and compromise or settlement of the claim, but Transmission Provider shall keep Interconnection Customer informed, shall consider in good faith suggestions from Interconnection Customer about the conduct of the contest, and shall reasonably permit Interconnection Customer or an Interconnection Customer representative to attend contest proceedings.

Interconnection Customer shall pay to Transmission Provider on a periodic basis, as invoiced by Transmission Provider, Transmission Provider's documented reasonable costs of prosecuting such appeal, protest, abatement or other contest. At any time during the contest, Transmission Provider may agree to a settlement either with Interconnection Customer's consent or after obtaining written advice from nationally-recognized tax counsel, selected by Transmission Provider, but reasonably acceptable to Interconnection Customer, that the proposed settlement represents a reasonable settlement given the

hazards of litigation. Interconnection Customer's obligation shall be based on the amount of the settlement agreed to by Interconnection Customer, or if a higher amount, so much of the settlement that is supported by the written advice from nationally-recognized tax counsel selected under the terms of the preceding sentence. The settlement amount shall be calculated on a fully grossed-up basis to cover any related cost consequences of the current tax liability. Any settlement without Interconnection Customer's consent or such written advice will relieve Interconnection Customer from any obligation to indemnify Transmission Provider for the tax at issue in the contest.

#### **5.17.8 Refund.**

In the event that (a) a private letter ruling is issued to Transmission Provider which holds that any amount paid or the value of any property transferred by Interconnection Customer to Transmission Provider under the terms of this QF-LGIA is not subject to federal income taxation, (b) any legislative change or administrative announcement, notice, ruling or other determination makes it reasonably clear to Transmission Provider in good faith that any amount paid or the value of any property transferred by Interconnection Customer to Transmission Provider under the terms of this QF-LGIA is not taxable to Transmission Provider, (c) any abatement, appeal, protest, or other contest results in a determination that any payments or transfers made by Interconnection Customer to Transmission Provider are not subject to federal income tax, or (d) if Transmission Provider receives a refund from any taxing authority for any overpayment of tax attributable to any payment or property transfer made by Interconnection Customer to Transmission Provider pursuant to this QF-LGIA, Transmission Provider shall promptly refund to Interconnection Customer the following:

- (i) any payment made by Interconnection Customer under this Article 5.17 for taxes that is attributable to the amount determined to be non-taxable, together with interest thereon,
- (ii) interest on any amounts paid by Interconnection Customer to Transmission Provider for such taxes which Transmission Provider did not submit to the taxing authority, calculated in accordance with the methodology set forth in FERC's regulations at 18 CFR §35.19a(a)(2)(iii) from the date payment was made by Interconnection Customer to the date Transmission Provider refunds such payment to Interconnection Customer, and
- (iii) with respect to any such taxes paid by Transmission Provider, any refund or credit Transmission Provider receives or to which it may be entitled from any Governmental Authority, interest (or that portion thereof attributable to the payment described in clause (i), above) owed to Transmission Provider for such overpayment of taxes (including any reduction in interest otherwise payable by Transmission Provider to any Governmental Authority resulting from an offset or credit); provided, however, that Transmission Provider will remit such amount promptly to Interconnection Customer only after and to the extent that Transmission Provider has received a tax refund, credit or offset from any Governmental Authority for any applicable overpayment of income tax related to Transmission Provider's Interconnection Facilities.

The intent of this provision is to leave the Parties, to the extent practicable, in the event that no taxes are due with respect to any payment for Interconnection Facilities and Network Upgrades hereunder, in the same position they would have been in had no such tax payments been made.

#### **5.17.9 Taxes Other Than Income Taxes.**

Upon the timely request by Interconnection Customer, and at Interconnection Customer's sole expense, Transmission Provider may appeal, protest, seek abatement of, or otherwise contest any tax (other than federal or state income tax) asserted or assessed against Transmission Provider for which Interconnection Customer may be required to reimburse Transmission Provider under the terms of this QF-LGIA. Interconnection Customer shall pay to Transmission Provider on a periodic basis, as invoiced by Transmission Provider, Transmission Provider's documented reasonable costs of prosecuting such appeal, protest, abatement, or other contest. Interconnection Customer and Transmission Provider shall cooperate in good faith with respect to any such contest. Unless the payment of such taxes is a prerequisite to an appeal or abatement or cannot be deferred, no amount shall be payable by Interconnection Customer to Transmission Provider for such taxes until they are assessed by a final, non-appealable order by any court or agency of competent jurisdiction. In the event that a tax payment is withheld and ultimately due and payable after appeal, Interconnection Customer will be responsible for all taxes, interest and penalties, other than penalties attributable to any delay caused by Transmission Provider.

#### **5.17.10 Transmission Owners Who Are Not Transmission Providers.**

If Transmission Provider is not the same entity as the Transmission Owner, then (i) all references in this Article 5.17 to Transmission Provider shall be deemed also to refer to and to include the Transmission Owner, as appropriate, and (ii) this QF-LGIA shall not become effective until such Transmission Owner shall have agreed in writing to assume all of the duties and obligations of Transmission Provider under this Article 5.17 of this QF-LGIA.

### **5.18 Tax Status.**

Each Party shall cooperate with the other to maintain the other Party's tax status. Nothing in this QF-LGIA is intended to adversely affect any Transmission Provider's tax exempt status with respect to the issuance of bonds including, but not limited to, Local Furnishing Bonds.

### **5.19 Modification.**

#### **5.19.1 General.**

Either Party may undertake modifications to its facilities. If a Party plans to undertake a modification that reasonably may be expected to affect the other Party's facilities, that Party shall provide to the other Party sufficient information regarding such modification so that the other Party may evaluate the potential impact of such modification prior to commencement of the work. Such information shall be deemed to be confidential hereunder and shall include information concerning the timing of such modifications and whether such modifications are expected to interrupt the flow of electricity from the Large Generating Facility. The Party desiring to perform such work shall provide the relevant drawings, plans, and specifications to the other Party at least ninety (90) Calendar Days in advance of the commencement of the work or such shorter period upon which the Parties may agree, which agreement shall not unreasonably be withheld, conditioned or delayed.

In the case of Large Generating Facility modifications that do not require Interconnection Customer to submit an Interconnection Request, Transmission Provider shall provide,

within thirty (30) Calendar Days (or such other time as the Parties may agree), an estimate of any additional modifications to the Transmission System, Transmission Provider's Interconnection Facilities or Network Upgrades necessitated by such Interconnection Customer modification and a good faith estimate of the costs thereof.

#### **5.19.2 Standards.**

Any additions, modifications, or replacements made to a Party's facilities shall be designed, constructed and operated in accordance with this QF-LGIA, Applicable Reliability Standards and Good Utility Practice.

#### **5.19.3 Modification Costs.**

Interconnection Customer shall not be directly assigned for the costs of any additions, modifications, or replacements that Transmission Provider makes to Transmission Provider's Interconnection Facilities or the Transmission System to facilitate the interconnection of a third party to Transmission Provider's Interconnection Facilities or the Transmission System, or to provide transmission service to a third party under Transmission Provider's OATT. Interconnection Customer shall be responsible for the costs of any additions, modifications, or replacements to Interconnection Customer's Interconnection Facilities that may be necessary to maintain or upgrade such Interconnection Customer's Interconnection Facilities consistent with Applicable Laws and Regulations, Applicable Reliability Standards or Good Utility Practice.

### **Article 6. Testing and Inspection**

#### **6.1 Pre-Commercial Operation Date Testing and Modifications.**

Prior to the Commercial Operation Date, Transmission Provider shall test Transmission Provider's Interconnection Facilities and Network Upgrades and Interconnection Customer shall test the Large Generating Facility and Interconnection Customer's Interconnection Facilities to ensure their safe and reliable operation. Similar testing may be required after initial operation. Each Party shall make any modifications to its facilities that are found to be necessary as a result of such testing. Interconnection Customer shall bear the cost of all such testing and modifications. Interconnection Customer shall generate test energy at the Large Generating Facility only if it has arranged for the delivery of such test energy.

#### **6.2 Post Commercial Operation Date Testing and Modifications.**

Each Party shall perform routine inspection and testing of its facilities and equipment in accordance with Good Utility Practice as may be necessary to ensure the continued interconnection of the Large Generating Facility with the Transmission System in a safe and reliable manner. Each Party shall have the right, upon advance written notice, to require reasonable additional testing of the other Party's facilities, at the requesting Party's expense, as may be in accordance with Good Utility Practice. Interconnection Customer shall bear the cost of all testing and modifications required under this Article 6.2.

#### **6.3 Right to Observe Testing.**

Each Party shall notify the other Party in advance of its performance of tests of its Interconnection Facilities. The other Party has the right, at its own expense, to observe such testing.

#### **6.4 Right to Inspect.**

Each Party shall have the right, but shall have no obligation to: (i) observe the other Party's tests and/or inspection of any of its System Protection Facilities and other protective equipment, including Power System Stabilizers; (ii) review the settings of the other Party's System Protection Facilities and other protective equipment; and (iii) review the other Party's maintenance records relative to the Interconnection Facilities, the System Protection Facilities and other protective equipment. A Party may exercise these rights from time to time as it deems necessary upon reasonable notice to the other Party. The exercise or non-exercise by a Party of any such rights shall not be construed as an endorsement or confirmation of any element or condition of the Interconnection Facilities or the System Protection Facilities or the Power System Stabilizers or other protective equipment or the operation thereof, or as a warranty as to the fitness, safety, desirability, or reliability of same. Any information that a Party obtains through the exercise of any of its rights under this Article 6.4 shall be deemed to be Confidential Information and treated pursuant to Article 22 of this QF-LGIA.

### **Article 7. Metering**

#### **7.1 General.**

Each Party shall comply with the Applicable Reliability Council requirements regarding metering. Unless otherwise agreed by the Parties, Transmission Provider shall install Metering Equipment at the Point of Interconnection prior to any operation of the Large Generating Facility and shall own, operate, test and maintain such Metering Equipment. Power flows to and from the Large Generating Facility shall be measured at or, at Transmission Provider's option, compensated to, the Point of Interconnection. Transmission Provider shall provide metering quantities, in analog and/or digital form, to Interconnection Customer upon request. Interconnection Customer shall bear all reasonable documented costs associated with the purchase, installation, operation, testing and maintenance of the Metering Equipment.

#### **7.2 Station Power Metering**

To the extent the Large Generating Facility relies, or may need to rely, on Station Power not generated by the Large Generating Facility itself, the Parties shall agree to and provide for the installation of Metering Equipment at such locations as necessary to meter the quantities of Station Power delivered to and used by the Large Generating Facility.

The intent of such Metering Equipment is to allow the Parties to accurately meter Station Power so that the Net Output of the Large Generating Facility can be accurately ascertained on a hourly basis. Unless otherwise agreed by the Parties, the Transmission Provider shall install the Metering Equipment required by this Article 7.2 at such location or locations as necessary to meter Station Power for the purposes of this Article 7.2 and Transmission Provider shall own, operate, test and maintain such Station Power Metering Equipment. Interconnection Customer shall bear all reasonable documented costs associated with the purchase, installation, operation, testing and maintenance of the Metering Equipment required by this Article 7.2.

#### **7.3 Check Meters.**

Interconnection Customer, at its option and expense, may install and operate, on its premises and on its side of the Point of Interconnection, one or more check meters to check Transmission Provider's meters. Such check meters shall be for check purposes only and shall not be used for

the measurement of power flows for purposes of this QF-LGIA, except as provided in Article 7.5 below. The check meters shall be subject at all reasonable times to inspection and examination by Transmission Provider or its designee. The installation, operation and maintenance thereof shall be performed entirely by Interconnection Customer in accordance with Good Utility Practice.

#### **7.4 Standards.**

Transmission Provider shall install, calibrate, and test revenue quality Metering Equipment in accordance with applicable American National Standards Institute ("ANSI") standards.

#### **7.5 Testing of Metering Equipment.**

Transmission Provider shall, at Interconnection Customer's expense, inspect and test all Transmission Provider-owned Metering Equipment upon installation and at least once every two (2) years thereafter. If requested to do so by Interconnection Customer, Transmission Provider shall, at Interconnection Customer's expense, inspect or test Metering Equipment more frequently than every two (2) years. Transmission Provider shall give reasonable notice of the time when any inspection or test shall take place, and Interconnection Customer may have representatives present at the test or inspection. If at any time Metering Equipment is found to be inaccurate or defective, it shall be adjusted, repaired or replaced at Interconnection Customer's expense, in order to provide accurate metering, unless the inaccuracy or defect is due to Transmission Provider's failure to maintain, then Transmission Provider shall pay. If Metering Equipment fails to register, or if the measurement made by Metering Equipment during a test varies by more than two percent from the measurement made by the standard meter used in the test, Transmission Provider shall adjust the measurements by correcting all measurements for the period during which Metering Equipment was in error by using Interconnection Customer's check meters, if installed. If no such check meters are installed or if the period cannot be reasonably ascertained, the adjustment shall be for the period immediately preceding the test of the Metering Equipment equal to one-half the time from the date of the last previous test of the Metering Equipment.

#### **7.6 Metering Data.**

At Interconnection Customer's expense, the metered data shall be telemetered to one or more locations designated by Transmission Provider and one or more locations designated by Interconnection Customer. Such telemetered data shall be used, under normal operating conditions, as the official measurement of the amount of energy delivered from the Large Generating Facility to the Point of interconnection.

### **Article 8. Communications**

#### **8.1 Interconnection Customer Obligations.**

Interconnection Customer shall maintain satisfactory operating communications with Transmission Provider's Transmission System dispatcher or representative designated by Transmission Provider. Interconnection Customer shall provide standard voice line, dedicated voice line and facsimile communications at its Large Generating Facility control room or central dispatch facility through use of either the public telephone system, or a voice communications system that does not rely on the public telephone system.

Interconnection Customer shall also provide the dedicated data circuit(s) necessary to provide Interconnection Customer data to Transmission Provider as set forth in Appendix D, Security Arrangements Details. The data circuit(s) shall extend from the Large Generating Facility to the location(s) specified by Transmission Provider. Any required maintenance of such communications equipment shall be performed by Interconnection Customer. Operational communications shall be activated and maintained under, but not be limited to, the following events: system paralleling or separation, scheduled and unscheduled shutdowns, equipment clearances, and hourly and daily load data. Interconnection Customer shall bear all costs associated with obtaining and maintaining the communication services and equipment required by this Article 8 including the cost of any ground potential rise or other communication-related study or testing required by a telecommunications provider or required by Good Utility Practice.

### **8.2 Remote Terminal Unit.**

Prior to the Initial Synchronization Date of the Large Generating Facility, a Remote Terminal Unit, or equivalent data collection and transfer equipment acceptable to the Parties, shall be installed by Interconnection Customer, or by Transmission Provider at Interconnection Customer's expense, to gather accumulated and instantaneous data to be telemetered to the location(s) designated by Transmission Provider through use of a dedicated point-to-point data circuit(s) as indicated in Article 8.1. The communication protocol for the data circuit(s) shall be specified by Transmission Provider. Instantaneous bi-directional analog real power and reactive power flow information must be telemetered directly to the location(s) specified by Transmission Provider.

Each Party will promptly advise the other Party if it detects or otherwise learns of any metering, telemetry or communications equipment errors or malfunctions that require the attention and/or correction by the other Party. The Party owning such equipment shall, at Interconnection Customer's expense, correct such error or malfunction as soon as reasonably feasible.

### **8.3 No Annexation.**

Any and all equipment placed on the premises of a Party shall be and remain the property of the Party providing such equipment regardless of the mode and manner of annexation or attachment to real property, unless otherwise mutually agreed by the Parties.

## **Article 9. Operations**

### **9.1 General.**

Each Party shall comply with the Applicable Reliability Council requirements. Each Party shall provide to the other Party all information that may reasonably be required by the other Party to comply with Applicable Laws and Regulations and Applicable Reliability Standards.

### **9.2 Transmission Provider Obligations.**

Transmission Provider shall cause the Transmission System and Transmission Provider's Interconnection Facilities to be operated, maintained and controlled in a safe and reliable manner and in accordance with this QF-LGIA. Transmission Provider may provide operating instructions to Interconnection Customer consistent with this QF-LGIA and Transmission Provider's operating protocols and procedures as they may change from time to time. Transmission Provider

will consider changes to its operating protocols and procedures proposed by Interconnection Customer.

### **9.3 Interconnection Customer Obligations.**

Interconnection Customer shall at its own expense operate, maintain and control the Large Generating Facility and Interconnection Customer's Interconnection Facilities in a safe and reliable manner and in accordance with this QF-LGIA. Interconnection Customer shall operate the Large Generating Facility and Interconnection Customer's Interconnection Facilities in accordance with all applicable requirements of Transmission Provider's Control Area, as such requirements are set forth in Appendix C, Interconnection Details, of this QF-LGIA. Appendix C, Interconnection Details, will be modified to reflect changes to the requirements as they may change from time to time. Either Party may request that the other Party provide copies of the requirements set forth in Appendix C, Interconnection Details, of this QF-LGIA.

### **9.4 Start-Up and Synchronization.**

Consistent with the Parties' mutually acceptable procedures, Interconnection Customer is responsible for the proper synchronization of the Large Generating Facility to Transmission Provider's Transmission System.

### **9.5 Reactive Power.**

#### **9.5.1 Power Factor Design Criteria.**

Interconnection Customer shall design the Large Generating Facility to maintain a composite power delivery at continuous rated power output at the Point of Interconnection at a power factor within the range of 0.95 leading to 0.95 lagging, unless Transmission Provider has established different requirements that apply to all generators in the Control Area on a comparable basis. The requirements of this paragraph shall not apply to wind generators.

#### **9.5.2 Voltage Schedules.**

Once Interconnection Customer has synchronized the Large Generating Facility with the Transmission System, Transmission Provider shall require Interconnection Customer to operate the Large Generating Facility to produce or absorb reactive power within the design limitations of the Large Generating Facility set forth in Article 9.5.1 (Power Factor Design Criteria). Transmission Provider's voltage schedules shall treat all sources of reactive power in the Control Area in an equitable and not unduly discriminatory manner. Transmission Provider shall exercise Reasonable Efforts to provide Interconnection Customer with such schedules at least one (1) day in advance, and may make changes to such schedules as necessary to maintain the reliability of the Transmission System. Interconnection Customer shall operate the Large Generating Facility to maintain the specified output voltage or power factor at the Point of Interconnection within the design limitations of the Large Generating Facility set forth in Article 9.5.1 (Power Factor Design Criteria). If Interconnection Customer is unable to maintain the specified voltage or power factor, it shall promptly notify Transmission Provider.

### **9.5.2.1 Governors and Regulators.**

Whenever the Large Generating Facility is operated in parallel with the Transmission System and the speed governors (if installed on the generating unit pursuant to Good Utility Practice) and voltage regulators are capable of operation, Interconnection Customer shall operate the Large Generating Facility with its speed governors and voltage regulators in automatic operation. If the Large Generating Facility's speed governors and voltage regulators are not capable of such automatic operation, Interconnection Customer shall immediately notify Transmission Provider's system operator, or its designated representative, and ensure that such Large Generating Facility's reactive power production or absorption (measured in MVARs) are within the design capability of the Large Generating Facility's generating unit(s) and steady state stability limits. Interconnection Customer shall not cause its Large Generating Facility to disconnect automatically or instantaneously from the Transmission System or trip any generating unit comprising the Large Generating Facility for an under or over frequency condition unless the abnormal frequency condition persists for a time period beyond the limits set forth in ANSI/IEEE Standard C37.106, or such other standard as applied to other generators in the Control Area on a comparable basis.

### **9.5.3 Payment for Reactive Power.**

Transmission Provider is required to pay Interconnection Customer for reactive power that Interconnection Customer provides or absorbs from the Large Generating Facility when Transmission Provider requests Interconnection Customer to operate its Large Generating Facility outside the range specified in Article 9.5.1, provided that if Transmission Provider pays its own or affiliated generators for reactive power service within the specified range, it must also pay Interconnection Customer. Payments shall be pursuant to Article 11.6 or such other agreement to which the Parties have otherwise agreed.

## **9.6 Outages and Interruptions.**

### **9.6.1 Outages.**

#### **9.6.1.1 Outage Authority and Coordination.**

Each Party may in accordance with Good Utility Practice in coordination with the other Party remove from service any of its respective Interconnection Facilities or Network Upgrades that may impact the other Party's facilities as necessary to perform maintenance or testing or to install or replace equipment. Absent an Emergency Condition, the Party scheduling a removal of such facility(ies) from service will use Reasonable Efforts to schedule such removal on a date and time mutually acceptable to the Parties. In all circumstances, any Party planning to remove such facility(ies) from service shall use Reasonable Efforts to minimize the effect on the other Party of such removal.

#### **9.6.1.2 Outage Schedules.**

Transmission Provider shall post scheduled outages of its transmission facilities on its Open Access Same-Time Information System ("OASIS"). Interconnection

Customer shall submit its planned maintenance schedules for the Large Generating Facility to Transmission Provider for a minimum of a rolling twenty-four month period. Interconnection Customer shall update its planned maintenance schedules as necessary. Transmission Provider may request Interconnection Customer to reschedule its maintenance as necessary to maintain the reliability of the Transmission System; provided, however, adequacy of generation supply shall not be a criterion in determining Transmission System reliability. Transmission Provider shall compensate Interconnection Customer for any additional direct costs that Interconnection Customer incurs as a result of having to reschedule maintenance, including any additional overtime, breaking of maintenance contracts or other costs above and beyond the cost Interconnection Customer would have incurred absent Transmission Provider's request to reschedule maintenance. Interconnection Customer will not be eligible to receive compensation, if during the twelve (12) months prior to the date of the scheduled maintenance, Interconnection Customer had modified its schedule of maintenance activities.

#### **9.6.1.3 Outage Restoration.**

If an outage on a Party's Interconnection Facilities or Network Upgrades adversely affects the other Party's operations or facilities, the Party that owns or controls the facility that is out of service shall use Reasonable Efforts to promptly restore such facility(ies) to a normal operating condition consistent with the nature of the outage. The Party that owns or controls the facility that is out of service shall provide the other Party, to the extent such information is known, information on the nature of the Emergency Condition, an estimated time of restoration, and any corrective actions required. Initial verbal notice shall be followed up as soon as practicable with written notice explaining the nature of the outage.

#### **9.6.2 Interruption of Service.**

If required by Good Utility Practice to do so, Transmission Provider may require Interconnection Customer to interrupt or reduce deliveries of electricity if such delivery of electricity could adversely affect Transmission Provider's ability to perform such activities as are necessary to safely and reliably operate and maintain the Transmission System. The following provisions shall apply to any interruption or reduction permitted under this Article 9.6.2:

##### **9.6.2.1**

The interruption or reduction shall continue only for so long as reasonably necessary under Good Utility Practice;

##### **9.6.2.2**

Any such interruption or reduction shall be made on an equitable, non-discriminatory basis with respect to all Generating Facilities directly connected to the Transmission System;

### **9.6.2.3**

When the interruption or reduction must be made under circumstances which do not allow for advance notice, Transmission Provider shall notify Interconnection Customer by telephone as soon as practicable of the reasons for the curtailment, interruption, or reduction, and, if known, its expected duration. Telephone notification shall be followed by written notification as soon as practicable;

### **9.6.2.4**

Except during the existence of an Emergency Condition, when the interruption or reduction can be scheduled without advance notice, Transmission Provider shall notify Interconnection Customer in advance regarding the timing of such scheduling and further notify Interconnection Customer of the expected duration. Transmission Provider shall coordinate with Interconnection Customer using Good Utility Practice to schedule the interruption or reduction during periods of least impact to Interconnection Customer and Transmission Provider;

### **9.6.2.5**

The Parties shall cooperate and coordinate with each other to the extent necessary in order to restore the Large Generating Facility, Interconnection Facilities, and the Transmission System to their normal operating state, consistent with system conditions and Good Utility Practice.

## **9.6.3 Under-Frequency and Over Frequency Conditions.**

The Transmission System is designed to automatically activate a load-shed program as required by the Applicable Reliability Council in the event of an under-frequency system disturbance. Interconnection Customer shall implement under-frequency and over-frequency relay set points for the Large Generating Facility as required by the Applicable Reliability Council to ensure "ride through" capability of the Transmission System. The Large Generating Facility response to frequency deviations of pre-determined magnitudes, both under-frequency and over-frequency deviations, shall be studied and coordinated with Transmission Provider in accordance with Good Utility Practice. The term "ride through" as used herein shall mean the ability of a Large Generating Facility to stay connected to and synchronized with the Transmission System during system disturbances within a range of under-frequency and over-frequency conditions, in accordance with Good Utility Practice.

## **9.6.4 System Protection and Other Control Requirements.**

### **9.6.4.1. System Protection Facilities.**

Interconnection Customer shall, at its expense, install, operate and maintain System Protection Facilities as a part of the Large Generating Facility or Interconnection Customer's Interconnection Facilities. Transmission Provider shall install at Interconnection Customer's expense any System Protection Facilities that may be required on Transmission Provider's Interconnection Facilities or the Transmission System as a result of the interconnection of the

Large Generating Facility and Interconnection Customer's Interconnection Facilities.

**9.6.4.2**

Each Party's protection facilities shall be designed and coordinated with other systems in accordance with Good Utility Practice.

**9.6.4.3**

Each Party shall be responsible for protection of its facilities consistent with Good Utility Practice.

**9.6.4.4**

Each Party's protective relay design shall incorporate the necessary test switches to perform the tests required in Article 6. The required test switches will be placed such that they allow operation of lockout relays while preventing breaker failure schemes from operating and causing unnecessary breaker operations and/or the tripping of Interconnection Customer's units.

**9.6.4.5**

Each Party will test, operate and maintain System Protection Facilities in accordance with Good Utility Practice.

**9.6.4.6**

Prior to the In-Service Date, and again prior to the Commercial Operation Date, each Party or its agent shall perform a complete calibration test and functional trip test of the System Protection Facilities. At intervals suggested by Good Utility Practice and following any apparent malfunction of the System Protection Facilities, each Party shall perform both calibration and functional trip tests of its System Protection Facilities. These tests do not require the tripping of any in-service generation unit. These tests do, however, require that all protective relays and lockout contacts be activated.

**9.6.5 Requirements for Protection.**

In compliance with Good Utility Practice, Interconnection Customer shall provide, install, own, and maintain relays, circuit breakers and all other devices necessary to remove any fault contribution of the Large Generating Facility to any short circuit occurring on the Transmission System not otherwise isolated by Transmission Provider's equipment, such that the removal of the fault contribution shall be coordinated with the protective requirements of the Transmission System. Such protective equipment shall include, without limitation, a disconnecting device or switch with load-interrupting capability located between the Large Generating Facility and the Transmission System at a site selected upon mutual agreement (not to be unreasonably withheld, conditioned or delayed) of the Parties. Interconnection Customer shall be responsible for protection of the Large Generating Facility and Interconnection Customer's other equipment from such conditions as negative sequence currents, over- or under-frequency, sudden load rejection, over- or under-voltage, and generator loss-of-field. Interconnection Customer shall be solely responsible to disconnect the Large Generating Facility and

Interconnection Customer's other equipment if conditions on the Transmission System could adversely affect the Large Generating Facility.

#### **9.6.6 Power Quality.**

Neither Party's facilities shall cause excessive voltage flicker nor introduce excessive distortion to the sinusoidal voltage or current waves as defined by ANSI Standard C84.1-1989, in accordance with IEEE Standard 519, or any applicable superseding electric industry standard. In the event of a conflict between ANSI Standard C84.1-1989, or any applicable superseding electric industry standard, ANSI Standard C84.1-1989, or the applicable superseding electric industry standard, shall control.

#### **9.7 Switching and Tagging Rules.**

Each Party shall provide the other Party a copy of its switching and tagging rules that are applicable to the other Party's activities. Such switching and tagging rules shall be developed on a non-discriminatory basis. The Parties shall comply with applicable switching and tagging rules, as amended from time to time, in obtaining clearances for work or for switching operations on equipment.

#### **9.8 Use of Interconnection Facilities by Third Parties.**

##### **9.8.1 Purpose of Interconnection Facilities.**

Except as may be required by Applicable Laws and Regulations, or as otherwise agreed to among the Parties, the Interconnection Facilities shall be constructed for the sole purpose of interconnecting the Large Generating Facility to the Transmission System and shall be used for no other purpose.

##### **9.8.2 Third Party Users.**

If required by Applicable Laws and Regulations or if the Parties mutually agree, such agreement not to be unreasonably withheld, to allow one or more third parties to use Transmission Provider's Interconnection Facilities, or any part thereof, Interconnection Customer will be entitled to compensation for the capital expenses it incurred in connection with the Interconnection Facilities based upon the pro rata use of the Interconnection Facilities by Transmission Provider, all third party users, and Interconnection Customer, in accordance with Applicable Laws and Regulations or upon some other mutually-agreed upon methodology. In addition, cost responsibility for ongoing costs, including operation and maintenance costs associated with the Interconnection Facilities, will be allocated between Interconnection Customer and any third party users based upon the pro rata use of the Interconnection Facilities by Transmission Provider, all third party users, and Interconnection Customer, in accordance with Applicable Laws and Regulations or upon some other mutually agreed upon methodology. If the issue of such compensation or allocation cannot be resolved through such negotiations, it shall be submitted to the OPUC for resolution.

#### **9.9 Disturbance Analysis Data Exchange.**

The Parties will cooperate with one another in the analysis of disturbances to either the Large Generating Facility or Transmission Provider's Transmission System by gathering and providing access to any information relating to any disturbance, including information from oscillography, protective relay targets, breaker operations and sequence of events records, and any disturbance information required by Good Utility Practice.

## **Article 10. Maintenance**

### **10.1 Transmission Provider Obligations.**

Transmission Provider shall maintain the Transmission System and Transmission Provider's Interconnection Facilities in a safe and reliable manner and in accordance with this QF-LGIA.

### **10.2 Interconnection Customer Obligations.**

Interconnection Customer shall maintain the Large Generating Facility and Interconnection Customer's Interconnection Facilities in a safe and reliable manner and in accordance with this QF-LGIA.

### **10.3 Coordination.**

The Parties shall confer regularly to coordinate the planning, scheduling and performance of preventive and corrective maintenance on the Large Generating Facility and the Interconnection Facilities.

### **10.4 Secondary Systems.**

Each Party shall cooperate with the other in the inspection, maintenance, and testing of control or power circuits that operate below 600 volts, AC or DC, including, but not limited to, any hardware, control or protective devices, cables, conductors, electric raceways, secondary equipment panels, transducers, batteries, chargers, and voltage and current transformers that directly affect the operation of a Party's facilities and equipment which may reasonably be expected to impact the other Party. Each Party shall provide advance notice to the other Party before undertaking any work on such circuits, especially on electrical circuits involving circuit breaker trip and close contacts, current transformers, or potential transformers.

### **10.5 Operating and Maintenance Expenses.**

Subject to the provisions herein addressing the use of facilities by others, and except for operations and maintenance expenses associated with modifications made for providing interconnection or transmission service to a third party and such third party pays for such expenses, Interconnection Customer shall be responsible for all reasonable actual expenses including overheads, associated with: (1) owning, operating, maintaining, repairing, and replacing Interconnection Customer's Interconnection Facilities; and (2) operation, maintenance, repair and replacement of Transmission Provider's Interconnection Facilities.

## **Article 11. Performance Obligation**

### **11.1 Interconnection Customer Interconnection Facilities.**

Interconnection Customer shall design, procure, construct, install, own and/or control Interconnection Customer Interconnection Facilities described in Appendix A, Interconnection Facilities, Network Upgrades and Distribution Upgrades, at its sole expense.

### **11.2 Transmission Provider's Interconnection Facilities.**

In accordance with Good Utility Practice, Transmission Provider or Transmission Owner shall design, procure, construct, install, own and/or control the Transmission Provider's

Interconnection Facilities described in Appendix A, Interconnection Facilities, Network Upgrades and Distribution Upgrades, at the sole expense of the Interconnection Customer.

### **11.3 Network Upgrades and Distribution Upgrades.**

Transmission Provider or Transmission Owner shall design, procure, construct, install, and own the Network Upgrades and Distribution Upgrades described in Appendix A, Interconnection Facilities, Network Upgrades and Distribution Upgrades. The interconnection Customer shall be responsible for all costs related to Distribution Upgrades. Unless Transmission Provider or Transmission Owner elects to fund the capital for the Network Upgrades, they shall be solely funded by Interconnection Customer.

### **11.4 Special Provisions for Affected Systems.**

The Interconnection Customer shall be responsible for all costs related to Network Upgrades required on Affected Systems.

### **11.5 Provision of Security.**

At least thirty (30) Calendar Days prior to the commencement of the design, procurement, installation, or construction of a discrete portion of a Transmission Provider's Interconnection Facilities, Network Upgrades, or Distribution Upgrades, Interconnection Customer shall provide Transmission Provider, at Interconnection Customer's option, a guarantee, a surety bond, letter of credit or other form of security that is reasonably acceptable to Transmission Provider and is consistent with the Uniform Commercial Code of the jurisdiction identified in Article 14.2.1. Such security for payment shall be in an amount sufficient to cover the costs for constructing, designing, procuring and installing the applicable portion of Transmission Provider's Interconnection Facilities, Network Upgrades, or Distribution Upgrades and shall be reduced on a dollar-for-dollar basis for payments made to Transmission Provider for these purposes.

In addition:

#### **11.5.1**

The guarantee must be made by an entity that meets the creditworthiness requirements of Transmission Provider, and contain terms and conditions that guarantee payment of any amount that may be due from Interconnection Customer, up to an agreed-to maximum amount.

#### **11.5.2**

The letter of credit must be issued by a financial institution reasonably acceptable to Transmission Provider and must specify a reasonable expiration date.

#### **11.5.3**

The surety bond must be issued by an insurer reasonably acceptable to Transmission Provider and must specify a reasonable expiration date.

### **11.6 Interconnection Customer Compensation.**

If Transmission Provider requests or directs Interconnection Customer to provide a service pursuant to Articles 9.5.3 (Payment for Reactive Power), or 13.4.1 of this QF-LGIA,

Transmission Provider shall compensate Interconnection Customer in accordance with Interconnection Customer's applicable rate schedule then in effect unless the provision of such service(s) is subject to an RTO or ISO FERC-approved rate schedule. Interconnection Customer shall serve Transmission Provider or RTO or ISO with any filing of a proposed rate schedule at the time of such filing with FERC. To the extent that no rate schedule is in effect at the time the Interconnection Customer is required to provide or absorb any Reactive Power under this QF-LGIA, Transmission Provider agrees to compensate Interconnection Customer in such amount as would have been due Interconnection Customer had the rate schedule been in effect at the time service commenced; provided, however, that such rate schedule must be filed at FERC or other appropriate Governmental Authority within sixty (60) Calendar Days of the commencement of service.

#### **11.6.1 Interconnection Customer Compensation for Actions During Emergency Condition.**

Transmission Provider or RTO or ISO shall compensate Interconnection Customer for its provision of real and reactive power and other Emergency Condition services that Interconnection Customer provides to support the Transmission System during an Emergency Condition in accordance with Article 11.6.

### **Article 12. Invoice**

#### **12.1 General.**

Each Party shall submit to the other Party, on a monthly basis, invoices of amounts due for the preceding month. Each invoice shall state the month to which the invoice applies and fully describe the services and equipment provided. The Parties may discharge mutual debts and payment obligations due and owing to each other on the same date through netting, in which case all amounts a Party owes to the other Party under this QF-LGIA, including interest payments or credits, shall be netted so that only the net amount remaining due shall be paid by the owing Party.

#### **12.2 Final Invoice.**

Within six months after completion of the construction of Transmission Provider's Interconnection Facilities and the Network Upgrades, Transmission Provider shall provide an invoice of the final cost of the construction of Transmission Provider's Interconnection Facilities and the Network Upgrades and shall set forth such costs in sufficient detail to enable Interconnection Customer to compare the actual costs with the estimates and to ascertain deviations, if any, from the cost estimates. Transmission Provider shall refund to Interconnection Customer any amount by which the actual payment by Interconnection Customer for estimated costs exceeds the actual costs of construction within thirty (30) Calendar Days of the issuance of such final construction invoice.

#### **12.3 Payment.**

Invoices shall be rendered to the paying Party at the address specified in Appendix F. The Party receiving the invoice shall pay the invoice within thirty (30) Calendar Days of receipt. All payments shall be made in immediately available funds payable to the other Party, or by wire transfer to a bank named and account designated by the invoicing Party. Payment of invoices by either Party will not constitute a waiver of any rights or claims either Party may have under this QF-LGIA.

## **12.4 Disputes.**

In the event of a billing dispute between Transmission Provider and Interconnection Customer, Transmission Provider shall continue to provide Interconnection Service under this QF-LGIA as long as Interconnection Customer: (i) continues to make all payments not in dispute; and (ii) pays to Transmission Provider or into an independent escrow account the portion of the invoice in dispute, pending resolution of such dispute. If Interconnection Customer fails to meet these two requirements for continuation of service, then Transmission Provider may provide notice to Interconnection Customer of a Default pursuant to Article 17. Within thirty (30) Calendar Days after the resolution of the dispute, the Party that owes money to the other Party shall pay the amount due with interest calculated in accord with the methodology set forth in FERC's regulations at 18 CFR § 35.19a(a)(2)(iii).

## **Article 13. Emergencies**

### **13.1 Obligations.**

Each Party shall comply with the Emergency Condition procedures of the applicable ISO/RTO, NERC, the Applicable Reliability Council, Applicable Laws and Regulations, and any emergency procedures agreed to by the Parties.

### **13.2 Notice.**

Transmission Provider shall notify Interconnection Customer promptly when it becomes aware of an Emergency Condition that affects Transmission Provider's Interconnection Facilities or the Transmission System that may reasonably be expected to affect Interconnection Customer's operation of the Large Generating Facility or Interconnection Customer's Interconnection Facilities. Interconnection Customer shall notify Transmission Provider promptly when it becomes aware of an Emergency Condition that affects the Large Generating Facility or Interconnection Customer's Interconnection Facilities that may reasonably be expected to affect the Transmission System or Transmission Provider's Interconnection Facilities. 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 interconnection Customer's or Transmission Provider's facilities and operations, its anticipated duration and the corrective action taken and/or to be taken. The initial notice shall be followed as soon as practicable with written notice.

### **13.3 Immediate Action.**

Unless, in Interconnection Customer's reasonable judgment, immediate action is required, Interconnection Customer shall obtain the consent of Transmission Provider, such consent to not be unreasonably withheld, prior to performing any manual switching operations at the Large Generating Facility or Interconnection Customer's Interconnection Facilities in response to an Emergency Condition either declared by Transmission Provider or otherwise regarding the Transmission System.

### **13.4 Transmission Provider Authority.**

#### **13.4.1 General.**

Transmission Provider may take whatever actions or inactions with regard to the Transmission System or Transmission Provider's Interconnection Facilities it deems necessary during an Emergency Condition in order to (i) preserve public health and

safety, (ii) preserve the reliability of the Transmission System or Transmission Provider's Interconnection Facilities, (iii) limit or prevent damage, and (iv) expedite restoration of service.

Transmission Provider shall use Reasonable Efforts to minimize the effect of such actions or inactions on the Large Generating Facility Interconnection Customer's Interconnection Facilities. Transmission Provider may, on the basis of technical considerations, require the Large Generating Facility to mitigate an Emergency Condition by taking actions necessary and limited in scope to remedy the Emergency Condition, including, but not limited to, directing Interconnection Customer to shut-down, start-up, increase or decrease the real or reactive power output of the Large Generating Facility; implementing a reduction or disconnection pursuant to Article 13.4.2; directing Interconnection Customer to assist with blackstart (if available) or restoration efforts; or altering the outage schedules of the Large Generating Facility and Interconnection Customer's Interconnection Facilities. Interconnection Customer shall comply with all of Transmission Provider's operating instructions concerning Large Generating Facility real power and reactive power output within the manufacturer's design limitations of the Large Generating Facility's equipment that is in service and physically available for operation at the time, in compliance with Applicable Laws and Regulations

#### **13.4.2 Reduction and Disconnection.**

Transmission Provider may reduce Interconnection Service or disconnect the Large Generating Facility or Interconnection Customer's Interconnection Facilities, when such, reduction or disconnection is necessary under Good Utility Practice due to Emergency Conditions. These rights are separate and distinct from any right of curtailment of Transmission Provider pursuant to Transmission Provider's OATT. When Transmission Provider can schedule the reduction or disconnection in advance, Transmission Provider shall notify Interconnection Customer of the reasons, timing and expected duration of the reduction or disconnection. Transmission Provider shall coordinate with Interconnection Customer using Good Utility Practice to schedule the reduction or disconnection during periods of least impact to Interconnection Customer and Transmission Provider. Any reduction or disconnection shall continue only for so long as reasonably necessary under Good Utility Practice. The Parties shall cooperate with each other to restore the Large Generating Facility, the Interconnection Facilities, and the Transmission System to their normal operating state as soon as practicable consistent with Good Utility Practice Interconnection Customer Authority. Consistent with Good Utility Practice and the QF-LGIA and the QF-LGIP, Interconnection Customer may take actions or inactions with regard to the Large Generating Facility or Interconnection Customer's Interconnection Facilities during an Emergency Condition in order to (i) preserve public health and safety, (ii) preserve the reliability of the Large Generating Facility or Interconnection Customer's Interconnection Facilities, (iii) limit or prevent damage, and (iv) expedite restoration of service. Interconnection Customer shall use Reasonable Efforts to minimize the effect of such actions or inactions on the Transmission System and Transmission Provider's Interconnection Facilities. Transmission Provider shall use Reasonable Efforts to assist Interconnection Customer in such actions.

### **13.5 Limited Liability.**

Except as otherwise provided in Article 11.6.1 of this QF-LGIA, neither Party shall be liable to the other for any action it takes in responding to an Emergency Condition so long as such action is made in good faith and is consistent with Good Utility Practice.

## **Article 14. Regulatory Requirements and Governing Law**

### **14.1 Regulatory Requirements.**

Each Party's obligations under this QF-LGIA shall be subject to its receipt of any required approval or certificate from one or more Governmental Authorities in the form and substance satisfactory to the applying Party, or the Party making any required filings with, or providing notice to, such Governmental Authorities, and the expiration of any time period associated therewith. These regulatory requirements include, but are not limited to, certification of the Interconnection Customer's Generating Facility as a QF. Each Party shall in good faith seek and use its Reasonable Efforts to obtain such other approvals. Nothing in this QF-LGIA shall require Interconnection Customer to take any action that could result in its inability to obtain, or its loss of, status or exemption under the Federal Power Act, the Public Utility Holding Company Act of 1935, as amended, or the Public Utility Regulatory Policies Act of 1978.

### **14.2 Governing Law.**

#### **14.2.1**

The validity, interpretation and performance of this QF-LGIA and each of its provisions shall be governed by the laws of the state where the Point of Interconnection is located, without regard to its conflicts of law principles.

#### **14.2.2**

This QF-LGIA is subject to all Applicable Laws and Regulations.

#### **14.2.3**

Each Party expressly reserves the right to seek changes in, appeal, or otherwise contest any laws, orders, rules, or regulations of a Governmental Authority.

## **Article 15. Notices.**

### **15.1 General.**

Unless otherwise provided in this QF-LGIA, any notice, demand or request required or permitted to be given by either Party to the other and any instrument required or permitted to be tendered or delivered by either Party in writing to the other shall be effective when delivered and may be so given, tendered or delivered, by recognized national courier, or by depositing the same with the United States Postal Service with postage prepaid, for delivery by certified or registered mail, addressed to the Party, or personally delivered to the Party, at the address set out in Appendix F, Addresses for Delivery of Notices and Billings.

Either Party may change the notice information in this QF-LGIA by giving five (5) Business Days written notice prior to the effective date of the change.

**15.2 Billings and Payments.**

Billings and payments shall be sent to the addresses set out in Appendix F.

**15.3 Alternative Forms of Notice.**

Any notice or request required or permitted to be given by a Party to the other and not required by this QF-LGIA to be given in writing may be so given by telephone, facsimile or email to the telephone numbers and email addresses set out in Appendix F.

**15.4 Operations and Maintenance Notice.**

Each Party shall notify the other Party in writing of the identity of the person(s) that it designates as the point(s) of contact with respect to the implementation of Articles 9 and 10.

**Article 16. Force Majeure**

**16.1 Force Majeure.**

**16.1.1**

Economic hardship is not considered a Force Majeure event.

**16.1.2**

Neither Party shall be considered to be in Default with respect to any obligation hereunder, (including obligations under Article 4), other than the obligation to pay money when due, if prevented from fulfilling such obligation by Force Majeure. A Party unable to fulfill any obligation hereunder (other than an obligation to pay money when due) by reason of Force Majeure shall give notice and the full particulars of such Force Majeure to the other Party in writing or by telephone as soon as reasonably possible after the occurrence of the cause relied upon.

Telephone notices given pursuant to this article shall be confirmed in writing as soon as reasonably possible and shall specifically state full particulars of the Force Majeure, 'the time and date when the Force Majeure occurred and when the Force Majeure is reasonably expected to cease. The Party affected shall exercise due diligence to remove such disability with reasonable dispatch, but shall not be required to accede or agree to any provision not satisfactory to it in order to settle and terminate a strike or other labor disturbance.

**Article 17. Default**

**17.1 Default**

**17.1.1 General.**

No Default shall exist where such failure to discharge an obligation (other than the payment of money) is the result of Force Majeure as defined in this QF-LGIA or the result of an act of omission of the other Party. Upon a Breach, the non-breaching Party shall give written notice of such Breach to the Breaching Party. Except as provided in Article 17.1.2, the Breaching Party shall have thirty (30) Calendar Days from receipt of the Breach notice within which to cure such Breach; provided however, if such Breach is not capable of cure within thirty (30) Calendar Days, the Breaching Party shall commence such cure within thirty (30) Calendar Days after notice and continuously and

diligently complete such cure within ninety (90) Calendar Days from receipt of the Breach notice; and, if cured within such time, the Breach specified in such notice shall cease to exist.

**17.1.2 Right to Terminate.**

If a Breach is not cured as provided in this article, or if a Breach is not capable of being cured within the period provided for herein, the non-breaching Party shall have the right to declare a Default and terminate this QF-LGIA by written notice at any time until cure occurs, and be relieved of any further obligation hereunder and, whether or not that Party terminates this QF-LGIA, to recover from the Breaching Party all amounts due hereunder, plus all other damages and remedies to which it is entitled at law or in equity. The provisions of this article will survive termination of this QF-LGIA.

**Article 18. Indemnity, Consequential Damages and Insurance**

**18.1 Indemnity.**

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 inactions of its obligations under this QF-LGIA on behalf of the Indemnifying Party, except in cases of gross negligence or intentional wrongdoing by the indemnified Party.

**18.1.1 Indemnified Person.**

If an Indemnified Person is entitled to indemnification under this Article 18 as a result of a claim by a third party, and the Indemnifying Party fails, after notice and reasonable opportunity to proceed under Article 18.1, to assume the defense of such 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.

**18.1.2 Indemnifying Party.**

If an Indemnifying Party is obligated to indemnify and hold any Indemnified Person harmless under this Article 18, 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.

**18.1.3 Indemnity Procedures.**

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 Article 18.1 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.

The Indemnifying Party shall have the right to assume the defense thereof with counsel designated by such Indemnifying Party and reasonably satisfactory to the Indemnified Person. If the defendants in any such action include one or more Indemnified Persons and the Indemnifying Party and if the Indemnified Person reasonably concludes that there

may be legal defenses available to it and/or other Indemnified Persons which are different from or additional to those available to the Indemnifying Party, the Indemnified Person shall have the right to select separate counsel to assert such legal defenses and to otherwise participate in the defense of such action on its own behalf. In such instances, the Indemnifying Party shall only be required to pay the fees and expenses of one additional attorney to represent an Indemnified Person or Indemnified Persons having such differing or additional legal defenses.

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

## **18.2 Consequential Damages.**

Other than the Liquidated Damages heretofore described, in no event shall either Party be liable under any provision of this QF-LGIA 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.

## **18.3 Insurance.**

Each party shall, at its own expense, maintain in force throughout the period of this QF-LGIA, and until released by the other Party, the following minimum insurance coverages, with insurers authorized to do business in the state where the Point of Interconnection is located:

### **18.3.1**

Employers' Liability and Workers' Compensation Insurance providing statutory benefits in accordance with the laws and regulations of the state in which the Point of interconnection is located.

### **18.3.2**

Commercial General Liability Insurance including premises and operations, personal injury, broad form property damage, broad form blanket contractual liability coverage (including coverage for the contractual indemnification) products and completed operations coverage, coverage for explosion, collapse and underground hazards, independent contractors coverage, coverage for pollution to the extent normally available and punitive damages to the extent normally available and a cross liability endorsement, with minimum limits of One Million Dollars

(\$1,000,000) per occurrence/One Million Dollars (\$1,000,000) aggregate combined single limit for personal injury, bodily injury, including death and property damage.

### **18.3.3**

Comprehensive Automobile Liability Insurance for coverage of owned and non-owned and hired vehicles, trailers or semi-trailers designed for travel on public roads, with a minimum, combined single limit of One Million Dollars (\$1,000,000) per occurrence for bodily injury, including death, and property damage.

### **18.3.4**

Excess Public Liability Insurance over and above the Employers' Liability Commercial General Liability and Comprehensive Automobile Liability Insurance coverage, with a minimum combined single limit of Twenty Million Dollars (\$20,000,000) per occurrence/Twenty Million Dollars (\$20,000,000) aggregate.

### **18.3.5**

The Commercial General Liability Insurance, Comprehensive Automobile Insurance and Excess Public Liability Insurance policies shall name the other Party, its parent, associated and Affiliate companies and their respective directors, officers, agents, servants and employees ("Other Party Group") as additional insured. All policies shall contain provisions whereby the insurers waive all rights of subrogation in accordance with the provisions of this QF-LGIA against the Other Party Group and provide thirty (30) Calendar Days advance written notice to the Other Party Group prior to anniversary date of cancellation or any material change in coverage or condition.

### **18.3.6**

The Commercial General Liability Insurance, Comprehensive Automobile Liability Insurance and Excess Public Liability Insurance policies shall contain provisions that specify that the policies are primary and shall apply to such extent without consideration for other policies separately carried and shall state that each insured is provided coverage as though a separate policy had been issued to each, except the insurer's liability shall not be increased beyond the amount for which the insurer would have been liable had only one insured been covered. Each Party shall be responsible for its respective deductibles or retentions.

### **18.3.7**

The Commercial General Liability Insurance, Comprehensive Automobile Liability Insurance and Excess Public Liability Insurance policies, if written on a Claims First Made Basis, shall be maintained in full force and effect for two (2) years after termination of this QF-LGIA, which coverage may be in the form of tail coverage or extended reporting period coverage if agreed by the Parties.

### **18.3.8**

The requirements contained herein as to the types and limits of all insurance to be maintained by the Parties are not intended to and shall not in any manner, limit or qualify the liabilities and obligations assumed by the Parties under this QF-LGIA.

### **18.3.9**

Within ten (10) days following execution of this QF-LGIA, and as soon as practicable after the end of each fiscal year or at the renewal of the insurance policy and in any event within ninety (90) days thereafter, each Party shall provide certification of all insurance required in this QF-LGIA, executed by each insurer or by an authorized representative of each insurer.

### **18.3.10**

Notwithstanding the foregoing, each Party may self-insure to meet the minimum insurance requirements of Articles 18.3.2 through 18.3.8 to the extent it maintains a self-insurance program; provided that, such Party's senior secured debt is rated at investment grade or better by Standard & Poor's and that its self-insurance program meets the minimum insurance requirements of Articles 18.3.2 through 18.3.8. For any period of time that a Party's senior secured debt is unrated by Standard & Poor's or is rated at less than investment grade by Standard & Poor's, such Party shall comply with the insurance requirements applicable to it under Articles 18.3.2 through 18.3.9. In the event that a Party is permitted to self-insure pursuant to this article, it shall notify the other Party that it meets the requirements to self-insure and that its self-insurance program meets the minimum insurance requirements in a manner consistent with that specified in Article 18.3.9.

### **18.3.11**

The Parties agree to report to each other in writing as soon as practical all accidents or occurrences resulting in injuries to any person, including death, and any property damage arising out of this QF-LGIA.

## **Article 19. Assignment**

### **19.1 Assignment.**

This QF-LGIA may be assigned by either Party only with the written consent of the other; provided that either Party may assign this QF-LGIA without the consent of the other Party to any Affiliate 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 QF-LGIA; and provided further that Interconnection Customer shall have the right to assign this QF-LGIA, without the consent of Transmission Provider, for collateral security purposes to aid in providing financing for the Large Generating Facility, provided that Interconnection Customer will promptly notify Transmission Provider of any such assignment. Any financing arrangement entered into by Interconnection Customer pursuant to this article will provide that prior to or upon the exercise of the secured Party's, trustee's or mortgagee's assignment rights pursuant to said arrangement, the secured creditor, the trustee or mortgagee will notify Transmission Provider of the date and particulars of any such exercise of assignment right(s), including providing the

Transmission Provider with proof that it meets the requirements of Articles 11.5 and 18.3. Any attempted assignment that violates this article is void and ineffective. Any assignment under this QF-LGIA shall not relieve a Party of its obligations, nor shall a Party's obligations be enlarged, in whole or in part, by reason thereof. Where required, consent to assignment will not be unreasonably withheld, conditioned or delayed.

**Article 20. Severability**

**20.1 Severability.**

If any provision in this QF-LGIA is finally determined to be invalid, void or unenforceable by any court or other Governmental Authority having jurisdiction, such determination shall not invalidate, void or make unenforceable any other provision, agreement or covenant of this QF-LGIA; provided that if Interconnection Customer (or any third party, but only if such third party is not acting at the direction of Transmission Provider) seeks and obtains such a final determination with respect to any provision of the Alternate Option (Article 5.1.2), or the Negotiated Option (Article 5.1.4), then none of these provisions shall thereafter have any force or effect and the Parties' rights and obligations shall be governed solely by the Standard Option (Article 5.1.1).

**Article 21. Comparability**

**21.1 Comparability.**

The Parties will comply with all applicable comparability and code of conduct laws, rules and regulations, as amended from time to time.

**Article 22. Confidentiality**

**22.1 Confidentiality.**

Confidential Information shall include, without limitation, all information relating to a Party's technology, research and development, business affairs, and pricing, and any information supplied by either of the Parties to the other prior to the execution of this QF-LGIA.

Information is Confidential Information only if it is clearly designated or marked in writing as confidential on the face of the document, or, if the information is conveyed orally or by inspection, if the Party providing the information orally informs the Party receiving the information that the information is confidential.

If requested by either Party, the other Party shall provide in writing, the basis for asserting that the information referred to in this Article 22 warrants confidential treatment, and the requesting Party may disclose such writing to the appropriate Governmental Authority. Each Party shall be responsible for the costs associated with affording confidential treatment to its information. The release of Confidential Information shall be subject to Applicable Laws and Regulations and Applicable Reliability Standards

#### **22.1.1 Term.**

During the term of this QF-LGIA, and for a period of three (3) years after the expiration or termination of this QF-LGIA, except as otherwise provided in this Article 22, each Party shall hold in confidence and shall not disclose to any person Confidential Information.

#### **22.1.2 Scope.**

Confidential Information shall not include information that the receiving Party can demonstrate: (1) is generally available to the public other than as a result of a disclosure by the receiving Party; (2) was in the lawful possession of the receiving Party on a non-confidential basis before receiving it from the disclosing Party; (3) was supplied to the receiving Party without restriction by a third party, who, to the knowledge of the receiving Party after due inquiry, was under no obligation to the disclosing Party to keep such information confidential; (4) was independently developed by the receiving Party without reference to Confidential Information of the disclosing Party; (5) is, or becomes, publicly known, through no wrongful act or omission of the receiving Party or Breach of this QF-LGIA; or (6) is required, in accordance with Article 22.1.7 of the QF-LGIA, Order of Disclosure, to be disclosed by any Governmental Authority or is otherwise required to be disclosed by law or subpoena, or is necessary in any legal proceeding establishing rights and obligations under this QF-LGIA. Information designated as Confidential Information will no longer be deemed confidential if the Party that designated the information as confidential notifies the other Party that it no longer is confidential.

#### **22.1.3 Release of Confidential Information.**

Neither Party shall release or disclose Confidential Information to any other person, except to its Affiliates (limited by the Standards of Conduct requirements), subcontractors, employees, consultants, or to parties who may be or considering providing financing to or equity participation with Interconnection Customer, or to potential purchasers or assignees of Interconnection Customer, on a need-to-know basis in connection with this QF-LGIA, unless such person has first been advised of the confidentiality provisions of this Article 22 and has agreed to comply with such provisions. Notwithstanding the foregoing, a Party providing Confidential Information to any person shall remain primarily responsible for any release of Confidential Information in contravention of this Article 22.

#### **22.1.4 Rights.**

Each Party retains all rights, title, and interest in the Confidential Information that each Party discloses to the other Party. The disclosure by each Party to the other Party of Confidential Information shall not be deemed a waiver by either Party or any other person or entity of the right to protect the Confidential Information from public disclosure.

#### **22.1.5 No Warranties.**

By providing Confidential Information, neither Party makes any warranties or representations as to its accuracy or completeness. In addition, by supplying Confidential Information, neither Party obligates itself to provide any particular information or Confidential Information to the other Party nor to enter into any further agreements or proceed with any other relationship or joint venture.

#### **22.1.6 Standard of Care.**

Each Party shall use at least the same standard of care to protect Confidential Information it receives as it uses to protect its own Confidential Information from unauthorized disclosure, publication or dissemination. Each Party may use Confidential Information solely to fulfill its obligations to the other Party under this QF-LGIA or its regulatory requirements.

#### **22.1.7 Order of Disclosure.**

If a court or a Government Authority or entity with the right, power, and apparent authority to do so requests or requires either Party, by subpoena, oral deposition, interrogatories, requests for production of documents, administrative order, or otherwise, to disclose Confidential Information, that Party shall provide the other Party with prompt notice of such request(s) or requirement(s) so that the other Party may seek an appropriate protective order or waive compliance with the terms of this QF-LGIA. Notwithstanding the absence of a protective order or waiver, the Party may disclose such Confidential Information which, in the opinion of its counsel, the Party is legally compelled to disclose. Each Party will use Reasonable Efforts to obtain reliable assurance that confidential treatment will be accorded any Confidential Information so furnished.

#### **22.1.8 Termination of Agreement.**

Upon termination of this QF-LGIA for any reason, each Party shall, within ten (10) Calendar Days of receipt of a written request from the other Party, use Reasonable Efforts to destroy, erase, or delete (with such destruction, erasure, and deletion certified in writing to the other Party) or return to the other Party, without retaining copies thereof, any and all written or electronic Confidential Information received from the other Party

#### **22.1.9 Remedies.**

The Parties agree that monetary damages would be inadequate to compensate a Party for the other Party's Breach of its obligations under this Article 22. Each Party accordingly agrees that the other Party shall be entitled to equitable relief, by way of injunction or otherwise, if the first Party Breaches or threatens to Breach its obligations under this Article 22, which equitable relief shall be granted without bond or proof of damages, and the receiving Party shall not plead in defense that there would be an adequate remedy at law. Such remedy shall not be deemed an exclusive remedy for the Breach of this Article 22 but shall be in addition to all other remedies available at law or inequity. The Parties further acknowledge and agree that the covenants contained herein are necessary for the protection of legitimate business interests and are reasonable in scope. No Party, however, shall be Liable for indirect, incidental, or consequential or punitive damages of any nature or kind resulting from or arising in connection with this Article 22.

#### **22.1.10 Disclosure to OPUC or its Staff.**

Notwithstanding anything in this Article 22 to the contrary, and pursuant to 18 CFR section 1b.20, if OPUC or its staff, during the course of an investigation or otherwise, requests information from one of the Parties that is otherwise required to be maintained in confidence pursuant to this QF-LGIA, the Party shall provide the requested information to OPUC or its staff, within the time provided for in the request for information. In providing the information to OPUC or its staff, the Party must request that the information be treated as confidential and non-public by OPUC and its staff and that the information be withheld from public disclosure. Parties are prohibited from notifying the other Party to this QF-LGIA prior to the release of the Confidential Information to OPUC or its staff. The Party shall notify the other Party to the QF-LGIA when it is notified by OPUC or its staff that a request to release Confidential Information has been received by OPUC, at which time either of the Parties may respond before such information would be made public.

#### **22.1.11**

Subject to the exception in Article 22.1.10, any information that a Party claims is competitively sensitive, commercial or financial information under this QF-LGIA ("Confidential Information") shall not be disclosed by the other Party to any person not employed or retained by the other Party, except to the extent disclosure is (i) required by law; (ii) reasonably deemed by the disclosing Party to be required to be disclosed in connection with a dispute between or among the Parties, or the defense of litigation or dispute; (iii) otherwise permitted by consent of the other Party, such consent not to be unreasonably withheld; or (iv) necessary to fulfill its obligations under this QF-LGIA or as a transmission service provider or a Control Area operator including disclosing the Confidential Information to an RTO or ISO or to a regional or national reliability organization. The Party asserting confidentiality shall notify the other Party in writing of the information it claims is confidential. Prior to any disclosures of the other Party's Confidential Information under this subparagraph, or if any third Party or Governmental Authority makes any request or demand for any of the information described in this subparagraph, the disclosing Party agrees to promptly notify the other Party in writing and agrees to assert confidentiality and cooperate with the other Party in seeking to protect the Confidential Information from public disclosure by confidentiality agreement, protective order or other reasonable measures.

### **Article 23. Environmental Releases**

#### **23.1**

Each Party shall notify the other Party, first orally and then in writing, of the release of any Hazardous Substances, any asbestos or lead abatement activities, or any type of remediation activities related to the Large Generating Facility or the Interconnection Facilities, each of which may reasonably be expected to affect the other Party. The notifying Party shall: (i) provide the notice as soon as practicable, provided such Party makes a good faith effort to provide the notice no later than twenty-four hours after such Party becomes aware of the occurrence; and (ii) promptly furnish to the other Party copies of any publicly available reports filed with any Governmental Authorities addressing such events.

## **Article 24. Information Requirements**

### **24.1 Information Acquisition.**

Transmission Provider and Interconnection Customer shall submit specific information regarding the electrical characteristics of their respective facilities to each other as described below and in accordance with Applicable Reliability Standards.

### **24.2 Information Submission by Transmission Provider.**

The initial information submission by Transmission Provider shall occur no later than one hundred eighty (180) Calendar Days prior to Trial Operation and shall include Transmission System information necessary to allow Interconnection Customer to select equipment and meet any system protection and stability requirements, unless otherwise agreed to by the Parties. On a monthly basis Transmission Provider shall provide Interconnection Customer a status report on the construction and installation of Transmission Provider's Interconnection Facilities and Network Upgrades, including, but not limited to, the following information: (1) progress to date; (2) a description of the activities since the last report (3) a description of the action items for the next period; and (4) the delivery status of equipment ordered.

### **24.3 Updated Information Submission by Interconnection Customer.**

The updated information submission by Interconnection Customer, including manufacturer information, shall occur no later than one hundred eighty (180) Calendar Days prior to the Trial Operation. Interconnection Customer shall submit a completed copy of the Large Generating Facility data requirements contained in Appendix 1 to the QF-LGIP. It shall also include any additional information provided to Transmission Provider for the Cluster Study and Facilities Study. Information in this submission shall be the most current Large Generating Facility design or expected performance data. Information submitted for stability models shall be compatible with Transmission Provider standard models. If there is no compatible model, Interconnection Customer will work with a consultant mutually agreed to by the Parties to develop and supply a standard model and associated information.

If Interconnection Customer's data is materially different from what was originally provided to Transmission Provider pursuant to the Interconnection Study Agreement between Transmission Provider and Interconnection Customer, then Transmission Provider will conduct appropriate studies to determine the impact on Transmission Provider Transmission System based on the actual data submitted pursuant to this Article 24.3. The Interconnection Customer shall not begin Trial Operation until such studies are completed.

### **24.4 Information Supplementation.**

Prior to the Commercial Operation Date, the Parties shall supplement their information submissions described above in this Article 24 with any and all "as-built" Large Generating Facility information or "as-tested" performance information that differs from the initial submissions or, alternatively, written confirmation that no such differences exist. The Interconnection Customer shall conduct tests on the Large Generating Facility as required by Good Utility Practice such as an open circuit "step voltage" test on the Large Generating Facility to verify proper operation of the Large Generating Facility's automatic voltage regulator.

Unless otherwise agreed, the test conditions shall include: (1) Large Generating Facility at synchronous speed; (2) automatic voltage regulator on and in voltage control mode; and (3) a five percent change in Large Generating Facility terminal voltage initiated by a change in the voltage regulators reference voltage. Interconnection Customer shall provide validated test recordings showing the responses of Large Generating Facility terminal and field voltages. In the event that direct recordings of these voltages is impractical, recordings of other voltages or currents that mirror the response of the Large Generating Facility's terminal or field voltage are acceptable if information necessary to translate these alternate quantities to actual Large Generating Facility terminal or field voltages is provided. Large Generating Facility testing shall be conducted and results provided to Transmission Provider for each individual generating unit in a station.

Subsequent to the Commercial Operation Date, Interconnection Customer shall provide Transmission Provider any information changes due to equipment replacement, repair, or adjustment. Transmission Provider shall provide Interconnection Customer any information changes due to equipment replacement, repair or adjustment in the directly connected substation or any adjacent Transmission Provider-owned substation that may affect Interconnection Customer's Interconnection Facilities equipment ratings, protection or operating requirements. The Parties shall provide such information no later than thirty (30) Calendar Days after the date of the equipment replacement, repair or adjustment.

## **Article 25. Information Access and Audit Rights**

### **25.1 Information Access.**

Each Party (the "disclosing Party") shall make available to the other Party information that is in the possession of the disclosing Party and is necessary in order for the other Party to: (i) verify the costs incurred by the disclosing Party for which the other Party is responsible under this QF-LGIA; and (ii) carry out its obligations and responsibilities under this QF-LGIA. The Parties shall not use such information for purposes other than those set forth in this Article 25.1 and to enforce their rights under this QF-LGIA.

### **25.2 Reporting of Non-Force Majeure Events.**

Each Party (the "notifying Party") shall notify the other Party when the notifying Party becomes aware of its inability to comply with the provisions of this QF-LGIA for a reason other than a Force Majeure event. The Parties agree to cooperate with each other and provide necessary information regarding such inability to comply, including the date, duration, reason for the inability to comply, and corrective actions taken or planned to be taken with respect to such inability to comply. Notwithstanding the foregoing, notification, cooperation or information provided under this article shall not entitle the Party receiving such notification to allege a cause for anticipatory breach of this QF-LGIA.

### **25.3 Audit Rights.**

Subject to the requirements of confidentiality under Article 22 of this QF-LGIA, each Party shall have the right, during normal business hours, and upon prior reasonable notice to the other Party, to audit at its own expense the other Party's accounts and records pertaining to either Party's performance or either Party's satisfaction of obligations under this QF-LGIA. Such audit rights shall include audits of the other Party's costs, calculation of invoiced amounts, Transmission Provider's efforts to allocate responsibility for the provision of reactive support to the Transmission System, Transmission Provider's efforts to allocate responsibility for interruption or

reduction of generation on the Transmission System, and each Party's actions in an Emergency Condition. Any audit authorized by this Article shall be performed at the offices where such accounts and records are maintained and shall be limited to those portions of such accounts and records that relate to each Party's performance and satisfaction of obligations under this QF-LGIA. Each Party shall keep such accounts and records for a period equivalent to the audit rights periods described in Article 25.4.

#### **25.4 Audit Rights Periods.**

##### **25.4.1 Audit Rights Period for Construction-Related Accounts and Records.**

Accounts and records related to the design, engineering, procurement, and construction of Transmission Provider's Interconnection Facilities and Network Upgrades shall be subject to audit for a period of twenty-four months following Transmission Provider's issuance of a final invoice in accordance with Article 12.2.

##### **25.4.2 Audit Rights Period for All Other Accounts and Records.**

Accounts and records related to either Party's performance or satisfaction of all obligations under this QF-LGIA other than those described in Article 25.4.1 shall be subject to audit as follows: (i) for an audit relating to cost obligations, the applicable audit rights period shall be twenty-four months after the auditing Party's receipt of an invoice giving rise to such cost obligations; and (ii) for an audit relating to all other obligations, the applicable audit rights period shall be twenty-four months after the event for which the audit is sought.

#### **25.5 Audit Results.**

If an audit by a Party determines that an overpayment or an underpayment has occurred, a notice of such overpayment or underpayment shall be given to the other Party together with those records from the audit which support such determination.

### **Article 26. Subcontractors**

#### **26.1 General.**

Nothing in this QF-LGIA shall prevent a Party from utilizing the services of any subcontractor as it deems appropriate to Perform its obligations under this QF-LGIA; provided, however, that each Party shall require its subcontractors to comply with all applicable terms and conditions of this QF-LGIA in providing such services and each Party shall remain primarily liable to the other Party for the performance of such subcontractor.

#### **26.2 Responsibility of Principal.**

The creation of any subcontract relationship shall not relieve the hiring Party of any of its obligations under this QF-LGIA. 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; provided, however, that in no event shall Transmission Provider be liable for the actions or inactions of Interconnection Customer or its subcontractors with respect to obligations of Interconnection Customer under Article 5 of this QF-LGIA. Any applicable obligation imposed by this QF-LGIA upon the hiring Party shall be equally binding upon, and shall be construed as having application to, any subcontractor of such Party.

### **26.3 No Limitation by Insurance.**

The obligations under this Article 26 will not be limited in any way by any limitation of subcontractor's insurance.

## **Article 27. Disputes**

### **27.1 Submission.**

In the event either Party has a dispute, or asserts a claim, that arises out of or in connection with this QF-LGIA or its performance, such Party (the "disputing Party") shall provide the other Party with written notice of the dispute or claim ("Notice of Dispute"). Such dispute or claim shall be referred to a designated senior representative of each Party for resolution on an informal basis as promptly as practicable after receipt of the Notice of Dispute by the other Party. In the event the designated representatives are unable to resolve the claim or dispute through unassisted or assisted negotiations within thirty (30) Calendar Days of the other Party's receipt of the Notice of Dispute, such claim or dispute may, upon mutual agreement of the parties, be submitted to arbitration and resolved in accordance with the arbitration procedures set forth below. In the event the Parties do not agree to submit such claim or dispute to arbitration, each Party may exercise whatever rights and remedies it may have in equity or at law consistent with the terms of this QF-LGIA.

### **27.2 Arbitration of Disputes.**

(1) An interconnecting public utility or an interconnection applicant may petition the Commission for arbitration of disputes arising during review of an application to interconnect a large generator facility or during negotiation of an interconnection agreement. If the public utility or the applicant petitions the Commission to arbitrate their dispute, then the Commission will use an administrative law judge (ALJ) as arbitrator unless workload constraints necessitate the use of an outside arbitrator.

(2) A petition for arbitration of an interconnection agreement must contain: (a) A statement of all unresolved issues; (b) A description of each party's position on the unresolved issues; and (c) A proposed agreement addressing all issues, including those on which the parties have reached agreement and those that are in dispute.

(3) A petition for arbitration of a dispute arising during review of an application to interconnect a large generator facility must contain: (a) A statement of all unresolved issues; (b) A description of each party's position on the unresolved issues; and (c) A proposed resolution for each unresolved issue.

(4) Respondent may file a response within 25 calendar days of the petition for arbitration. In the response, the respondent must address each issue listed in the petition, describe the respondent's position on those issues, and present any additional issues for which the respondent seeks resolution.

(5) The filing of a petition for arbitration of a dispute arising during review of an application to interconnect a large generator facility does not affect the application's queue position.

(6) The arbitration is conducted in a manner similar to a contested case proceeding, and the arbitrator has the same authority to conduct the arbitration process as an ALJ has in conducting hearings under the Commission's rules, but the arbitration process is streamlined. The arbitrator holds an early conference to discuss processing of the case. The arbitrator establishes the schedule and decides whether an oral hearing is necessary. After the oral hearing or other procedures (for example, rounds of comments), each party submits its final proposed interconnection agreement or resolution of disputed issues. The arbitrator chooses between the two final offers. If neither offer is consistent with applicable statutes, Commission rules, and Commission policies, then the arbitrator will make a decision that meets those requirements.

(7) The arbitrator may allow formal discovery only to the extent deemed necessary. Parties are required to make good faith attempts to exchange information relevant to any disputed issue in an informal, voluntary, and prompt manner. Unresolved discovery disputes are resolved by the arbitrator upon request of a party. The arbitrator will order a party to provide information if the arbitrator determines the requesting party has a reasonable need for the requested information and that the request is not overly burdensome.

(8) Only the two negotiating parties have full party status. The arbitrator may confer with Commission staff for assistance throughout the arbitration process.

(9) To keep the process moving forward, appeals to the Commission are not allowed during the arbitration process. An arbitrator may certify a question to the Commission if the arbitrator believes it is necessary.

(10) To accommodate the need for flexibility, the arbitrator may use different procedures so long as the procedures are fair, treat the parties equitably, and substantially comply with the procedures listed here.

(11) The arbitrator must serve the arbitration decision on the interconnecting public utility and the interconnection applicant. The parties may file comments on the arbitration decision with the Commission within 10 calendar days after service.

(12) The Commission must accept, reject, or modify an arbitration decision within 30 calendar days after service of the decision.

(13) Within 14 calendar days after the Commission issues an order on a petition for arbitration of an interconnection agreement, the petitioner must prepare an interconnection agreement complying with the terms of the decision and serve it on respondent. Respondent must either sign and file the interconnection agreement or file objections to it within 10 calendar days of service of the agreement. If objections are filed, respondent must state how the interconnection agreement fails to comply with the Commission order and offer substitute language complying with the decision. The Commission must approve or reject a filed interconnection agreement within 20 calendar days of its filing or the agreement is deemed approved.

(14) If petitioner, without respondent's consent, fails to timely prepare and serve an interconnection agreement on respondent, respondent may file a motion requesting the Commission dismiss the petition for arbitration with prejudice. The Commission may grant such motion if the petitioner's failure to timely prepare and serve the interconnection agreement was the result of inexcusable neglect on the part of petitioner.

(15) The public utility and the applicant may agree to hire an outside arbitrator rather than file a petition with the Commission pursuant to Article 27.3.

**27.3 External Arbitration Procedures.**

Any arbitration initiated under this QF-LGIA shall be conducted before a single neutral arbitrator appointed by the Parties. If the Parties fail to agree upon a single arbitrator within ten (10) Calendar Days of the submission of the dispute to arbitration, each Party shall choose one arbitrator who shall sit on a three-member arbitration panel. The two arbitrators so chosen shall within twenty (20) Calendar Days select a third arbitrator to chair the arbitration panel. In either case, the arbitrators shall be knowledgeable in electric utility matters including electric transmission and bulk power issues, and shall not have any current or past substantial business or financial relationships with any party to the arbitration (except prior arbitration). The arbitrator(s) shall provide each of the Parties an opportunity to be heard and, except as otherwise provided herein, shall conduct the arbitration in accordance with the Commercial Arbitration Rules of the American Arbitration Association ("Arbitration Rules") provided, however, in the event of a conflict between the Arbitration Rules and the terms of this Article 27, the terms of this Article 27 shall prevail.

**27.4 Arbitration Decisions.**

Unless otherwise agreed by the Parties, the arbitrator(s) shall render a decision within ninety (90) Calendar Days of appointment and shall notify the Parties in writing of such decision and the reasons therefore. The arbitrator(s) shall be authorized only to interpret and apply the provisions of this QF-LGIA and shall have no power to modify or change any provision of this QF-LGIA in any manner. The decision of the arbitrator(s) shall be final and binding upon the Parties, and judgment on the award may be entered in any court having jurisdiction. The decision of the arbitrator(s) may be appealed solely on the grounds that the conduct of the arbitrator(s), or the decision itself, violated the standards set forth in the Federal Arbitration Act or the Administrative Dispute Resolution Act.

**27.5 Costs.**

Each Party shall be responsible for its own costs incurred during the arbitration process and for the following costs, if applicable: (1) the cost of the arbitrator chosen by the Party to sit on the three member panel and one half of the cost of the third arbitrator chosen; or (2) one half the cost of the single arbitrator jointly chosen by the Parties.

**Article 28. Representations, Warranties, and Covenants**

**28.1 General.**

Each Party makes the following representations, warranties and covenants:

**28.1.1 Good Standing.**

Such Party is duly organized, validly existing and in good standing under the laws of the state in which it is organized, formed, or incorporated, as applicable; that it is qualified to do business in the state or states in which the Large Generating Facility, Interconnection Facilities and Network Upgrades owned by such Party, as applicable, are located; and that it has the corporate power and authority to own its properties, to carry on its business

as now being conducted and to enter into this QF-LGIA and carry out the transactions contemplated hereby and perform and carry out all covenants and obligations on its part to be performed under and pursuant to this QF-LGIA.

#### **28.1.2 Authority.**

Such Party has the right, power and authority to enter into this QF-LGIA, to become a Party hereto and to perform its obligations hereunder. This QF-LGIA is a legal, valid and binding obligation of such Party, enforceable against such Party in accordance with its terms, except as the enforceability thereof may be limited by applicable bankruptcy, insolvency, reorganization or other similar laws affecting creditors' rights generally and by general equitable principles (regardless of whether enforceability is sought in a proceeding in equity or at law).

#### **28.1.3 No Conflict.**

The execution, delivery and performance of this QF-LGIA does not violate or conflict with the organizational or formation documents, or bylaws or operating agreement, of such Party, or any judgment, license, permit, order, material agreement or instrument applicable to or binding upon such Party or any of its assets.

#### **28.1.4 Consent and Approval.**

Such Party has sought or obtained, or, in accordance with this QF-LGIA will seek or obtain, each consent, approval, authorization, order, or acceptance by any Governmental Authority in connection with the execution, delivery and performance of this QF-LGIA, and it will provide to any Governmental Authority notice of any actions under this QF-LGIA that are required by Applicable Laws and Regulations.

### **Article 29. Miscellaneous**

#### **29.1 Binding Effect.**

This QF-LGIA and the rights and obligations hereof, shall be binding upon and shall inure to the benefit of the successors and assigns of the Parties hereto.

#### **29.2 Conflicts.**

In the event of a conflict between the body of this QF-LGIA and any attachment, appendices or exhibits hereto, the terms and provisions of the body of this QF-LGIA shall prevail and be deemed the final intent of the Parties.

#### **29.3 Rules of interpretation.**

This QF-LGIA, unless a clear contrary intention appears, shall be construed and interpreted as follows: (1) the singular number includes the plural number and vice versa; (2) reference to any person includes such person's successors and assigns but, in the case of a Party, only if such successors and assigns are permitted by this QF-LGIA, and reference to a person in a particular capacity excludes such person in any other capacity or individually; (3) reference to any agreement (including this QF-LGIA), document, instrument or tariff means such agreement, document, instrument, or tariff as amended or modified and in effect from time to time in accordance with the terms thereof and, if applicable, the terms hereof; (4) reference to any Applicable Laws and Regulations means such Applicable Laws and Regulations as amended,

modified, codified, or reenacted, in whole or in part, and in effect from time to time, including, if applicable, rules and regulations promulgated thereunder; (5) unless expressly stated otherwise, reference to any Article, Section or Appendix means such Article of this QF-LGIA or such Appendix to this QF-LGIA, or such Section to the QF-LGIP or such Appendix to the QF-LGIP, as the case may be; (6) "hereunder" "hereof", "herein", "hereto" and words of similar import shall be deemed references to this QF-LGIA as a whole and not to any particular Article or other provision hereof or thereof; (7) "including" (and with correlative meaning "include") means including without limiting the generality of any description preceding such term; and (8) relative to the determination of any period of time, "from" means "from and including", "to" means "to but excluding" and "through" means "through and including".

#### **29.4 Entire Agreement.**

This QF-LGIA, including all Appendices and Schedules attached hereto, 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 this QF-LGIA. There are no other agreements, representations, warranties, or covenants which constitute any part of the consideration for, or any condition to, either Party's compliance with its obligations under this QF-LGIA.

#### **29.5 No Third Party Beneficiaries.**

This QF-LGIA 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.

#### **29.6 Waiver.**

The failure of a Party to this QF-LGIA to insist, on any occasion, upon strict performance of any provision of this QF-LGIA will not be considered a waiver of any obligation, right, or duty of, or imposed upon, such Party.

Any waiver at any time by either Party of its rights with respect to this QF-LGIA 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 this QF-LGIA. Termination or Default of this QF-LGIA for any reason by Interconnection Customer shall not constitute a waiver of Interconnection Customer's legal rights to obtain an interconnection from Transmission Provider. Any waiver of this QF-LGIA shall, if requested, be provided in writing.

#### **29.7 Headings.**

The descriptive headings of the various Articles of this QF-LGIA have been inserted for convenience of reference only and are of no significance in the interpretation or construction of this QF-LGIA.

#### **29.8 Multiple Counterparts.**

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

**29.9 Amendment.**

The Parties may by mutual agreement amend this QF-LGIA by a written instrument duly executed by the Parties.

**29.10 Modification by the Parties.**

The Parties may by mutual agreement amend the Appendices to this QF-LGIA by a written instrument duly executed by the Parties. Such amendment shall become effective and a part of this QF-LGIA upon satisfaction of all Applicable Laws and Regulations.

**29.11 Reservation of Rights.**

Transmission Provider shall have the right to make a unilateral filing with OPUC to modify this QF-LGIA with respect to any rates, terms and conditions, charges, classifications of service, rule or regulation under applicable provision of the Federal or Oregon law or the OPUC’s rules and regulations thereunder, and Interconnection Customer shall have the right to make a unilateral filing with OPUC to modify this QF-LGIA pursuant to any other applicable provision of Federal or Oregon law or the OPUC’s rules and regulations thereunder; provided that each Party shall have the right to protest any such filing by the other Party and to participate fully in any proceeding before OPUC in which such modifications may be considered.

**29.12 No Partnership.**

This QF-LGIA shall 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.

IN WITNESS WHEREOF, the Parties have executed this QF-LGIA in duplicate originals, each of which shall constitute and be an original effective Agreement between the Parties.

**[Insert name of Transmission Provider or Transmission Owner, if applicable]**

By: \_\_\_\_\_ By: \_\_\_\_\_

Title: \_\_\_\_\_ Title: \_\_\_\_\_

Date: \_\_\_\_\_ Date: \_\_\_\_\_

**[Insert name of Interconnection Customer]**

By: \_\_\_\_\_ Title: \_\_\_\_\_ Date: \_\_\_\_\_

## **Appendix A to QF-LGIA**

### **Interconnection Facilities, Network Upgrades and Distribution Upgrades**

#### **1. Interconnection Facilities:**

(a) [insert Interconnection Customer's Interconnection Facilities]:

(b) [insert Transmission Provider's Interconnection Facilities]:

#### **2. Network Upgrades:**

(a) [insert Stand Alone Network Upgrades]:

(b) [insert Other Network Upgrades]:

#### **3. Distribution Upgrades:**

## **Appendix B to QF-LGIA**

### **Milestones**

## **Appendix C to QF-LGIA**

### **Interconnection Details**

## **Appendix D to QF-LGIA**

### **Security Arrangements Details**

Infrastructure security of Transmission System equipment and operations and control hardware and software is essential to ensure day-to-day Transmission System reliability and operational security. FERC will expect all Transmission Providers, market participants, and Interconnection Customers interconnected to the Transmission System to comply with the recommendations offered by the President's Critical Infrastructure Protection Board and, eventually, best practice recommendations from the electric reliability authority. All public utilities will be expected to meet basic standards for system infrastructure and operational security, including physical, operational, and cyber-security practices.

**Appendix E to QF-LGIA**  
**Commercial Operation Date**

This Appendix E is a part of the QF-LGIA between Transmission Provider and Interconnection Customer.

**[Date]**

**[Transmission Provider Address]**

Re: \_\_\_\_\_ Large Generating Facility

Dear -----

On **[Date]** **[Interconnection Customer]** has completed Trial Operation of Unit No. \_\_. This letter confirms that **[Interconnection Customer]** commenced Commercial Operation of Unit No. \_\_ at the Large Generating Facility, effective as of **[Date plus one day]**.

Thank you. **[Signature]**

**[Interconnection Customer Representative]**

**Appendix F to QF-LGIA**

**Addresses for Delivery of Notices and Billings**

Notices:.

Transmission Provider:

US Mail Deliveries: PacifiCorp Transmission Services  
Attn: Central Cashiers Office  
PO Box 2757  
Portland, OR 97208-2757

Other Deliveries: Central Cashiers Office  
Attn: PacifiCorp Transmission Services  
825 NE Multnomah Street, Suite 550  
Portland OR 97232

Phone Number: [Add Central Cashiers Phone Number]

Interconnection Customer: [To be supplied.]

Billings and Payments:

Transmission Provider: [To be supplied.]

Interconnection Customer: [To be supplied.]

Alternative Forms of Delivery of Notices (telephone, facsimile or email):

Transmission Provider:

Director, Transmission Services [Add phone number]  
Manager, Transmission Scheduling [Add phone number]  
Manager, Interconnection Services [Add phone number]  
Manager, Transmission Services [Add phone number]  
Transmission Business Facsimile [Add facsimile number]

OASIS Address: <http://www.oasis.pacificorp.com/oasis/ppw/main.htmlx>

Interconnection Customer: [To be supplied.]

## APPENDIX G

### INTERCONNECTION REQUIREMENTS FOR A WIND GENERATING PLANT

Appendix G sets forth requirements and provisions specific to a wind generating plant. All other requirements of this QF-LGIA continue to apply to wind generating plant interconnections.

#### A. Technical Standards Applicable to a Wind Generating Plant

##### i. Low Voltage Ride-Through (LVRT) Capability

A wind generating plant shall be able to remain online during voltage disturbances up to the time periods and associated voltage levels set forth in the standard below. All wind generating plants must meet the following requirements:

1. Wind generating plants are required to remain in-service during three-phase faults with normal clearing (which is a time period of approximately 4 -9 cycles) and single line to ground faults with delayed clearing, and subsequent post-fault voltage recovery to pre-fault voltage unless clearing the fault effectively disconnects the generator from the system. The clearing time requirement for a three-phase fault will be specific to the wind generating plant substation location, as determined by and documented by the transmission provider.
2. The maximum clearing time the wind generating plant shall be required to withstand for a three-phase fault shall be 9 cycles at a voltage as low as 0.15 p.u., as measured at the high side of the wind generating plant step-up transformer (i.e. the transformer that steps the voltage up to the transmission interconnection voltage or "GSU"), after which, if the fault remains following the location-specific normal clearing time for three-phase faults, the wind generating plant may disconnect from the transmission system.
3. This requirement does not apply to faults that would occur between the wind generator terminals and the high side of the GSU.
4. Wind generating plants may be tripped after the fault period if this action is intended as part of a special protection system.

Issued by: \_\_\_\_\_

Issued on: -----

Effective: -----

5. Wind generating plants may meet the LVRT requirements of this standard by the performance of the generators or by installing additional equipment (, Static VAr Compensator, etc.) within the wind generating plant or by a combination of generator performance and additional equipment.
6. Existing individual generator units that are, or have been, interconnected to the network at the same location at the effective date of the Appendix G LVRT Standard are exempt from meeting the Appendix G LVRT Standard for the remaining life of the existing generation equipment. Existing individual generator units that are replaced are required to meet the Appendix G LVRT Standard.

##### ii. Power Factor Design Criteria (Reactive Power)

A wind generating plant shall maintain a power factor within the range of 0.95 leading to 0.95

lagging, measured at the Point of Interconnection as defined in this QF-LGIA, if the Transmission Provider's Cluster Study shows that such a requirement is necessary to ensure safety or reliability. The power factor range standard can be met by using, for example, power electronics designed to supply this Level of reactive capability 606 (taking into account any limitations due to voltage level, real power output, etc.) or fixed and switched capacitors if agreed to by the Transmission Provider, or a combination of the two. The Interconnection Customer shall not disable power factor equipment while the wind plant is in operation. Wind plants shall also be able to provide sufficient dynamic voltage support in lieu of the power system stabilizer and automatic voltage regulation at the generator excitation system if the Cluster Study shows this to be required for system safety or reliability.

iii. Supervisory Control and Data Acquisition (SCADA) Capability

The wind plant shall provide SCADA capability to transmit data and receive instructions from the Transmission Provider to protect system reliability. The Transmission Provider and the wind plant Interconnection Customer shall determine what SCADA information is essential for the proposed wind plant, taking into account the size of the plant and its characteristics, location, and importance in maintaining generation resource adequacy and transmission system reliability in its area.

Issued by: \_\_\_\_\_

Effective: -----

**Attachment A to QF-LGIA**

**One-line Diagram**

Issued by: \_\_\_\_\_ Issued on: \_\_\_\_\_

Effective: \_\_\_\_\_

**Attachment B to QF-LGIA**

**Scope of Work**

Issued by: \_\_\_\_\_ Issued on: \_\_\_\_\_

Effective: \_\_\_\_\_

**Attachment C to QF-LGIA**

**Facility Connection Requirements for Transmission Systems**

Issued by: \_\_\_\_\_ Issued on: \_\_\_\_\_

Effective: \_\_\_\_\_

**Docket UM 2032**

**Attachment 12**

**to**

**JOINT UTILITIES' APPLICATION  
FOR APPROVAL OF COMPLIANCE FILING**

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*PacifiCorp's Appendices to Qualifying Facility Large Generator  
Interconnection Procedures*

**APPENDICES TO QUALIFYING FACILITY LARGE GENERATOR INTERCONNECTION  
PROCEDURES**

APPENDIX 1 INTERCONNECTION REQUEST FOR A LARGE GENERATING FACILITY

APPENDIX 2 INFORMATIONAL INTERCONNECTION STUDY REQUEST

APPENDIX 2A INFORMATIONAL INTERCONNECTION STUDY AGREEMENT

APPENDIX 3 CLUSTER STUDY AGREEMENT

APPENDIX 4 INTERCONNECTION FACILITIES STUDY AGREEMENT

APPENDIX 5 STANDARD LARGE GENERATOR INTERCONNECTION AGREEMENT

APPENDIX 6 INTERCONNECTION PROCEDURES FOR A WIND GENERATING PLANT

**APPENDIX 1 to QF-LGIP  
INTERCONNECTION REQUEST FOR A QF LARGE GENERATING FACILITY**

1. The undersigned Interconnection Customer submits this request to interconnect its Large Generating Facility which is a Qualifying Facility with Transmission Provider's Transmission System pursuant to Transmission Provider's QF-LGIP.

2. This Interconnection Request is for (check one):

A proposed new Large Generating Facility that is a Qualifying Facility.

An increase in the generating capacity or a Material Modification of an existing Generating Facility that is a Qualifying Facility.

3. The type of interconnection service requested (check one): is

       Network Resource Interconnection Service

       Check here only if Interconnection Customer requesting Network Resource Interconnection Service also seeks to have its Generating Facility studied for Energy Resource Interconnection Service

4.        Check here if interconnection Customer ~~requesting Network Resource Interconnection Service~~ has initiated the process of certifying the Large Generating Facility as a Qualifying Facility as provided in 18 C.F.R. 292.207.

5. Interconnection Customer provides the following information:

a. Address or location of the proposed new Large Generating Facility site (to the extent known) or, in the case of an existing Generating Facility, the name and specific location of the existing Generating Facility;

b. Maximum summer at \_\_\_ degrees C and winter at \_\_\_ degrees C megawatt electrical output of the proposed new Large Generating Facility or the amount of megawatt increase in the generating capacity of an existing Generating Facility;

c. General description of the equipment configuration;

d. Commercial Operation Date (Day, Month, and Year);

e. Name, address, telephone number, and e-mail address of Interconnection Customer's contact person;

f. Approximate location of the proposed Point of interconnection; and

g. Interconnection Customer Data (set forth in Attachment A)

6. Applicable deposit amount as specified in the QF-LGIP.

7. Site Control as specified in the QF-LGIP (check one)

\_\_\_\_\_ Evidence is attached to this Interconnection Request

\_\_\_\_\_ Site Control deposit provided in accordance with this QF-LGIP

8. This Interconnection Request shall be submitted to the representative indicated below:

[To be completed by Transmission Provider]

9. Representative of interconnection Customer to contact:

[To be completed by Interconnection Customer]

10. This Interconnection Request is submitted by:

Name of Interconnection Customer: \_\_\_\_\_

By (signature): \_\_\_\_\_

Name (type or print): \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

**Attachment A to Appendix 1 Interconnection Request**

**QF LARGE GENERATING FACILITY DATA**

UNIT RATINGS

kVA \_\_\_\_\_ °F Voltage \_\_\_\_\_

Power Factor \_\_\_\_\_

Speed (RPM) \_\_\_\_\_ Connection (e.g. Wye) \_\_\_\_\_

Short Circuit Ratio ---- Frequency, Hertz \_\_\_\_\_

Stator Amperes at Rated kVA \_ \_ Field Volts \_\_\_\_\_

Max Turbine MW \_\_\_\_\_ °F \_\_\_\_\_

COMBINED TURBINE-GENERATOR-EXCITER INERTIA DATA

Inertia Constant, H = \_\_\_\_\_ kW

sec/kVA Moment-of-Inertia, WR2 = \_\_\_\_\_ lb.

ft.2

REACTANCE DATA (PER UNIT-RATED KVA)

	DIRECT AXIS	QUADRATURE AXIS
Synchronous -saturated Synchronous -unsaturated	_____	X <sub>qv</sub>
Transient -saturated	X' <sub>dv</sub> _____	X <sub>qi</sub>
		X <sub>qv</sub> <sup>1</sup>
Transient -unsaturated Subtransient	X <sub>1di</sub>	X' <sub>qi</sub>
- saturated Subtransient -unsaturated	X'' <sub>dv</sub>	X'' <sub>qv</sub>
Negative Sequence -saturated	X'' <sub>di</sub>	X' <sub>q1</sub>
Negative Sequence -unsaturated	X <sub>2v</sub>	
Zero Sequence -saturated	X <sub>2i</sub>	
	X <sub>0v</sub>	
Zero Sequence -unsaturated X <sub>0i</sub>		
Leakage Reactance	X <sub>lm</sub>	

FIELD TIME CONSTANT DATA (SEC)

Open Circuit	$T'_{do}$	$T'_{qo}$
Three-Phase Short Circuit Transient $T'_{d3}$		$T'_q$
Line to Line Short Circuit Transient $T'_{d2}$		
Line to Neutral Short Circuit Transient	$T'_{d1}$	
Short Circuit Subtransient	$T''_d$	$T''_{if}$
Open Circuit Subtransient	$T''_{do}$	$T''_{qo}$

ARMATURE TIME CONSTANT DATA (SEC)

Three Phase Short Circuit  $T_{a3}$   
 Line to Line Short Circuit  $T_{a2}$   
 Line to Neutral Short Circuit  $T_{a1}$

NOTE: If requested information is not applicable, indicate by marking "N/A."

MW CAPABILITY AND PLANT CONFIGURATION LARGE GENERATING FACILITY DATA

ARMATURE WINDING RESISTANCE DATA (PER UNIT)

Positive  $R_1$  \_\_\_\_\_  
 Negative Zero  $R_2$  \_\_\_\_\_  
 $R_0$  \_\_\_\_\_

Rotor Short Time Thermal Capacity  $I_2^2t =$   
 Field Current at Rated kVA, Armature Voltage and PF = \_\_\_\_\_ amps  
 Field Current at Rated kVA and Armature Voltage, 0 PF = \_\_\_\_\_ amps  
 Three Phase Armature Winding Capacitance = \_\_\_\_\_ microfarad  
 Field Winding Resistance = \_\_\_\_\_ ohms °C  
 Armature Winding Resistance (Per Phase) = \_\_\_\_\_ ohms °C



### EXCITATION SYSTEM DATA

Identify appropriate IEEE model block diagram of excitation system and power system stabilizer (PSS) for computer representation in power system stability simulations and the corresponding excitation system and PSS constants for use in the model.

### GOVERNOR SYSTEM DATA

Identify appropriate IEEE model block diagram of governor system for computer representation in power system stability simulations and the corresponding governor system constants for use in the model.

### WIND GENERATORS

Number of generators to be interconnected pursuant to this Interconnection Request: \_\_\_\_\_

Elevation:

Single Phase

Three Phase

Inverter manufacturer, model name, number, and version:

\_\_\_\_\_

List of adjustable setpoints for the protective equipment or software:

\_\_\_\_\_

Note: A completed General Electric Company Power Systems Load Flow (PSLF) data sheet or other compatible formats, such as IEEE and PTI power flow models, must be supplied with the Interconnection Request. If other data sheets are more appropriate to the proposed device, then they shall be provided and discussed at Scoping Meeting.

## INDUCTION GENERATORS

(\*) Field Volts:----- (\*) Field Amperes : \_\_\_\_\_  
(\*) Motoring Power (kW): \_\_\_\_\_  
(\*) Neutral Grounding Resistor (If Applicable): \_\_\_\_\_ (\*) *Ilt* or K (Heating Time Constant): \_\_\_\_\_  
(\*) Rotor Resistance: \_\_\_\_\_ (\*) Stator Resistance: \_\_\_\_\_ (\*) Stator Reactance: \_\_\_\_\_ (\*) Rotor Reactance: \_\_\_\_\_  
(\*) Magnetizing Reactance: \_\_\_\_\_  
(\*) Short Circuit Reactance: \_\_\_\_\_ (\*) Exciting Current: \_\_\_\_\_ (\*)  
Temperature Rise: \_\_\_\_\_ (\*)  
Frame Size: \_\_\_\_\_  
(\*) Design Letter: \_\_\_\_\_  
(\*) Reactive Power Required In Vars (No Load): \_\_\_\_\_  
(\*) Reactive Power Required In Vars (Full Load): \_\_\_\_\_  
(\*) Total Rotating Inertia, H: \_\_\_\_\_ Per Unit on KVA Base

Note: Please consult Transmission Provider prior to submitting the Interconnection Request to determine if the information designated by (\*) is required.

**APPENDIX 2 to QF-LGIP**  
**INFORMATIONAL INTERCONNECTION STUDY REQUEST**

1. The undersigned Interconnection Customer submits this request for an Informational Interconnection Study pursuant to Transmission Provider's Tariff.
2. Interconnection Customer provides the following information:
  - a. Address or location of the proposed new Large Generating Facility site to be studied (to the extent known) or, in the case of an existing Generating Facility, the name and specific location of the existing Generating Facility;
  - b. Maximum summer at \_\_\_\_\_ degrees C and winter at \_\_\_\_\_ degrees C megawatt electrical output of the proposed new Large Generating Facility or the amount of megawatt increase in the generating capacity of an existing Generating Facility;
  - c. General description of the equipment configuration;
  - d. Commercial Operation Date to be studied (Day, Month, and Year);
  - e. Name, address, telephone number, and e-mail address of Interconnection Customer's contact person;
  - f. Approximate location of the proposed Point of Interconnection;
  - g. Interconnection Customer Data (set forth in Attachment A);
  - h. Primary frequency response operating range for electric storage resources; and
  - i. Requested capacity (in MW) of Interconnection Service to be studied (if lower than the Generating Facility Capacity).
5. \$10,000 study deposit amount as specified in the QF-LGIP.
6. This Interconnection Request shall be submitted to the representative indicated below:  
[To be completed by Transmission Provider]
7. Representative of Interconnection Customer to contact:  
[To be completed by Interconnection Customer]
8. This Informational Interconnection Request is submitted by:

Name of Interconnection Customer:

By (signature):

Name (type or print):

Title:

Date:

**Attachment A to Appendix 2  
Informational Interconnection Study Request**

**LARGE GENERATING FACILITY DATA**

**UNIT RATINGS**

kVA	°F	Voltage
Power Factor		
Speed (RPM)	Connection (e.g. Wye)	
Short Circuit Ratio _____	Frequency, Hertz	
Stator Amperes at Rated kVA	Field Volts	
Max Turbine MW	°F	

Primary frequency response operating range for electric storage resources:

Minimum State of Charge: \_\_\_\_\_

Maximum State of Charge: \_\_\_\_\_

**COMBINED TURBINE-GENERATOR-EXCITER INERTIA DATA**

Inertia Constant, H =	kW sec/kVA
Moment-of-Inertia, WR <sup>2</sup> =	lb. ft. <sup>2</sup>

**REACTANCE DATA (PER UNIT-RATED KVA)**

	<b>DIRECT AXIS</b>	<b>QUADRATURE AXIS</b>
Synchronous - saturated	X <sub>dv</sub>	X <sub>qv</sub>
Synchronous - unsaturated	X <sub>di</sub>	X <sub>qi</sub>
Transient - saturated	X' <sub>dv</sub>	X' <sub>qv</sub>
Transient - unsaturated	X' <sub>di</sub>	X' <sub>qi</sub>
Subtransient - saturated	X'' <sub>dv</sub>	X'' <sub>qv</sub>
Subtransient - unsaturated	X'' <sub>di</sub>	X'' <sub>qi</sub>
Negative Sequence - saturated	X <sub>2v</sub>	
Negative Sequence - unsaturated	X <sub>2i</sub>	
Zero Sequence - saturated	X <sub>0v</sub>	
Zero Sequence - unsaturated	X <sub>0i</sub>	
Leakage Reactance	X <sub>lm</sub>	

**FIELD TIME CONSTANT DATA (SEC)**

Open Circuit		T' <sub>do</sub>		T' <sub>qo</sub>
Three-Phase Short Circuit Transient	T' <sub>d3</sub>		T' <sub>q</sub>	
Line to Line Short Circuit Transient	T' <sub>d2</sub>			
Line to Neutral Short Circuit Transient	T' <sub>d1</sub>			
Short Circuit Subtransient		T'' <sub>d</sub>		T'' <sub>q</sub>
Open Circuit Subtransient		T'' <sub>do</sub>		T'' <sub>qo</sub>

**ARMATURE TIME CONSTANT DATA (SEC)**

Three Phase Short Circuit	T <sub>a3</sub>
Line to Line Short Circuit	T <sub>a2</sub>
Line to Neutral Short Circuit	T <sub>a1</sub>

NOTE: If requested information is not applicable, indicate by marking "N/A."

**MW CAPABILITY AND PLANT CONFIGURATION  
LARGE GENERATING FACILITY DATA**

**ARMATURE WINDING RESISTANCE DATA (PER UNIT)**

Positive	R <sub>1</sub>
Negative	R <sub>2</sub>
Zero	R <sub>0</sub>

Rotor Short Time Thermal Capacity I<sub>2</sub><sup>2</sup>t = \_\_\_\_\_  
 Field Current at Rated kVA, Armature Voltage and PF = \_\_\_\_\_ amps  
 Field Current at Rated kVA and Armature Voltage, 0 PF = \_\_\_\_\_ amps  
 Three Phase Armature Winding Capacitance = \_\_\_\_\_ microfarad  
 Field Winding Resistance = \_\_\_\_\_ ohms \_\_\_\_\_ °C  
 Armature Winding Resistance (Per Phase) = \_\_\_\_\_ ohms \_\_\_\_\_ °C

**CURVES**

Provide Saturation, Vee, Reactive Capability, Capacity Temperature Correction curves. Designate normal and emergency Hydrogen Pressure operating range for multiple curves.

**GENERATOR STEP-UP TRANSFORMER DATA RATINGS**

Capacity	Self-cooled/ Maximum Nameplate	/	kVA
Voltage Ratio(Generator Side/System side/Tertiary)	/	/	kV
Winding Connections (Low V/High V/Tertiary V (Delta or Wye))	/	/	
Fixed Taps Available			
Present Tap Setting			

## IMPEDANCE

Positive	$Z_1$ (on self-cooled kVA rating)	%	X/R
Zero	$Z_0$ (on self-cooled kVA rating)	%	X/R

## EXCITATION SYSTEM DATA

Identify appropriate IEEE model block diagram of excitation system and power system stabilizer (PSS) for computer representation in power system stability simulations and the corresponding excitation system and PSS constants for use in the model.

## GOVERNOR SYSTEM DATA

Identify appropriate IEEE model block diagram of governor system for computer representation in power system stability simulations and the corresponding governor system constants for use in the model.

## WIND GENERATORS

Number of generators to be interconnected pursuant to this Interconnection Request:

Single Phase	Three Phase
--------------	-------------

Inverter manufacturer, model name, number, and version:

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

Note: A completed General Electric Company Power Systems Load Flow (PSLF) data sheet or other compatible formats, such as IEEE and PTI power flow models, must be supplied with the Interconnection Request. If other data sheets are more appropriate to the proposed device, then they shall be provided and discussed at Scoping Meeting.

## INDUCTION GENERATORS

- (\*) Field Volts:
- (\*) Field Amperes:
- (\*) Motoring Power (kW):
- (\*) Neutral Grounding Resistor (If Applicable):
- (\*)  $I_2^2t$  or K (Heating Time Constant):
- (\*) Rotor Resistance:
- (\*) Stator Resistance:
- (\*) Stator Reactance:
- (\*) Rotor Reactance:
- (\*) Magnetizing Reactance:
- (\*) Short Circuit Reactance:
- (\*) Exciting Current:

- (\*) Temperature Rise:
- (\*) Frame Size:
- (\*) Design Letter:
- (\*) Reactive Power Required In Vars (No Load):
- (\*) Reactive Power Required In Vars (Full Load):
- (\*) Total Rotating Inertia, H: Per Unit on KVA Base

Note: Please consult Transmission Provider prior to submitting the Interconnection Request to determine if the information designated by (\*) is required

**APPENDIX 2A to QF-LGIP  
INFORMATIONAL INTERCONNECTION STUDY AGREEMENT**

**THIS AGREEMENT** is made and entered into this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_ by and between \_\_\_\_\_, a \_\_\_\_\_ organized and existing under the laws of the State of \_\_\_\_\_, (“Interconnection Customer,”) and \_\_\_\_\_, (“Transmission Provider”). Interconnection Customer and Transmission Provider each may be referred to as “Party, ” or collectively as the “Parties.”

**RECITALS**

**WHEREAS**, Interconnection Customer is developing a Large Generating Facility or generating capacity addition to an existing Generating Facility; and

**WHEREAS**, Interconnection Customer is proposing to evaluate an interconnection with the Transmission System; and

**WHEREAS**, Interconnection Customer has submitted to Transmission Provider an Informational Interconnection Study Request; and

**NOW, THEREFORE**, in consideration of and subject to the mutual covenants contained herein the Parties agree as follows:

1.0 When used in this Agreement, with initial capitalization, the terms specified shall have the meanings indicated in Transmission Provider's OPUC-approved QF- LGIP.

2.0 Interconnection Customer elects and Transmission Provider shall cause to be performed an Informational Interconnection Study consistent with Article 6 of this QF-LGIP.

3.0 The scope of the Informational Interconnection Study shall be subject to the assumptions set forth in Attachment A to this Agreement.

4.0 The Informational Interconnection Study shall be performed solely for informational purposes and is not binding on either Party.

5.0 The Informational Interconnection Study shall be based on the technical information provided by Interconnection Customer in the Informational Interconnection Study Request, as may be modified as the result of the optional scoping meeting. Transmission Provider 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 Informational Interconnection Study. If Interconnection Customer modifies its Informational Interconnection Study Request, the time to complete the Informational Interconnection Study may be extended.

6.0 The Informational Interconnection Study Report shall provide the following information:

preliminary identification of any circuit breaker short circuit capability limits exceeded as a result of the interconnection;

preliminary identification of any thermal overload or voltage limit violations resulting from the

interconnection; and

preliminary description and non-bonding estimated cost of facilities required to interconnect the Large Generating Facility to the Transmission System and to address the identified short circuit and power flow issues.

7.0 Interconnection Customer shall provide a deposit of \$10,000 for the performance of the Informational Interconnection Study.

Upon receipt of the Informational Interconnection Study Transmission Provider shall charge and Interconnection Customer shall pay the actual costs of the Informational Interconnection Study.

Any difference between the deposit and the actual cost of the study shall be paid by or refunded to Interconnection Customer, as appropriate.

8.0 Miscellaneous. The Informational Interconnection Study Agreement shall include standard miscellaneous terms including, but not limited to, indemnities, representations, disclaimers, warranties, governing law, amendment, execution, waiver, enforceability and assignment, that reflect best practices in the electric industry, and that are consistent with regional practices, Applicable Laws and Regulations, and the organizational nature of each Party. All of these Provisions, to the extent practicable, shall be consistent with the provisions of the QF-LGIP and the QF-LGIA.

**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 Transmission Provider or Transmission Owner, if applicable]**

By:

By:

Title:

Title:

Date:

Date:

**[Insert name of Interconnection Customer]**

By:

Title:

Date:

**Attachment A to Appendix 2A**  
**Informational Interconnection Study Agreement**

ASSUMPTIONS USED IN CONDUCTING THE  
INFORMATIONAL INTERCONNECTION STUDY

The Informational Interconnection Study will be based upon the information set forth in the Informational Interconnection Study Request and agreed upon in the Scoping Meeting held on  
:

Designation of Point of interconnection and configuration to be studied.

Designation of alternative Point(s) of interconnection and configuration.

[Above assumptions to be completed by Interconnection Customer and other assumptions to be provided by Interconnection Customer and Transmission Provider]

**APPENDIX 3 to QF-LGIP  
CLUSTER STUDY AGREEMENT**

**THIS AGREEMENT** is made and entered into this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_ by and between \_\_\_\_\_, a \_\_\_\_\_ organized and existing under the laws of the State of \_\_\_\_\_ ("Interconnection Customer,") and a \_\_\_\_\_ existing under the laws of the State of \_\_\_\_\_, ("Transmission Provider"). Interconnection Customer and Transmission Provider each may be referred to as a "Party," or collectively as the "Parties."

**RECITALS**

**WHEREAS**, Interconnection Customer is proposing to develop a Large Generating Facility or generating capacity addition to an existing Generating Facility consistent with the Interconnection Request submitted by Interconnection Customer dated \_\_\_\_\_; and

**WHEREAS**, Interconnection Customer desires to interconnect the Large Generating Facility with the Transmission System;

**WHEREAS**, Interconnection Customer has requested Transmission Provider to perform a Cluster Study to assess the impact of interconnecting the Large Generating Facility to the Transmission System, and of any Affected Systems;

**NOW, THEREFORE**, in consideration of and subject to the mutual covenants contained herein the Parties agreed as follows:

1.0 When used in this Agreement, with initial capitalization, the terms specified shall have the meanings indicated in Transmission Provider's OPUC-approved QF- LGIP.

2.0 Interconnection Customer elects and Transmission Provider shall cause to be performed a Cluster Study consistent with Article 7.0 of this QF-LGIP in accordance with the Tariff.

3.0 The scope of the Cluster Study shall be subject to the assumptions set forth in Attachment A to this Agreement.

4.0 The Cluster Study will be based upon information provided by Interconnection Customer in the Interconnection Request, subject to any modifications in accordance with Article 4.4 of the QF-LGIP. Transmission Provider 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 Cluster Study. If Interconnection Customer modifies its Interconnection Request, or the technical information provided therein, the time to complete the Cluster Study may be extended.

5.0 The Cluster Study report shall provide the following information:

- identification of any circuit breaker short circuit capability limits exceeded as a result of the interconnection;
- identification of any thermal overload or voltage limit violations resulting from the interconnection;

- identification of any instability or inadequately damped response to system disturbances resulting from the interconnection and
- description and non-binding, good faith estimated cost of facilities required to interconnect the Large Generating Facility to the Transmission System and to address the identified short circuit, instability, and power flow issues.

6.0 Interconnection Customer’s deposit, paid pursuant to Article 3.1, OAR 860-082-0035, or Appendix 8, as may be applicable, shall be used to pay Interconnection Customer’s share of Cluster Study costs allocated pursuant to Article 4.2.2. Transmission Provider's good faith estimate for the time of completion of the Cluster Study is [insert date].

Upon receipt of the Cluster Study, Transmission Provider shall charge and Interconnection Customer shall pay its actual allocable costs of the Cluster Study.

Any difference between the deposit and the actual cost of the study shall be paid by or refunded to Interconnection Customer, as appropriate. As provided in Article 13.3 of the LGIP, Interconnection Customer has thirty (30) Calendar Days of receipt of an invoice from Transmission Provider to pay any undisputed costs. If invoices are not paid within thirty (30) Calendar Days of receipt of an invoice, Transmission Provider shall draw upon the security and deposits provided to settle all accounts, which shall include any offsets of amounts due and owing by Transmission Provider. After the final invoice is paid and all accounts are settled, Transmission Provider shall refund all remaining security and deposits.

7.0 Miscellaneous. The Cluster Study Agreement shall include standard miscellaneous terms including, but not limited to, indemnities, representations, disclaimers, warranties, governing law, amendment, execution, waiver, enforceability and assignment, that reflect best practices in the electric industry, that are consistent with regional practices, Applicable Laws and Regulations and the organizational nature of each Party. All of these provisions, to the extent practicable, shall be consistent with the provisions of the QF-LGIP and the QF-LGIA .]

**IN WITNESS THEREOF**, 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 Transmission Provider or Transmission Owner, if applicable]**

By:	By:
Title:	Title:
Date:	Date:

**[Insert name of Interconnection Customer]**

By:	Title:	Date:
-----	--------	-------

**Attachment A To Appendix 3  
Cluster Study Agreement**

ASSUMPTIONS USED IN CONDUCTING THE CLUSTER STUDY

The Cluster Study will be based upon the results of the information set forth in the Interconnection Request and results of applicable prior Interconnection Studies, subject to any modifications in accordance with Article 4.4 of the QF-LGIP, and the following assumptions:

Designation of Point of interconnection and configuration to be studied.

[Above assumptions to be completed by Interconnection Customer and other assumptions to be provided by Interconnection Customer and Transmission Provider]

**APPENDIX 4 to QF-LGIP  
INTERCONNECTION FACILITIES STUDY AGREEMENT**

**THIS AGREEMENT** is made and entered into this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_ by and between \_\_\_\_\_, a \_\_\_\_\_ organized and existing under the laws of the State of \_\_\_\_\_ ("Interconnection Customer,") and \_\_\_\_\_, a \_\_\_\_\_ existing under the laws of the State of \_\_\_\_\_, ("Transmission Provider"). Interconnection Customer and Transmission Provider each may be referred to as a "Party," or collectively as the "Parties."

**RECITALS**

**WHEREAS**, Interconnection Customer is proposing to develop a Large Generating Facility or generating capacity addition to an existing Generating Facility consistent with the Interconnection Request submitted by Interconnection Customer dated \_\_\_\_\_; and

**WHEREAS**, Interconnection Customer desires to interconnect the Large Generating Facility with the Transmission System;

**WHEREAS**, Transmission Provider has completed a Cluster Study and provided the results of said study to Interconnection Customer; and

**WHEREAS**, Interconnection Customer has requested Transmission Provider 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 Cluster Study in accordance with Good Utility Practice to physically and electrically connect the Large Generating Facility to the Transmission System.

**NOW, THEREFORE**, in consideration of and subject to the mutual covenants contained herein the Parties agreed as follows:

1.0 When used in this Agreement, with initial capitalization, the terms specified shall have the meanings indicated in Transmission Provider's OPUC-approved QF- LGIP.

2.0 Interconnection Customer elects and Transmission Provider shall cause an Interconnection Facilities Study consistent with Article 8.0 of this QF-LGIP.

2.1 Interconnection Customer shall provide a demonstration of Site Control and additional financial security payment in accordance with Article 8.1 of the Tariff.

3.0 The scope of the Interconnection Facilities Study shall be subject to the assumptions set forth in Attachment A and the data provided in Attachment B to this Agreement.

4.0 The Interconnection Facilities Study report (i) shall provide a description, estimated cost of (consistent with Attachment A), schedule for required facilities to interconnect the Large Generating Facility to the Transmission System and (ii) shall address the short circuit, instability, and power flow issues identified in the Cluster Study.

5.0 Interconnection Customer shall pay the actual costs of the Interconnection Facilities Study. The

time for completion of the Interconnection Facilities Study is specified in Attachment A.

Transmission Provider shall invoice Interconnection Customer on a monthly basis for the work to be conducted on the Interconnection Facilities Study each month. Interconnection Customer shall pay invoiced amounts within thirty (30) Calendar Days of receipt of invoice. Transmission Provider shall continue to hold the amounts on deposit until settlement of the final invoice for the study.

6.0 Miscellaneous. The Interconnection Facility Study Agreement shall include standard miscellaneous terms including, but not limited to, indemnities, representations, disclaimers, warranties, governing law, amendment, execution, waiver, enforceability and assignment, that reflect best practices in the electric industry, and that are consistent with regional practices, Applicable Laws and Regulations, and the organizational nature of each Party. All of these provisions, to the extent practicable, shall be consistent with the provisions of the QF-LGIP and the QF-LGIA.

**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 Transmission Provider or Transmission Owner, if applicable]**

By:

By:

Title:

Title:

Date:

Date:

**[Insert name of Interconnection Customer]**

By:

Title:

Date:

**Attachment A To Appendix 4**  
**Interconnection Facilities Study Agreement**

INTERCONNECTION CUSTOMER SCHEDULE ELECTION FOR CONDUCTING THE  
INTERCONNECTION FACILITIES STUDY

Transmission Provider shall use Reasonable Efforts to complete the study and issue a draft Interconnection Facilities Study report to Interconnection Customer within the following number of days after of receipt of an executed copy of this Interconnection Facilities Study Agreement:

ninety (90) Calendar Days with no more than a +/- 20 percent cost estimate contained in the report, or

one hundred eighty (180) Calendar Days with no more than a +/- 10 percent cost estimate contained in the report.

**Attachment B to Appendix 4  
Interconnection Facilities Study Agreement**

DATA FORM TO BE PROVIDED BY INTERCONNECTION CUSTOMER WITH THE  
INTERCONNECTION FACILITIES STUDY AGREEMENT

Type of Interconnection Service Requested:

\_\_\_\_\_ Network Resource Interconnection Service

\_\_\_\_\_ Energy Resource Interconnection Service

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

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

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

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 one line diagram).

What type of control system or PLC will be located at Interconnection Customer's Large Generating Facility?

\_\_\_\_\_

What protocol does the control system or PLC use?

\_\_\_\_\_

Please provide a 7.5-minute quadrangle of the site. Sketch the plant, station, transmission line and property line.

Physical dimensions of the proposed interconnection station: Bus length from generation to

\_\_\_\_\_

interconnection station:

\_\_\_\_\_

Line length from interconnection station to Transmission Provider's transmission line.

\_\_\_\_\_

Tower number observed in the field. (Painted on tower leg)\*----- Number of third party easements



**APPENDIX 5 to QF-LGIP**  
**QF Large Generator Interconnection Agreement**

Is in a separate file.

**APPENDIX 6 to QF-LGIP**  
**INTERCONNECTION PROCEDURES FOR A WIND GENERATING PLANT**

Appendix 6 sets forth procedures specific to a wind generating plant. All other requirements of the QF-LGIP continue to apply to wind generating plant interconnections.

**A. Special Procedures Applicable to Wind Generators**

The wind plant Interconnection Customer, in completing the Interconnection Request required by Article 3.3 of the QF-LGIP, may provide to the Transmission Provider a set of preliminary electrical design specification depicting the wind plant as a single equivalent generator. Upon satisfying these and other applicable Interconnection Request conditions, the wind plant may enter the queue and receive the base case data as provided for in the QF-LGIP.

No later than six months after submitting an Interconnection Request completed in this manner, the wind plant Interconnection Customer must submit completed detailed electrical design specifications and other data (including collector system layout data) needed to allow the Transmission Provider to complete the System Impact Study.

**Docket UM 2032**

**Attachment 13**

**to**

**JOINT UTILITIES' APPLICATION  
FOR APPROVAL OF COMPLIANCE FILING**

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*PacifiCorp's Small Generator Facility Interconnection  
Application*

**SMALL GENERATOR QUALIFIED FACILITY INTERCONNECTION REQUEST  
(Application Form)**

**Transmission Provider:** PacifiCorp

Designated Contact Person: Kris Bremer

Address (for U.S. Mail Deliveries): PacifiCorp Transmission  
P.O. Box 2757  
Portland, OR 97208-2757

Address (for All Other Deliveries): PacifiCorp Transmission  
825 NE Multnomah Ave, Suite 550  
Portland, OR 97232

Telephone Number: (503) 813-6496

Fax: \_\_\_\_\_

E-Mail Address: [GIApplications@PacifiCorp.com](mailto:GIApplications@PacifiCorp.com)

An Interconnection Request is considered complete when it provides all applicable and correct information required below.

**Preamble and Instructions**

An Interconnection Customer who requests a Qualified Facility interconnection must submit this Interconnection Request by hand delivery, mail, e-mail, or fax to the Transmission Provider.

**Processing Fee or Deposit:**

If the Interconnection Request is submitted to be evaluated under a Fast Track Process, the non-refundable processing fee is \$500.

If the Interconnection Request is submitted under the Study Process, whether a new submission or an Interconnection Request that did not pass the Fast Track Process, the Interconnection Customer shall submit to the Transmission Provider a deposit of \$1,000.

**Interconnection Customer Information**

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

Name: \_\_\_\_\_

Contact Person: \_\_\_\_\_

Mailing Address: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_

Facility Location (if different from above): \_\_\_\_\_

Telephone (Day): \_\_\_\_\_ Telephone (Evening): \_\_\_\_\_

Fax: \_\_\_\_\_ E-Mail Address: \_\_\_\_\_

Alternative Contact Information (if different from the Interconnection Customer)

Contact Name: \_\_\_\_\_

Title: \_\_\_\_\_

Address: \_\_\_\_\_

\_\_\_\_\_

Telephone (Day): \_\_\_\_\_ Telephone (Evening): \_\_\_\_\_

Fax: \_\_\_\_\_ E-Mail Address: \_\_\_\_\_

Application is for:             New Small Generating Qualified Facility  
    Capacity addition to Existing Small Generating Facility

If capacity addition to existing facility, please describe: \_\_\_\_\_

\_\_\_\_\_

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

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

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

\_\_\_\_\_  
(Local Electric Service Provider\*)

\_\_\_\_\_  
(Existing Account Number\*)

[\*To be provided by the Interconnection Customer if the local electric service provider is different from the Transmission Provider]

Contact Name: \_\_\_\_\_

Title: \_\_\_\_\_

Address: \_\_\_\_\_  
\_\_\_\_\_

Telephone (Day): \_\_\_\_\_ Telephone (Evening): \_\_\_\_\_

Fax: \_\_\_\_\_ E-Mail Address: \_\_\_\_\_

Requested Point of Interconnection: \_\_\_\_\_

Interconnection Customer's Requested In-Service Date: \_\_\_\_\_

Type of Interconnection Service Requested (check one):

\_\_\_\_\_ Network Resource Interconnection Service only

Applicant wishes to be studied for both Network Resource Interconnection Service and Energy Resource Interconnection Service and understands it will be required to select one service type prior to the Facilities Study.

**Small Generating Facility Information**

Data apply only to the Small Generating Qualified Facility, not the Interconnection Facilities.

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

Prime Mover: \_\_\_ Fuel Cell \_\_\_ Recip Engine \_\_\_ Gas Turb \_\_\_ Steam Turb  
\_\_\_ Microturbine \_\_\_ PV \_\_\_ Other

Type of Generator: \_\_\_ Synchronous \_\_\_ Induction \_\_\_ Inverter

Generator Nameplate Rating: \_\_\_\_\_ kW (Typical)      Generator Nameplate kVAR: \_\_\_\_\_

Expected Interconnection Customer or Customer-Site Load: \_\_\_\_\_ kW (if none, so state)

Typical Reactive Load (if known): \_\_\_\_\_

Maximum Nameplate Capability Requested: \_\_\_\_\_ kW

List components of the Small Generating Facility equipment package that are currently certified:

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

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

Generator (or solar inverter)

Manufacturer, Model Name & Number: \_\_\_\_\_

Version Number: \_\_\_\_\_

Nameplate Output Power Rating in kW: (Summer) \_\_\_\_\_ (Winter) \_\_\_\_\_

Nameplate Output Power Rating in kVA: (Summer) \_\_\_\_\_ (Winter) \_\_\_\_\_

Individual Generator Power Factor

Rated Power Factor: Leading: \_\_\_\_\_ Lagging: \_\_\_\_\_

Total Number of Generators in wind farm to be interconnected pursuant to this Interconnection Request:

\_\_\_\_\_ Elevation: \_\_\_\_\_      \_\_\_ Single phase      \_\_\_ Three phase

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

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

**Note: A completed Power System Simulator for Engineering (PSS/E) data sheet must be supplied with the Interconnection Request.**

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

Max design fault contribution current: \_\_\_\_\_ Instantaneous \_\_\_ or RMS? \_\_\_

Harmonics Characteristics: \_\_\_\_\_

Start-up requirements: \_\_\_\_\_

Small Generating Facility Characteristic Data (for rotating machines)

RPM Frequency: \_\_\_\_\_

(\*) Neutral Grounding Resistor (If Applicable): \_\_\_\_\_

Synchronous Generators:

Direct Axis Synchronous Reactance,  $X_d$ : \_\_\_\_\_ P.U.

Direct Axis Transient Reactance,  $X'_d$ : \_\_\_\_\_ P.U.

Direct Axis Subtransient Reactance,  $X''_d$ : \_\_\_\_\_ P.U.

Negative Sequence Reactance,  $X_2$ : \_\_\_\_\_ P.U.

Zero Sequence Reactance,  $X_0$ : \_\_\_\_\_ P.U.

KVA Base: \_\_\_\_\_

Field Volts: \_\_\_\_\_

Field Amperes: \_\_\_\_\_

Induction Generators:

Motoring Power (kW): \_\_\_\_\_

$I^2t$  or K (Heating Time Constant): \_\_\_\_\_

Rotor Resistance,  $R_r$ : \_\_\_\_\_

Stator Resistance,  $R_s$ : \_\_\_\_\_

Stator Reactance,  $X_s$ : \_\_\_\_\_

Rotor Reactance,  $X_r$ : \_\_\_\_\_

Magnetizing Reactance,  $X_m$ : \_\_\_\_\_

Short Circuit Reactance,  $X_d''$ : \_\_\_\_\_

Exciting Current: \_\_\_\_\_

Temperature Rise: \_\_\_\_\_

Frame Size: \_\_\_\_\_

Design Letter: \_\_\_\_\_

Reactive Power Required In Vars (No Load): \_\_\_\_\_

Reactive Power Required In Vars (Full Load): \_\_\_\_\_

Total Rotating Inertia, H: \_\_\_\_\_ Per Unit on kVA Base

Note: Please contact the Transmission Provider prior to submitting the Interconnection Request to determine if the specified information above is required.

Excitation and Governor System Data for Synchronous Generators Only

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

**Interconnection Facilities Information**

Will a transformer be used between the generator and the point of interconnection?  Yes  No

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

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

Is the transformer:  single phase  three phase? Size: \_\_\_\_\_ kVA  
Transformer Impedance: \_\_\_\_\_ % on \_\_\_\_\_ kVA Base

If Three Phase:

Transformer Primary: \_\_\_\_\_ Volts \_\_\_\_\_ Delta \_\_\_\_\_ Wye \_\_\_\_\_ Wye Grounded  
Transformer Secondary: \_\_\_\_\_ Volts \_\_\_\_\_ Delta \_\_\_\_\_ Wye \_\_\_\_\_ Wye Grounded  
Transformer Tertiary: \_\_\_\_\_ Volts \_\_\_\_\_ Delta \_\_\_\_\_ Wye \_\_\_\_\_ Wye Grounded

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

(Attach copy of fuse manufacturer's Minimum Melt and Total Clearing Time-Current Curves)

Manufacturer: \_\_\_\_\_ Type: \_\_\_\_\_ Size: \_\_\_\_\_ Speed: \_\_\_\_\_

Interconnecting Circuit Breaker (if applicable):

Manufacturer: \_\_\_\_\_ Type: \_\_\_\_\_  
Load Rating (Amps): \_\_\_\_\_ Interrupting Rating (Amps): \_\_\_\_\_ Trip Speed (Cycles): \_\_\_\_\_

Interconnection Protective Relays (If Applicable):

If Microprocessor-Controlled:

List of Functions and Adjustable Setpoints for the protective equipment or software:

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

If Discrete Components:

(Enclose Copy of any Proposed Time-Overcurrent Coordination Curves)

Manufacturer: \_\_\_\_\_ Type: \_\_\_\_\_ Style/Catalog No.: \_\_\_\_\_ Proposed Setting: \_\_\_\_\_  
Manufacturer: \_\_\_\_\_ Type: \_\_\_\_\_ Style/Catalog No.: \_\_\_\_\_ Proposed Setting: \_\_\_\_\_  
Manufacturer: \_\_\_\_\_ Type: \_\_\_\_\_ Style/Catalog No.: \_\_\_\_\_ Proposed Setting: \_\_\_\_\_  
Manufacturer: \_\_\_\_\_ Type: \_\_\_\_\_ Style/Catalog No.: \_\_\_\_\_ Proposed Setting: \_\_\_\_\_  
Manufacturer: \_\_\_\_\_ Type: \_\_\_\_\_ Style/Catalog No.: \_\_\_\_\_ Proposed Setting: \_\_\_\_\_

Current Transformer Data (If Applicable):

(Enclose Copy of Manufacturer's Excitation and Ratio Correction Curves)

Manufacturer: \_\_\_\_\_  
Type: \_\_\_\_\_ Accuracy Class: \_ Proposed Ratio Connection: \_\_\_\_\_

Manufacturer: \_\_\_\_\_  
Type: \_\_\_\_\_ Accuracy Class: \_ Proposed Ratio Connection: \_\_\_\_\_

Potential Transformer Data (If Applicable):

Manufacturer: \_\_\_\_\_  
Type: \_\_\_\_\_ Accuracy Class: \_ Proposed Ratio Connection: \_\_\_\_\_

Manufacturer: \_\_\_\_\_  
Type: \_\_\_\_\_ Accuracy Class: \_ Proposed Ratio Connection: \_\_\_\_\_

**General Information**

Enclose copy of site electrical one-line diagram showing the configuration of all Small Generating Facility equipment, current and potential circuits, and protection and control schemes. **This one-line diagram must be signed and stamped by a licensed Professional Engineer if the Small Generating Facility is larger than 50 kW.**

Enclose copy of any acceptable site control documentation that indicates the precise physical location of the proposed Small Generating Facility (e.g., USGS topographic map or other diagram or documentation). This is additional to Transmission Provider required Site Control Documentation reasonably demonstrating: (1) ownership of, a leasehold interest in, or a right to develop a site for the purpose of constructing the Generating Facility; (2) an option to purchase or acquire a leasehold site for such purpose; or (3) an exclusivity or other business relationship between Interconnection Customer and the entity having the right to sell, lease or grant Interconnection Customer the right to possess or occupy a site for such purpose.

Proposed location of protective interface equipment on property (include address if different from the Interconnection Customer's address) \_\_\_\_\_

Enclose copy of any site documentation that describes and details the operation of the protection and control schemes. Is Available Documentation Enclosed?  Yes  No

Enclose copies of schematic drawings for all protection and control circuits, relay current circuits, relay potential circuits, and alarm/monitoring circuits (if applicable).  
Are Schematic Drawings Enclosed?  Yes  No

**Applicant Signature**

I hereby certify that, to the best of my knowledge, all the information provided in this Interconnection Request is true and correct.

For Interconnection Customer: \_\_\_\_\_ Date: \_\_\_\_\_

**Docket UM 2032**

**Attachment 14**

**to**

**JOINT UTILITIES' APPLICATION  
FOR APPROVAL OF COMPLIANCE FILING**

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*PacifiCorp's Interconnection Facilities Study Form Agreement*

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**Interconnection Facilities Study Form Agreement**

This agreement is made and entered into this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_ by and between [Applicant name (Q#)], a form of company organized and existing under the laws of the State of \_\_\_\_\_, (“Applicant,”) and PacifiCorp, a Corporation existing under the laws of the State of Oregon, (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 [date]; and

**Whereas**, The Applicant desires to interconnect the Small Generating Facility with the Public Utility’s Transmission System and/or Distribution System (“T&D System”);

**Whereas**, The Public Utility has completed an Interconnection Cluster 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 Cluster 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 small generator interconnection procedures.
2. Applicant elects and the Public Utility shall cause to be performed an Interconnection Facilities Study consistent with Article 0060.
3. The Applicant will provide the data requested in Attachment A of this form agreement. The scope of the Interconnection Facilities Study is detailed in Attachment B to this agreement and shall be subject to the data set forth in Attachment A to this agreement.
4. An Interconnection Facilities Study report shall provide the following information:
  - 4.1 A description of the Interconnection Equipment, Interconnection Facilities, and/or System Upgrades required to interconnect the Small Generator Facility to the Public Utility’s T&D System (including a description of any facilities or upgrades necessary to address impacts to Affected Systems);

**Interconnection Facilities Study Form Agreement**

4.2 A good-faith, non-binding estimate of the cost of the Interconnection Equipment, Interconnection Facilities, and/or System Upgrades required to interconnect the Small Generator Facility to the Public Utility's T&D System (including the cost of any facilities or upgrades necessary to address impacts to Affected Systems);

4.3 A reasonable schedule for the procurement, construction, installation and testing of the Interconnection Equipment, Interconnection Facilities, and/or System Upgrades required to interconnect the Small Generator Facility to the Public Utility's T&D System (including the cost of any facilities or upgrades necessary to address impacts to Affected Systems); and

4.4 A discussion of how the required Interconnection Equipment, Interconnection Facilities, and/or System Upgrades address the short circuit, instability, and power flow issues identified in the Interconnection Cluster Study.

5. The Public Utility may require a study deposit in an amount permitted by Article 0035(1) and the Public Utility shall have no obligation to begin the Facilities Study until such time as the Applicant has paid such deposit.

6. As required by Article 0060(13)(a), Attachment B to this agreement provides a scope for the Interconnection Facilities Study, a reasonable schedule for completion of the study, and a good-faith, non-binding estimate of the cost to perform the Interconnection Facilities Study. In cases where no Upgrades are required, and barring unforeseen circumstances, the Interconnection Facilities Study shall be completed and the results will be transmitted to the Applicant within thirty Business Days after the facilities study scoping meeting has been held between the Parties or mutual agreement has been reached to skip the facilities study scoping meeting. Attachment B is incorporated as part of this agreement.

7. The Applicant agrees to pay the actual cost of the Interconnection Facilities Study. Study fees will be based on and shall accord with the requirements of Article 0035(1) and will be based on actual costs. This provision shall constitute the Applicant's written authorization for the Public Utility to incur and assess costs in excess of the initial application fee.

**Interconnection Facilities Study Form Agreement**

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:

PacifiCorp

Signed \_\_\_\_\_ Date \_\_\_\_\_

Name (Printed): \_\_\_\_\_ Title \_\_\_\_\_

[Applicant name]

Signed \_\_\_\_\_ Date \_\_\_\_\_

Name (Printed): \_\_\_\_\_ Title \_\_\_\_\_

**Interconnection Facilities Study Form Agreement****Attachment A to the Interconnection Facilities Study Agreement****Data To Be Provided by Applicant With the Interconnection Facilities Study Agreement**Type of Interconnection Service Requested:Network Resource Interconnection ServiceEnergy Resource Interconnection Service

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: \_\_\_\_\_

**Interconnection Facilities Study Form Agreement**

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 Facilities Study Form Agreement****Attachment B: Interconnection Facilities Study Agreement****Detailed Scope, Reasonable Schedule, and Good-Faith non-Binding Cost Estimate for Interconnection Facilities Study**

---

**1. Detailed Scope:**

A description of the Interconnection Equipment, Interconnection Facilities, and/or System Upgrades required to interconnect the Small Generator Facility to the Public Utility's T&D System (including a description of any facilities or upgrades necessary to address impacts to Affected Systems);

A good-faith, non-binding estimate of the cost of the Interconnection Equipment, Interconnection Facilities, and/or System Upgrades required to interconnect the Small Generator Facility to the Public Utility's T&D System (including the cost of any facilities or upgrades necessary to address impacts to Affected Systems);

A reasonable schedule for the procurement, construction, installation and testing of the Interconnection Equipment, Interconnection Facilities, and/or System Upgrades required to interconnect the Small Generator Facility to the Public Utility's T&D System (including the cost of any facilities or upgrades necessary to address impacts to Affected Systems); and

A discussion of how the required Interconnection Equipment, Interconnection Facilities, and/or System Upgrades address the short circuit, instability, and power flow issues identified in the Interconnection Cluster Study.

**2. Reasonable Schedule:**

The Public Utility's good faith estimate for the time of completion of the Facilities Study is 30 – 45 business days after the Applicant returns the executed study, required technical data and requested deposit.

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**3. Estimated study costs:**

In accordance with Article 0035(1), the Applicant will need to provide a deposit in the amount of \$1000. The estimated study cost for the facilities study is \$15,000. The Applicant is only responsible for the actual costs of the facilities study which will be compiled upon the conclusion of the facilities study.

**Docket UM 2032**

**Attachment 15**

**to**

**JOINT UTILITIES' APPLICATION  
FOR APPROVAL OF COMPLIANCE FILING**

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*PacifiCorp's 37 Standard QF Schedule*

**Available**

To owners of Qualifying Facilities making sales of electricity to the Company in the State of Oregon.

**Applicable**

- For power purchased from Base Load and Wind Qualifying Facilities with a nameplate capacity of 10,000 kW or less or that, together with any other electric generating facility using the same motive force, owned or controlled by the same person(s) or affiliated person(s), and located at the same site, has a nameplate capacity of 10,000 kW or less.
- For power purchased Fixed and Tracking Solar Qualifying Facilities with a nameplate capacity of 3,000 kW or less or that, together with any other electric generating facility using the same motive force, owned or controlled by the same person(s) or affiliated person(s), and located at the same site, has a nameplate capacity of 3,000 kW or less.

Owners of these Qualifying Facilities ("Eligible QFs") will be required to enter into a written power sales contract with the Company; provided, however, that any on-system Qualifying Facility that proposes to take any form of interconnection service under a Generation Interconnection Agreement with the Company's transmission function other than Network Resource Interconnection Service shall not be an Eligible QF under this Schedule.

**Definitions****Cogeneration Facility**

A facility which produces electric energy together with steam or other form of useful energy (such as heat) which are used for industrial, commercial, heating or cooling purposes through the sequential use of energy.

**Qualifying Facilities**

Qualifying cogeneration facilities or qualifying small power production facilities within the meaning of section 201 and 210 of the Public Utility Regulatory Policies Act of 1978 (PURPA), 16 U.S.C. 796 and 824a-3.

**Qualifying Electricity**

Electricity that meets the requirements of "qualifying electricity" set forth in the Oregon Renewable Portfolio Standards: ORS 469A.010, 469A.020, and 469A.025.

**Renewable Qualifying Facility**

A Qualifying Facility that generates Qualifying Electricity.

**Wind Qualifying Facility**

A Renewable Qualifying Facility that generates Qualifying Electricity using wind as its motive force.

**Baseload Renewable Qualifying Facility**

A Renewable Qualifying Facility that generates Qualifying Electricity using any qualifying resource other than wind or solar.

**Small Power Production Facility**

A facility which produces electric energy using as a primary energy source biomass, waste, renewable resources or any combination thereof and has a power production capacity which, together with other facilities located at the same site, is not greater than 80 megawatts.

(continued)

**On-Peak Hours or Peak Hours**

On-Peak hours are defined as 6:00 a.m. to 10:00 p.m. Pacific Prevailing Time Monday through Saturday, excluding NERC holidays.

Due to the expansions of Daylight Saving Time (DST) as adopted under Section 110 of the U.S. Energy Policy Act of 2005, the time periods shown above will begin and end one hour later for the period between the second Sunday in March and the first Sunday in April and for the period between the last Sunday in October and the first Sunday in November.

**Off-Peak Hours**

All hours other than On-Peak.

**Excess Output**

Excess Output shall mean any increment of Net Output delivered at a rate, on an hourly basis, exceeding the Facility Nameplate Capacity. PacifiCorp shall pay Seller the Off-Peak Price as described and calculated under pricing option 4 (Non-Firm Market Index Avoided Cost Price) for all Excess Output.

**Same Site**

Generating facilities are considered to be located at the same site as the QF for which qualification for the standard rates and standard contract is sought if they are located within a five-mile radius of any generating facilities or equipment providing fuel or motive force associated with the QF for which qualification for the standard rates and standard contract is sought.

**Person(s) or Affiliated Person(s)**

A natural person or persons or any legal entity or entities sharing common ownership, management or acting jointly or in concert with or exercising influence over the policies or actions of another person or entity. Two facilities will not be held to be owned or controlled by the same person(s) or affiliated person(s) solely because they are developed by a single entity. Two facilities will not be held to be owned or controlled by the same person(s) or affiliated person(s) if such common person or persons is a "passive investor" whose ownership interest in the QF is primarily related to utilizing production tax credits, green tag values and MACRS depreciation as the primary ownership benefit and the facilities at issue are independent family-owned or community-based projects. A unit of Oregon local government may also be a "passive investor" in a community-based project if the local governmental unit demonstrates that it will not have an equity ownership interest in or exercise any control over the management of the QF and that its only interest is a share of the cash flow from the QF, which share will not exceed 20%. The 20% cash flow share limit may only be exceeded for good cause shown and only with the prior approval of the Commission.

**Shared Interconnection and Infrastructure**

QFs otherwise meeting the separate ownership test and thereby qualified for entitlement to the standard rates and standard contract will not be disqualified by utilizing an interconnection or other infrastructure not providing motive force or fuel that is shared with other QFs qualifying for the standard rates and standard contract so long as the use of the shared interconnection complies with the interconnecting utility's safety and reliability standards, interconnection contract requirements and Prudent Electrical Practices as that term is defined in the interconnecting utility's approved standard contract.

(continued)

**Family Owned**

After excluding the ownership interest of the passive investor whose ownership interests are primarily related to green tag values and tax benefits as the primary ownership benefit, five or fewer individuals own 50 percent or more of the equity of the project entity, or fifteen or fewer individuals own 90 percent or more of the project entity. A "look through" rule applies to closely held entities that hold the project entity, so that equity held by LLCs, trusts, estates, corporations, partnerships or other similar entities is considered held by the equity owners of the look through entity. An individual is a natural person. In counting to five or fifteen, spouses or children of an equity owner of the project owner who also have an equity interest are aggregated and counted as a single individual.

**Community-Based**

A community project (or a community sponsored project) must have a recognized and established organization located within the county of the project or within 50 miles of the project that has a genuine role in helping the project be developed and must have a significant continuing role with or interest in the project after it is completed and placed in service. Many varied and different organizations may qualify under this exception. For example, the community organization could be a church, a school, a water district, an agricultural cooperative, a unit of local government, & local utility, a homeowners' association, a charity, a civic organization, and etc.

After excluding the passive investor whose ownership interests are primarily related to green tag values and tax benefits as the primary ownership benefit, the equity (ownership) interests in a community sponsored project must be owned in substantial percentage (80 percent or more) by the following persons (individuals and entities): (i) the sponsoring organization, or its controlled affiliates; (ii) members of the sponsoring organization (if it is a membership organization) or owners of the sponsorship organization (if it is privately owned); (iii) persons who live in the county in which the project is located or who live a county adjoining the county in which the project is located; or (iv) units of local government, charities, or (v) other established nonprofit organizations active either in the county in which the project is located or active in a county adjoining the county in which the project is located.

**Dispute Resolution**

Upon request, the QF will provide the purchasing utility with documentation verifying the ownership, management and financial structure of the QF in reasonably sufficient detail to allow the utility to make an initial determination of whether or not the QF meets the above-described criteria for entitlement to the standard rates and standard contract.

Any dispute concerning a QF's entitlement to the standard rates and standard contract shall be presented to the Commission for resolution. The QF may file a complaint asking the Commission to adjudicate disputes regarding the formation of the standard contract. The QF may not file such a complaint during any 15-day period in which the utility has the obligation to respond, but must wait until the 15-day period has passed. The utility may respond to the complaint within ten days of service. The Commission will limit its review to the issues identified in the complaint and response, and utilize a process similar to the arbitration process adopted to facilitate the execution of interconnection agreements among telecommunications carriers. See OAR 860, Division 016. The Administrative Law Judge will act as an administrative law judge, not as an arbitrator.

(continued)

**Self Supply Option**

Owner shall elect to sell all Net Output to PacifiCorp and purchase its full electric requirements from PacifiCorp or sell Net Output surplus to its needs at the Facility site to PacifiCorp and purchase partial electric requirements service from PacifiCorp, in accordance with the terms and conditions of the power purchase agreement and the appropriate retail service.

**Pricing Options****1. Standard Fixed Avoided Cost Prices**

Prices are fixed at the time that the contract is signed by both the Qualifying Facility and the Company and will not change during the term of the contract. Standard Fixed Avoided Cost Prices are available for a contract term of up to 15 years and prices under a longer term contract (up to 20 years) will thereafter be under the Firm Market Indexed Avoided Cost Price.

The Standard Fixed Avoided Cost pricing option is available to all Qualifying Facilities. The Standard Fixed Avoided Cost Price for Wind and Solar Qualifying Facilities reflects integration costs as set forth on pages 6-7.

**2. Renewable Fixed Avoided Cost Prices**

Prices are fixed at the time that the contract is signed by both the Renewable Qualifying Facility and the Company and will not change during the term of the contract. Renewable Fixed Avoided Cost Prices are available for a contract term of up to 15 years and prices under a longer term contract (up to 20 years) will thereafter be under the Firm Market Indexed Avoided Cost Price. The Renewable Fixed Avoided Cost pricing option is available only to Renewable Qualifying Facilities. A Renewable Qualifying Facility choosing the Renewable Fixed Avoided Cost pricing option: (a) must cede all Green Tags generated by the facility, as defined in the standard contract, to the Company during the Renewable Resource Deficiency Period identified on page 8 including during any period after the first 15 years of a longer term contract (up to 20 years); and (b) will retain ownership of all Environmental Attributes generated by the facility, as defined in the standard contract, during the Renewable Resource Sufficiency Period identified on page 8.

**3. Firm Market Indexed Avoided Cost Prices**

Firm Market Index Avoided Cost Prices are available to Qualifying Facilities that contract to deliver firm power. Monthly On-Peak / Off-Peak prices paid are a blending of Intercontinental Exchange (ICE) Day Ahead Power Price Report at market hubs for On-Peak and Off-Peak prices. The monthly blending matrix is available upon request. The Firm Market Index Avoided Cost Price for Wind and Solar Qualifying Facilities will reflect integration costs.

**4. Non-Firm Market Index Avoided Cost Prices**

Non-Firm Market Index Avoided Cost Prices are available to Qualifying Facilities that do not elect to provide firm power. Qualifying Facilities taking this option will have contracts that do not include minimum delivery requirements, default damages for construction delay or, for under delivery or early termination, or default security for these purposes. Monthly On-Peak / Off-Peak prices paid are 93 percent of a blending of ICE Day Ahead Power Price Report at market hubs for on-peak and off-peak firm index prices. The monthly blending matrix is available upon request. The Non-Firm Market Index Avoided Cost pricing option is available to all Qualifying Facilities. The Non-Firm Market Index Avoided Cost Price for Wind and Solar Qualifying Facilities will reflect integration costs.

(continued)

**Third Party Transmission Cost Adjustment**

QFs located in discrete load center areas on PacifiCorp's system (also referred to as load "pockets" or load "bubbles") where there is insufficient load to sink additional generation must be exported from that load pocket, transmitted across a third-party transmission system using long-term, firm point-to-point transmission service ("LTF PTP"), and delivered to a different area on PacifiCorp's system where there is sufficient load to sink additional generation. QFs are required to reimburse PacifiCorp for the cost of these third-party system LTF PTP transmission service arrangements, including any associated Ancillary Services. PacifiCorp will procure third-party system LTF PTP and associated Ancillary Services based on the QF's maximum hourly output that is in excess of the load pocket minimum load ("Excess Generation"). Such LTF PTP transmission service and associated Ancillary Services including losses will be procured from the applicable third-party transmission provider consistent with such transmission provider's Open Access Transmission Tariff or comparable pricing schedule for transmission services.

"Ancillary Services," as used in this section, means those services necessary to support the transmission of energy from resources to loads while maintaining reliable operation of the third-party transmission provider's transmission system in accordance with good utility practice.

The amount and cost of the LTF PTP transmission service and associated Ancillary Services including losses will be subject to periodic updates as provided below and in Exhibit A of this Standard Avoided Cost Rate Schedule, and all terms and conditions will be memorialized in an exhibit to the power purchase agreement ultimately entered into between PacifiCorp and the QF, such exhibit being substantially in the form of Exhibit A of this Standard Avoided Cost Rate Schedule. QFs will have the option to select either option below for such transmission cost adjustments:

**Transmission Cost Adjustment Options**

1. Direct pass-through of actual costs. The QF will pay all actual costs incurred by PacifiCorp to secure LTF PTP transmission service and associated Ancillary Services from the applicable third-party transmission provider for exporting Excess Generation, as determined by such third-party transmission provider's Open Access Transmission Tariff or comparable pricing schedule for transmission services.
2. Fixed forecast costs. The QF will pay PacifiCorp a monthly fixed amount to secure LTF PTP transmission service and associated Ancillary Services including losses from the applicable third-party transmission provider for exporting Excess Generation. The monthly fixed amount will be determined consistent with Exhibit A of this Standard Avoided Cost Rate Schedule, including Table A of Exhibit A.

**Monthly Payments**

A Qualifying Facility shall select the option of payment at the time of signing the contract under one of the Pricing Options specified above. Once an option is selected the option will remain in effect for the duration of the Facility's contract.

**Renewable or Standard Fixed Avoided Cost Prices**

In accordance with the terms of a contract with a Qualifying Facility, the Company shall pay for all separately metered kilowatt-hours of On-Peak and Off-Peak generation at the renewable or standard fixed prices as provided in this schedule. On-Peak and Off-Peak are defined in the definitions section of this schedule.

(continued)

**Monthly Payments (continued)**
**Firm Market Indexed and Non-Firm Market Index Avoided Cost Prices**

In accordance with the terms of a contract with a Qualifying Facility, the Company shall pay for all separately metered kilowatt-hours of On-Peak and Off-Peak generation at the market prices calculated at the time of delivery. On-Peak and Off-Peak are defined in the definitions section of this schedule.

**Avoided Cost Prices**
**Standard Fixed Avoided Cost Prices for Base Load and Wind QF (¢/kWh)**

Deliveries During Calendar Year	Base Load QF (1)		Wind QF (1,2)		Wind Integration
	On-Peak Energy Price	Off-Peak Energy Price	On-Peak Energy Price	Off-Peak Energy Price	All hours Energy Charge
	(a)	(b)	(c)	(d)	(e)
2023	13.84	7.59	13.61	7.35	0.23
2024	11.54	7.46	11.34	7.26	0.20
2025	11.41	7.68	11.14	7.41	0.27
2026	5.72	3.73	5.67	3.45	0.29
2027	6.04	4.01	5.96	3.69	0.33
2028	6.22	4.15	6.14	3.81	0.34
2029	6.39	4.28	6.47	4.10	0.18
2030	6.47	4.31	6.57	4.14	0.16
2031	6.69	4.49	6.92	4.44	0.05
2032	6.96	4.71	7.17	4.64	0.07
2033	7.17	4.87	7.44	4.85	0.02
2034	7.40	5.04	7.67	5.03	0.01
2035	7.49	5.09	7.77	5.07	0.02
2036	7.65	5.19	7.94	5.18	0.01
2037	7.95	5.44	8.25	5.44	0.00
2038	8.25	5.69	8.57	5.69	0.00
2039	8.54	5.93	8.86	5.92	0.00
2040	8.88	6.20	9.19	6.19	0.01

(1) Standard Resource Sufficiency Period ends December 31, 2025 and Standard Resource Deficiency Period begins January 1, 2026.

(2) The avoided cost price has been reduced by wind or solar integration charges applicable to QF resources located in PacifiCorp's Balancing Area Authority (BAA) (in-system). If wind or solar QF resource is not in PacifiCorp's BAA, prices will be increased by the applicable integration charge.

(continued)

**Effective on and after February 26, 2020**

**Avoided Cost Prices (continued)**
**Standard Fixed Avoided Cost Prices for Fixed and Tracking Solar QF (¢/kWh)**

Deliveries During Calendar Year	Fixed Solar QF (1,2)		Tracking Solar QF (1,2)		Solar Integration
	On-Peak Energy Price	Off-Peak Energy Price	On-Peak Energy Price	Off-Peak Energy Price	All hours Energy Charge
	(f)	(g)	(h)	(i)	(j)
2023	13.24	6.98	13.24	6.98	0.61
2024	11.35	7.27	11.35	7.27	0.19
2025	11.29	7.56	11.29	7.56	0.12
2026	4.25	3.64	4.30	3.64	0.09
2027	4.39	3.78	4.44	3.78	0.24
2028	4.55	3.92	4.60	3.92	0.23
2029	4.88	4.24	4.93	4.24	0.04
2030	4.91	4.25	4.96	4.25	0.05
2031	5.14	4.47	5.19	4.47	0.02
2032	5.37	4.68	5.42	4.68	0.03
2033	5.56	4.86	5.62	4.86	0.01
2034	5.75	5.03	5.81	5.03	0.01
2035	5.81	5.07	5.87	5.07	0.01
2036	5.93	5.18	5.99	5.18	0.01
2037	6.20	5.44	6.26	5.44	0.00
2038	6.47	5.69	6.53	5.69	0.00
2039	6.72	5.92	6.78	5.92	0.00
2040	6.98	6.17	7.05	6.17	0.03

(3) Standard Resource Sufficiency Period ends December 31, 2025 and Standard Resource Deficiency Period begins January 1, 2026.

(4) The avoided cost price has been reduced by wind or solar integration charges applicable to QF resources located in PacifiCorp's Balancing Area Authority (BAA) (in-system). If wind or solar QF resource is not in PacifiCorp's BAA, prices will be increased by the applicable integration charge.

(continued)

**Avoided Cost Prices (continued)**
**Renewable Fixed Avoided Cost Prices for Base Load and Wind QF (¢/kWh)**

Deliveries During Calendar Year	Renewable Base Load QF (1)		Wind QF (1,2)		Wind Integration
	On-Peak Energy Price	Off-Peak Energy Price	On-Peak Energy Price	Off-Peak Energy Price	All hours Energy Charge
	(a)	(b)	(c)	(d)	(e)
2023	13.84	7.59	13.61	7.35	0.23
2024	11.54	7.46	11.34	7.26	0.20
2025	11.41	7.68	11.14	7.41	0.27
2026	5.35	3.16	3.90	2.87	0.29
2027	5.27	3.55	3.75	3.23	0.33
2028	5.32	3.73	3.76	3.39	0.34
2029	5.22	3.70	3.79	3.52	0.18
2030	5.27	3.81	3.84	3.65	0.16
2031	5.29	3.75	3.94	3.70	0.05
2032	5.34	3.95	3.95	3.88	0.07
2033	5.32	4.09	3.95	4.07	0.02
2034	5.43	4.17	4.03	4.15	0.01
2035	5.62	4.18	4.19	4.16	0.02
2036	5.89	4.07	4.43	4.06	0.01
2037	5.89	4.30	4.41	4.30	0.00
2038	5.99	4.42	4.48	4.42	0.00
2039	6.11	4.53	4.57	4.53	0.00
2040	6.37	4.50	4.78	4.48	0.01

(1) For the purpose of determining: (i) when the Renewable Qualifying Facility is entitled to renewable avoided cost prices; and (ii) the ownership of environmental attributes and the transfer of Green Tags to PacifiCorp, Renewable Sufficiency Period ends December 31, 2025 and Renewable Deficiency Period begins January 1, 2026.

(2) The avoided cost price has been reduced by wind or solar integration charges applicable to QF resources located in PacifiCorp's Balancing Area Authority (BAA) (in-system). If wind or solar QF resource is not in PacifiCorp's BAA, prices will be increased by the applicable integration charge.

(continued)

**Avoided Cost Prices (continued)**
**Renewable Fixed Avoided Cost Prices for Fixed and Tracking Solar QF (¢/kWh)**

Deliveries During Calendar Year	Fixed Solar QF (1,2)		Tracking Solar QF (1,2)		Solar Integration
	On-Peak Energy Price	Off-Peak Energy Price	On-Peak Energy Price	Off-Peak Energy Price	All hours Energy Charge
	(f)	(g)	(h)	(i)	(j)
2023	12.24	12.24	12.12	12.12	0.61
2024	10.70	10.70	10.62	10.62	0.19
2025	10.69	10.69	10.62	10.62	0.12
2026	2.60	2.60	2.89	2.89	0.09
2027	2.40	2.40	2.70	2.70	0.24
2028	2.42	2.42	2.74	2.74	0.23
2029	2.47	2.47	2.79	2.79	0.04
2030	2.47	2.47	2.80	2.80	0.05
2031	2.45	2.45	2.79	2.79	0.02
2032	2.46	2.46	2.81	2.81	0.03
2033	2.43	2.43	2.79	2.79	0.01
2034	2.47	2.47	2.84	2.84	0.01
2035	2.58	2.58	2.95	2.95	0.01
2036	2.73	2.73	3.10	3.10	0.01
2037	2.70	2.70	3.09	3.09	0.00
2038	2.75	2.75	3.14	3.14	0.00
2039	2.80	2.80	3.20	3.20	0.00
2040	2.92	2.92	3.32	3.32	0.03

(1) For the purpose of determining: (i) when the Renewable Qualifying Facility is entitled to renewable avoided cost prices; and (ii) the ownership of environmental attributes and the transfer of Green Tags to PacifiCorp, Renewable Sufficiency Period ends December 31, 2025 and Renewable Deficiency Period begins January 1, 2026.

(2) The avoided cost price has been reduced by wind or solar integration charges applicable to QF resources located in PacifiCorp's Balancing Area Authority (BAA) (in-system). If wind or solar QF resource is not in PacifiCorp's BAA, prices will be increased by the applicable integration charge.

(continued)

**Qualifying Facilities Contracting Procedure**

Interconnection and power purchase agreements are handled by different functions within the Company. Interconnection agreements (both transmission and distribution level voltages) are handled by the Company's transmission function (PacifiCorp Transmission Services) while power purchase agreements are handled by the Company's merchant function (PacifiCorp Commercial and Trading).

It is recommended that the owner initiate its request for interconnection 18 months ahead of the anticipated in-service date to allow time for studies, negotiation of agreements, engineering, procurement, and construction of the required interconnection facilities. Early application for interconnection will help ensure that necessary interconnection arrangements proceed in a timely manner on a parallel track with negotiation of the power purchase agreement.

**1. Eligible Qualifying Facilities**

**APPLICATION:** To owners of eligible existing or proposed QFs with a design capacity less than or equal to 10,000 kW for Base Load and Wind QF resources and less than or equal to 3,000 kW for Solar QF resources who desire to make sales to the Company in the state of Oregon. Such owners will be required to enter into a written power purchase agreement with the Company pursuant to the procedures set forth below.

**I. Process for Completing a Power Purchase Agreement****A. Communications**

Unless otherwise directed by the Company, all communications to the Company regarding QF power purchase agreements should be directed in writing as follows:

PacifiCorp  
Manager-QF Contracts  
825 NE Multnomah St, Suite 600  
Portland, Oregon 97232

The Company will respond to all such communications in a timely manner. If the Company is unable to respond on the basis of incomplete or missing information from the QF owner, the Company shall indicate what additional information is required. Thereafter, the Company will respond in a timely manner following receipt of all required information

**B. Procedures**

1. The Company's approved generic or standard form power purchase agreements may be obtained from the Company's website at [www.pacificorp.com](http://www.pacificorp.com), or if the owner is unable to obtain it from the website, the Company will send a copy within seven days of a written request.

(continued)

**I. Process for Completing a Power Purchase Agreement****B. Procedures (continued)**

2. In order to obtain a project specific draft power purchase agreement the owner must provide in writing to the Company, general project information required for the completion of a power purchase agreement, including, but not limited to:
  - (a) demonstration of ability to obtain QF status;
  - (b) design capacity (MW), station service requirements, and net amount of power to be delivered to the Company's electric system;
  - (c) generation technology and other related technology applicable to the site;
  - (d) proposed site location;
  - (e) schedule of monthly power deliveries;
  - (f) calculation or determination of minimum and maximum annual deliveries;
  - (g) motive force or fuel plan;
  - (h) proposed on-line date and other significant dates required to complete the milestones;
  - (i) proposed contract term and pricing provisions as defined in this Schedule (i.e., standard fixed price, renewable fixed price);
  - (j) status of interconnection or transmission arrangements;
  - (k) point of delivery or interconnection;
3. The Company shall provide a draft power purchase agreement when all information described in Paragraph 2 above has been received in writing from the QF owner. Within 15 business days following receipt of all information required in Paragraph 2, the Company will provide the owner with a draft power purchase agreement including current standard avoided cost prices and/or other optional pricing mechanisms as approved by the Public Utility Commission of Oregon in this Standard Avoided Cost Rate Schedule.
4. If the owner desires to proceed with the power purchase agreement after reviewing the Company's draft power purchase agreement, it may request in writing that the Company prepare a final draft power purchase agreement. In connection with such request, the owner must provide the Company with any additional or clarified project information that the Company reasonably determines to be necessary for the preparation of a final draft power purchase agreement. Within 15 business days following receipt of all information requested by the Company in this paragraph 4, the Company will provide the owner with a final draft power purchase agreement.

(continued)

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**I. Process for Completing a Power Purchase Agreement**  
**B. Procedures (continued)**

5. After reviewing the final draft power purchase agreement, the owner may either prepare another set of written comments and proposals or approve the final draft power purchase agreement. If the owner prepares written comments and proposals the Company will respond in 15 business days to those comments and proposals.
6. When both parties are in full agreement as to all terms and conditions of the draft power purchase agreement, the Company will prepare and forward to the owner within 15 business days, a final executable version of the agreement. Following the Company's execution a completely executed copy will be returned to the owner. Prices and other terms and conditions in the power purchase agreement will not be final and binding until the power purchase agreement has been executed by both parties.

**II. Process for Negotiating Interconnection Agreements**

[NOTE: Section II applies only to QFs connecting directly to PacifiCorp's electrical system. An off-system QF should contact its local utility or transmission provider to determine the interconnection requirements and wheeling arrangement necessary to move the power to PacifiCorp's system.]

In addition to negotiating a power purchase agreement, QFs intending to make sales to the Company are also required to enter into an interconnection agreement that governs the physical interconnection of the project to the Company's transmission or distribution system. The Company's obligation to make purchases from a QF is conditioned upon the QF completing all necessary interconnection arrangements. It is recommended that the owner initiate its request for interconnection 18 months ahead of the anticipated in-service date to help ensure that necessary interconnection arrangements proceed in a timely manner on a parallel track with negotiation of the power purchase agreement.

Because of functional separation requirements mandated by the Federal Energy Regulatory Commission, interconnection and power purchase agreements are handled by different functions within the Company. Interconnection agreements (both transmission and distribution level voltages) are handled by the Company's transmission function (including but not limited to PacifiCorp Transmission Services) while power purchase agreements are handled by the Company's merchant function (including but not limited to PacifiCorp's Commercial and Trading Group).

(continued)

**II. Process for Negotiating Interconnection Agreements (continued)****A. Communications**

Based on the project size and other characteristics, the Company will direct the QF owner to the appropriate individual within the Company's transmission function who will be responsible for negotiating the interconnection agreement with the QF owner. Thereafter, the QF owner should direct all communications regarding interconnection agreements to the designated individual, with a copy of any written communications to the address set forth above.

**B. Procedures**

Generally, the interconnection process involves (1) initiating a request for interconnection, (2) undertaking studies to determine the system impacts associated with the interconnection and the design, cost, and schedules for constructing any necessary interconnection facilities, and (3) executing an interconnection agreement to address facility construction, testing, acceptance, ownership, operation and maintenance issues. Consistent with PURPA and Oregon Public Utility Commission regulations, the owner is responsible for all interconnection costs assessed by the Company on a nondiscriminatory basis. For interconnections impacting the Company's Transmission and Distribution System, the Company will process the interconnection application through PacifiCorp Transmission Services.

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**Exhibit A to Oregon Standard Avoided Cost Rate Schedule****Transmission Services for Excess Generation**

1. No later than seven (7) days after the effective date of the power purchase agreement (“PPA”), PacifiCorp shall submit the request to designate the Qualifying Facility (“QF”) as a network resource eligible for network integration transmission service under its Network Integration Transmission Service Agreement with PacifiCorp’s transmission function (“DNR Request”). If, in response to PacifiCorp’s DNR Request, PacifiCorp is informed by PacifiCorp’s transmission function that such network resource designation is contingent on PacifiCorp procuring transmission service from a third-party transmission provider, PacifiCorp shall notify the QF Seller (“Seller”) in writing within seven (7) days of receiving the DNR Request transmission study and provide Seller the transmission study or other documentation from PacifiCorp’s transmission function that demonstrates the requirement.
2. Within thirty (30) days following Seller’s receipt of the notification and supporting materials contemplated in Section 1 above, Seller shall make one of the following elections in writing to PacifiCorp:
  - a. Seller shall agree to reimburse PacifiCorp for such third-party transmission service under Option 1 below plus reimburse PacifiCorp for all study costs incurred with the third-party transmission provider; or
  - b. Seller shall request PacifiCorp to prepare a proposed Monthly Transmission Rate (as defined below) under Option 2 below for Seller’s review plus reimburse PacifiCorp for all study costs incurred with the third-party transmission provider; or
  - c. Seller shall terminate the Agreement, and such termination shall not be deemed an event of default under the PPA and neither PacifiCorp nor Seller shall have any further obligations or liability to the other party relating to the PPA.

If PacifiCorp does not receive Seller’s response within forty five (45) days following the delivery of its notification under Section 1 above, Seller shall be deemed to have elected clause 2.c. above and the PPA shall immediately terminate with no further action of either party.

3. If Seller timely elects to proceed under Option 1 or Option 2, PacifiCorp will promptly proceed to procure long-term firm, point-to-point transmission service, including ancillary services<sup>1</sup> and losses as applicable (“LTF PTP”), beginning on the scheduled initial delivery date stated in the PPA in an amount determined through the transmission service request process as identified in Section 1 above (“Excess Generation”). Such LTF PTP transmission service will be procured from the applicable third-party transmission provider consistent with such transmission provider’s Open Access Transmission Tariff (“OATT”) or comparable pricing schedule for transmission services. Such LTF PTP transmission costs incurred by PacifiCorp will be reimbursed by Seller under either Option 1 or Option 2 below, as elected by Seller under Section 2 above. Once either Option 1 or Option 2 is elected by Seller, Seller may not change its election without prior approval of PacifiCorp which approval shall not be unreasonably withheld, conditioned, or delayed subject to commitments under any third-party

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<sup>1</sup> Ancillary services are those services that may include balancing services that are necessary to support the transmission of energy from resources to loads while maintaining reliable operation of the third-party transmission provider’s transmission system in accordance with good utility practice.

(continued)

transmission service application in progress. Seller's obligation to reimburse PacifiCorp for the LTF PTP transmission costs it incurs under either Option 1 or Option 2 below shall not be excused due to any delays in the commercial operation of the QF or the failure of the QF to operate, due to events of force majeure or otherwise.

**Option 1 – Direct pass-through of actual costs.**

Seller agrees to pay all actual costs incurred by PacifiCorp to secure LTF PTP transmission service from the applicable third-party transmission provider for exporting Excess Generation, as determined by such transmission provider's OATT or comparable pricing schedule for transmission services. If requested by Seller, PacifiCorp will provide within ten (10) business days of the request documentation supporting the actual costs incurred by PacifiCorp and for which PacifiCorp is seeking reimbursement from Seller. Seller compensates PacifiCorp for the actual costs PacifiCorp incurs one month in arrears through a netting of the LTF PTP transmission costs against PacifiCorp's monthly payment for generation under the PPA. Eighteen (18) months prior to each five (5) year anniversary of the start date under the third-party transmission service agreement, PacifiCorp will reevaluate and, if necessary, adjust the amount of LTF PTP transmission capacity necessary to export the Excess Generation.

**Option 2 – Fixed forecasted costs.**

Within ten (10) business days following PacifiCorp's receipt of Seller's election under clause 2.b. above, PacifiCorp will prepare and provide to Seller the proposed monthly fixed charge (the "Monthly Transmission Rate") that Seller pays to PacifiCorp for the costs it incurs in securing LTF PTP transmission service from the applicable third-party transmission provider for exporting Excess Generation, including workpapers and any other pertinent materials supporting the calculation. Such Monthly Transmission Rate will be determined based on the values provided in Table A of this Oregon Standard Avoided Cost Rate Schedule, as applicable for the relevant third-party transmission provider. If the applicable third-party transmission provider is not identified in Table A, PacifiCorp will prepare a Monthly Transmission Rate using the same methodology as was used to develop the values in Table A using the applicable posted rates of the third-party transmission provider.

Seller has ten (10) business days from the receipt of the proposed Monthly Transmission Rate to inform PacifiCorp whether it (a) elects to pay the transmission charges associated with this Option 2; (b) elects not to pay the transmission charges associated with this Option 2 and elects Option 1 instead; or (c) elects not to pay the transmission charges associated with this Option 2 and elects to terminate the PPA. If PacifiCorp does not receive Seller's response within thirty (30) days following the delivery of the proposed Monthly Transmission Rate from PacifiCorp, Seller shall be deemed to have elected clause (c) of this paragraph and the PPA shall immediately terminate with no further action of either party. Such termination of the PPA under this paragraph shall not be deemed an event of default under the PPA and no party shall have any further obligations or liability to the other party relating to the PPA.

Seller compensates PacifiCorp for the Monthly Transmission Rate one month in arrears through a netting of the Monthly Transmission Rate against PacifiCorp's monthly payment for generation under the PPA. Eighteen (18) months prior to each five (5) year anniversary of the start date under the third-party transmission service agreement, PacifiCorp will reevaluate and, if necessary, adjust the amount of LTF PTP transmission capacity necessary to export the Excess Generation.

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In addition, on each five year anniversary of the start date under the transmission service agreement between PacifiCorp and the third-party transmission provider, the Monthly Transmission Rate will be adjusted based on the applicable forecasted rates provided in Table A of PacifiCorp's Oregon Standard Avoided Cost Rate Schedule then in effect on such five year anniversary date; provided, however, that any posted rates of an applicable third-party transmission provider not captured in the methodology below but billed to PacifiCorp will also be included in the Monthly Transmission Rate on a prospective basis. If the applicable third-party transmission provider is not identified in Table A, PacifiCorp will adjust the Monthly Transmission Rate using the same methodology as was used to develop the values in Table A using the applicable posted rates of the third-party transmission provider then in effect on such five year anniversary date.

4. If under either Option 1 or Option 2 above, PacifiCorp is notified by the third-party transmission provider that the necessary LTF PTP transmission service request cannot be granted for the term requested, PacifiCorp shall promptly notify Seller and provide the supporting documentation received from the third-party transmission provider. Within thirty (30) days of receipt of such notice under this Section 4, and except as limited below, Seller shall elect one of the following:
  - a. Seller will agree to amend the QF PPA to (i) adjust the scheduled initial delivery date and the scheduled commercial operation date, if necessary, to align with the estimated date when LTF PTP transmission service is available; (ii) provide for Seller's reimbursement to PacifiCorp for any study costs it may incur with the third-party transmission provider; (iii) adjust the Monthly Transmission Rate to align with the revised dates under (i), and (iv) adjust the PPA contract price to reflect the change to the scheduled commercial operation date;
  - b. Seller will terminate the PPA and such termination by Seller shall not be an event of default under the PPA and no damages or other liabilities under the PPA related to such termination will be owed by one party to the other party.

**Option 2 – Fixed forecasted costs (continued)**

If PacifiCorp does not receive Seller's response within forty five (45) days following the date of PacifiCorp's notice to Seller under this Section 4, Seller shall be deemed to have elected clause (b) of this paragraph and the PPA shall immediately terminate with no further action of either Party. Seller may not elect (a) above if the estimated date for availability of LTF PTP transmission service results in an anticipated scheduled commercial operation date that is more than thirty six (36) months following the effective date of the PPA.

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**TABLE A**
**FIXED MONTHLY THIRD-PARTY TRANSMISSION RATES**
**Bonneville Power Administration (BPA)**

The fixed Monthly Transmission Rate for BPA consists of three components. Components A and B are multiplied by the Excess Generation in kilowatts (kW) as determined by the DNR Request described in Section 1 of this Exhibit. Component C is multiplied by the monthly generation delivery quantity exported over the third-party transmission provider's transmission system to PacifiCorp. The Monthly Transmission Rate is summed across the four components as illustrated in the below formula.

$$\text{Monthly Transmission Rate (\$)} = (A + B) * \text{Excess Generation (kW)} + C * V \text{ (MWh)}$$

Where:

A = Long-Term Firm, Point-to-Point Transmission Service (PTP) (\$/kW-month)

B = Scheduling, Control and Dispatch Service (SCD) (\$/kW-month)

C = Losses (L) (\$/MWh)

**Bonneville Power Administration**

Year	A	B	A+B	C
	Long Term Point-to-Point (PTP) \$/KW-Month	Scheduling, Control & Dispatch \$/KW-Month	Capacity Sub-total \$/KW-Month	Losses <sup>(1)</sup> \$/MWh
2020	\$1.533	\$0.365	<b>\$1.898</b>	\$0.52
2021	\$1.571	\$0.374	<b>\$1.945</b>	\$0.54
2022	\$1.611	\$0.383	<b>\$1.994</b>	\$0.60
2023	\$1.651	\$0.393	<b>\$2.044</b>	\$0.64
2024	\$1.692	\$0.403	<b>\$2.095</b>	\$0.72
2025	\$1.734	\$0.413	<b>\$2.147</b>	\$0.77
2026	\$1.778	\$0.423	<b>\$2.201</b>	\$0.82
2027	\$1.822	\$0.434	<b>\$2.256</b>	\$0.82
2028	\$1.868	\$0.445	<b>\$2.313</b>	\$0.82
2029	\$1.915	\$0.456	<b>\$2.370</b>	\$0.89
2030	\$1.962	\$0.467	<b>\$2.430</b>	\$0.92

Notes:

- (1) Losses are calculated by multiplying the BPA losses factor times the Calendar Year Contract Price from the Standard Avoided Cost Rate Schedule times scheduled volume of energy moved across BPA's system in the month. Losses will vary by volume and contract price. Contract price used in table is the standard avoided cost price for wind outside of PacifiCorp's BAA then in effect in Oregon Standard Avoided Cost Rate Schedule. Volume will be monthly volume from PPA times the ratio of the Excess Generation to the total nameplate capacity of the facility. On each five year anniversary of the start date under the transmission service agreement between PacifiCorp and BPA, the Losses will be adjusted based on the applicable forecasted rates provided in Table A of PacifiCorp's Oregon Standard Avoided Cost Rate Schedule then in effect on such five year anniversary date.

(continued)

**Effective on and after February 26, 2020**

**TABLE A**
**FIXED MONTHLY THIRD-PARTY TRANSMISSION RATES**
**Portland General Electric (PGE)**

The fixed Monthly Transmission Rate for Portland General consists of four components. Components A, B and C are multiplied by the Excess Generation in kilowatts (kW) as determined by the DNR Request described in Section 1 of this Exhibit. Component D is multiplied by the monthly generation delivery quantity exported over the third-party transmission provider's transmission system to PacifiCorp. The Monthly Transmission Rate is summed across the all components as illustrated in the below formula.

$$\text{Monthly Transmission Rate (\$)} = (A + B + C) * \text{Excess Generation (kW)} + D * V \text{ (MWh)}$$

A = Long-Term Firm, Point-to-Point Transmission Service (PTP) (\$/kW-month)

B = Scheduling, Control and Dispatch Service (SCD) (\$/kW-month)

C = Reactive Supply & Voltage Control Service (RSVC) (\$/kW-month)

D = Losses (L) (\$/MWh)

**Portland General Electric**

Year	A Long Term Point-to-Point (PTP) \$/KW-Month	B Scheduling, Control & Dispatch \$/KW-Month	C Reactive Supply & Voltage Control \$/KW-Month	A+B+C Capacity Sub- total \$/KW-Month	D Losses <sup>(2)</sup> \$/MWh
2020 <sup>(3)</sup>	\$0.523	\$0.012	\$0.038	<b>\$0.574</b>	\$0.43
2021	\$0.536	\$0.013	\$0.039	<b>\$0.588</b>	\$0.45
2022	\$0.549	\$0.013	\$0.040	<b>\$0.603</b>	\$0.49
2023	\$0.563	\$0.013	\$0.041	<b>\$0.618</b>	\$0.53
2024	\$0.577	\$0.014	\$0.042	<b>\$0.633</b>	\$0.59
2025	\$0.592	\$0.014	\$0.043	<b>\$0.649</b>	\$0.64
2026	\$0.607	\$0.014	\$0.045	<b>\$0.666</b>	\$0.68
2027	\$0.622	\$0.015	\$0.046	<b>\$0.682</b>	\$0.68
2028	\$0.637	\$0.015	\$0.047	<b>\$0.699</b>	\$0.68
2029	\$0.653	\$0.016	\$0.048	<b>\$0.717</b>	\$0.74
2030	\$0.669	\$0.016	\$0.049	<b>\$0.735</b>	\$0.76

Notes:

- (2) Losses are calculated by multiplying the PGE losses factor times the Calendar Year Contract Price from the Standard Avoided Cost Rate Schedule times scheduled volume of energy moved across PGE's system in the month. Losses will vary by volume and contract price. Contract price used in table is the standard avoided cost price for wind outside of PacifiCorp's BAA then in effect in Oregon Standard Avoided Cost Rate Schedule. Volume will be estimated monthly volume from PPA times the ratio of the Excess Generation to the total nameplate capacity of the facility. On each five year anniversary of the start date under the transmission service agreement between PacifiCorp and PGE, the Losses will be adjusted based on the applicable forecasted rates provided in Table A of PacifiCorp's Oregon Standard Avoided Cost Rate Schedule then in effect on such five year anniversary date.
- (3) Components A, B and C are escalated each year by PacifiCorp's acknowledged integrated resource plan escalation rate for third-party transmission service. Component D is not escalated.

**Docket UM 2032**

**Attachment 16**

**to**

**JOINT UTILITIES' APPLICATION  
FOR APPROVAL OF COMPLIANCE FILING**

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*PacifiCorp's 38 Non-Standard QF Schedule*

**AVOIDED COST PURCHASES FROM  
ELIGIBLE QUALIFYING FACILITIES**

Page 1

**Available**

To owners of Qualifying Facilities ("QF") making sales of electricity to the Company in the State of Oregon.

**Applicable**

For power purchased from Qualifying Facilities that are not eligible for Standard Avoided Cost Rates. Owners of these Qualifying Facilities will be required to enter into a negotiated written power purchase agreement with the Company.

A QF interconnecting directly with the Company's transmission or distribution system that obtains Energy Resource Interconnection Service will be required to enter into a negotiated written power purchase agreement. If the QF elects to be studied for Energy Resource Interconnection Service, the QF must provide an attestation to the Company's transmission function that it intends to negotiate a power purchase agreement, and the attestation must be provided to the Company's transmission function before the QF executes an interconnection facilities study agreement.

To receive Energy Resource Interconnection Service, the QF must provide an attestation to the Company's transmission function that that the QF has executed a negotiated written power purchase agreement. The attestation must be signed by the QF and the Company personnel responsible for negotiating the power purchase agreement and must be delivered to the Company's transmission function before the execution of an interconnection agreement. The attestation must be provided by the QF within 60 days of the QF receiving a final interconnection agreement or the interconnection application will be deemed withdrawn.

**Definitions****Cogeneration Facility**

A facility which produces electric energy together with steam or other form of useful energy (such as heat) which are used for industrial, commercial, heating or cooling purposes through the sequential use of energy.

**Qualifying Facilities**

Qualifying cogeneration facilities or qualifying small power production facilities within the meaning of section 201 and 210 of the Public Utility Regulatory Policies Act of 1978 (PURPA), 16 U.S.C. 796 and 824a-3.

**Small Power Production Facility**

A facility which produces electric energy using as a primary energy source biomass, waste, renewable resources or any combination thereof and has a power production capacity which, together with other facilities located at the same site, is not greater than 80 megawatts.

**On-Peak Hours or Peak Hours**

On-peak hours are defined as 6:00 a.m. to 10:00 p.m. Pacific Prevailing Time Monday through Saturday, excluding NERC holidays.

Due to the expansions of Daylight Saving Time (DST) as adopted under Section 110 of the U.S. Energy Policy Act of 2005, the time periods shown above will begin and end one hour later for the period between the second Sunday in March and the first Sunday in April and for the period between the last Sunday in October and the first Sunday in November.

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**Off-Peak Hours**

All hours other than On-Peak.

**Excess Output**

Excess output shall mean any increment of Net Output delivered at a rate, on an hourly basis, exceeding either the Facility Capacity Rating or the amount committed to in the contract. PacifiCorp shall pay the Qualifying Facility the Non-Firm Market Index Avoided Cost Price for all Excess Output.

**Non-Firm Market Index Avoided Cost Prices**

Non-Firm Market Index Avoided Cost Prices are available to Qualifying Facilities that do not elect to provide firm power. Qualifying Facilities taking this option will have contracts that do not include minimum delivery requirements, default damages for construction delay or, for under delivery or early termination, or default security for these purposes. Monthly On-Peak / Off-Peak prices paid are 93 percent of a blending of ICE Day Ahead Power Price Report at market hubs

**Non-Firm Market Index Avoided Cost Prices**

for on-peak and off-peak firm index prices. The monthly blending matrix is available upon request. The Non-Firm Market Index Avoided Cost pricing option is available to all Qualifying Facilities. The Non-Firm Market Index Avoided Cost Price for Wind Qualifying Facilities will reflect integration costs.

**Self Supply Option**

Owner shall elect to sell all Net Output to PacifiCorp and purchase its full electric requirements from PacifiCorp or sell Net Output surplus to its needs at the Facility site to PacifiCorp and purchase partial electric requirements service from PacifiCorp, in accordance with the terms and conditions of the power purchase agreement and the appropriate retail service.

**Third Party Transmission Cost Adjustment**

QFs located in discrete load center areas on PacifiCorp's system (also referred to as load "pockets" or load "bubbles") where there is insufficient load to sink additional generation must be exported from that load pocket, transmitted across a third-party transmission system using long-term, firm point-to-point transmission service ("LTF PTP"), and delivered to a different area on PacifiCorp's system where there is sufficient load to sink additional generation. QFs are required to reimburse PacifiCorp for the cost of these third-party system LTF PTP transmission service arrangements, including any associated Ancillary Services. PacifiCorp will procure third-party system LTF PTP and associated Ancillary Services based on the QF's maximum hourly output that is in excess of the load pocket minimum load ("Excess Generation"). Such LTF PTP transmission service and associated Ancillary Services including losses will be procured from the applicable third-party transmission provider consistent with such transmission provider's Open Access Transmission Tariff or comparable pricing schedule for transmission services.

"Ancillary Services," as used in this section, means those services necessary to support the transmission of energy from resources to loads while maintaining reliable operation of the third-party transmission provider's transmission system in accordance with good utility practice.

The amount and cost of the LTF PTP transmission service and associated Ancillary Services including losses will be subject to periodic updates as provided below and in Exhibit A of this Non-Standard Avoided Cost Rate Schedule, and all terms and conditions will be memorialized in an

(continued)

exhibit to the power purchase agreement ultimately entered into between PacifiCorp and the QF, such exhibit being substantially in the form of Exhibit A of this Non-Standard Avoided Cost Rate Schedule. QFs will have the option to select either option below for such transmission cost adjustments:

**Transmission Cost Adjustment Options**

1. Direct pass-through of actual costs. The QF will pay all actual costs incurred by PacifiCorp to secure LTF PTP transmission service and associated Ancillary Services from the applicable third-party transmission provider for exporting Excess Generation, as determined by such third-party transmission provider's Open Access Transmission Tariff or comparable pricing schedule for transmission services.

**Transmission Cost Adjustment Options**

2. Fixed forecast costs. The QF will pay PacifiCorp a monthly fixed amount to secure LTF PTP transmission service and associated Ancillary Services including losses from the applicable third-party transmission provider for exporting Excess Generation. The monthly fixed amount will be determined consistent with Exhibit A of this Non-Standard Avoided Cost Rate Schedule, including Table A of Exhibit A.

**Qualifying Facilities Contracting Procedure****A. Communications**

Unless otherwise directed by the Company, all communications to the Company regarding QF power purchase agreements should be directed in writing as follows:

PacifiCorp  
QF Requests  
Resource & Commercial Strategy  
825 NE Multnomah St, Suite 600  
Portland, Oregon 97232  
[QFrequests@pacificorp.com](mailto:QFrequests@pacificorp.com)

The Company will respond to all such communications in a timely manner. If the Company is unable to respond on the basis of incomplete or missing information from the QF owner, the Company shall indicate what additional information is required. Thereafter, the Company will respond in a timely manner following receipt of all required information.

**B. Procedures**

1. To obtain an indicative pricing proposal with respect to a proposed project, the owner must provide electronically, preferred, or in writing to the Company general project information reasonably required for the development of indicative pricing, including, but not limited to:
  - a) generation technology and other related technology applicable to the site
  - b) design capacity (MW), station service requirements, and net amount of power to be delivered to the Company's electric system
  - c) quantity, firmness, and timing of daily and monthly power deliveries (including project ability to respond to dispatch orders from the Company and maintenance schedule)

(continued)

- d) proposed site location and electrical interconnection point
- e) proposed on-line date and outstanding permitting requirements
- f) demonstration of ability to obtain QF status
- g) fuel type(s) and source(s)
- h) plans for fuel and transportation agreements
- i) proposed contract term and pricing provisions
- j) status of interconnection arrangements

**C. Procedures**

2. The Company shall not be obligated to provide an indicative pricing proposal until all information described in Paragraph 1 has been received in writing from the Qualifying Facility owner. Within 30 days following receipt of all information required in Paragraph 1, the Company will provide the owner with an indicative pricing proposal, which may include other indicative contract terms and conditions as allowed under federal law, state law, and as approved by the Commission, tailored to the individual characteristics of the proposed project. Indicative non-renewable prices will be calculated using the partial displacement differential revenue requirement, or PDDRR, method as approved by the Commission in Order No. 16-174. Consistent with Order No. 16-174 the floor for non-standard avoided cost prices is the wholesale power price forecast that is used to set sufficiency period avoided cost prices in standard QF contracts under Schedule 37. Indicative renewable pricing will be calculated using the methodology consistent with Commission Order No. 07-360 and Order No. 18-131.

The indicative pricing proposal may be used by the owner to make determinations regarding project planning, financing and feasibility. However, such prices are merely indicative and are not final and binding. Prices and other terms and conditions are only final and binding to the extent contained in a power purchase agreement executed by both parties. The Company will provide the owner with the indicative prices and a description of the methodology used to develop the prices.

3. If the owner desires to proceed forward with the project after reviewing the Company's indicative pricing proposal, it may request in writing that the Company prepare a draft power purchase agreement to serve as the basis for negotiations between the parties. In connection with such request, the owner must provide the Company with any additional project information that the Company reasonably determines to be necessary for the preparation of a draft power purchase agreement, which may include, but shall not be limited to:
  - a) updated information of the categories described in Paragraph B.1,
  - b) evidence of adequate control of proposed site
  - c) identification of, and timelines for obtaining any necessary governmental permits, approvals or authorizations
  - d) assurance of fuel supply or motive force
  - e) anticipated timelines for completion of key project milestones

(continued)

- f) evidence that any necessary interconnection studies have been completed and assurance that the necessary interconnection arrangements are being made.

**D. Procedures**

- 4. The Company shall not be obligated to provide the owner with a draft power purchase agreement until all information required pursuant to Paragraph 3 has been received by the Company in writing. Within 30 days following receipt of all information required pursuant to paragraph 3, the Company shall provide the owner with a draft power purchase agreement containing a comprehensive set of proposed terms and conditions, including specific pricing for purchases from the project. Such draft shall serve as the basis for subsequent negotiations between the parties and, unless clearly indicated, shall not be construed as a binding proposal by the Company.
- 5. After reviewing the draft power purchase agreement, the owner may prepare an initial set of written comments and proposals regarding the draft power purchase agreement and forward such comments and proposals to the Company. The Company shall not be obligated to commence negotiations with a Qualifying Facility owner until the Company has received an initial set of written comments and proposals from the Qualifying Facility owner. Following the Company's receipt of such comments and proposals, the owner may contact the Company to schedule contract negotiations at such times and places as are mutually agreeable to the parties. In connection with such negotiations, the Company:
  - a) will not unreasonably delay negotiations and will respond in good faith to any additions, deletions or modifications to the draft power purchase agreement that are proposed by the owner
  - b) may request to visit the site of the proposed project if such a visit has not previously occurred
  - c) will update its pricing proposals at appropriate intervals to accommodate any changes to the Company's avoided-cost calculations, the proposed project or proposed terms of the draft power purchase agreement
  - d) may request any additional information from the owner necessary to finalize the terms of the power purchase agreement and satisfy the Company's due diligence with respect to the project.
- 6. When both parties are in full agreement as to all terms and conditions of the power purchase agreement, the Company will prepare and forward to the owner a final, executable version of the agreement within 15 business days. Prices and other terms and conditions in the power purchase agreement will not be final and binding until the power purchase agreement has been executed by both parties.
- 7. At any time after 60 days from the date that Qualifying Facility has provided its written notification pursuant to Paragraph 5, the Qualifying Facility may file a complaint with the Commission asking the Commission to adjudicate any unresolved contract terms or conditions.

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**Exhibit A to Oregon Non-Standard Avoided Cost Rates**  
**Transmission Services for Excess Generation**

1. No later than seven (7) days after the effective date of the power purchase agreement (“PPA”), PacifiCorp shall submit the request to designate the Qualifying Facility (“QF”) as a network resource eligible for network integration transmission service under its Network Integration Transmission Service Agreement with PacifiCorp’s transmission function (“DNR Request”). If, in response to PacifiCorp’s DNR Request, PacifiCorp is informed by PacifiCorp’s transmission function that such network resource designation is contingent on PacifiCorp procuring transmission service from a third-party transmission provider, PacifiCorp shall notify the QF Seller (“Seller”) in writing within seven (7) days of receiving the DNR Request transmission study and provide Seller the transmission study or other documentation from PacifiCorp’s transmission function that demonstrates the requirement.
2. Within thirty (30) days following Seller’s receipt of the notification and supporting materials contemplated in Section 1 above, Seller shall make one of the following elections in writing to PacifiCorp:
  - a. Seller shall agree to reimburse PacifiCorp for such third-party transmission service under Option 1 below plus reimburse PacifiCorp for all study costs incurred with the third-party transmission provider; or
  - b. Seller shall request PacifiCorp to prepare a proposed Monthly Transmission Rate (as defined below) under Option 2 below for Seller’s review plus reimburse PacifiCorp for all study costs incurred with the third-party transmission provider; or
  - c. Seller shall terminate the Agreement, and such termination shall not be deemed an event of default under the PPA and neither PacifiCorp nor Seller shall have any further obligations or liability to the other party relating to the PPA.

If PacifiCorp does not receive Seller’s response within forty-five (45) days following the delivery of its notification under Section 1 above, Seller shall be deemed to have elected clause 2.c. above and the PPA shall immediately terminate with no further action of either party.

3. If Seller timely elects to proceed under Option 1 or Option 2, PacifiCorp will promptly proceed to procure long-term firm, point-to-point transmission service, including ancillary services<sup>1</sup> and losses as applicable (“LTF PTP”), beginning on the scheduled initial delivery date stated in the PPA in an amount determined through the transmission service request process as identified in Section 1 above (“Excess Generation”). Such LTF PTP transmission service will be procured from the applicable third-party transmission provider consistent with such transmission provider’s Open Access Transmission Tariff (“OATT”) or comparable pricing schedule for transmission services. Such LTF PTP transmission costs incurred by PacifiCorp will be reimbursed by Seller under either Option 1 or Option 2 below, as elected by Seller under Section 2 above. Once either Option 1 or Option 2 is elected by Seller, Seller may not change its election without prior approval

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<sup>1</sup> Ancillary services are those services that may include balancing services that are necessary to support the transmission of energy from resources to loads while maintaining reliable operation of the third-party transmission provider’s transmission system in accordance with good utility practice.

(continued)

of PacifiCorp which approval shall not be unreasonably withheld, conditioned, or delayed subject to commitments under any third-party transmission service application in progress. Seller's obligation to reimburse PacifiCorp for the LTF PTP transmission costs it incurs under either Option 1 or Option 2 below shall not be excused due to any delays in the commercial operation of the QF or the failure of the QF to operate, due to events of force majeure or otherwise.

**Option 1 – Direct pass-through of actual costs.**

Seller agrees to pay all actual costs incurred by PacifiCorp to secure LTF PTP transmission service from the applicable third-party transmission provider for exporting Excess Generation, as determined by such transmission provider's OATT or comparable pricing schedule for transmission services. If requested by Seller, PacifiCorp will provide within ten (10) business days of the request documentation supporting the actual costs incurred by PacifiCorp and for which PacifiCorp is seeking reimbursement from Seller. Seller compensates PacifiCorp for the actual costs PacifiCorp incurs one month in arrears through a netting of the LTF PTP transmission costs against PacifiCorp's monthly payment for generation under the PPA. Eighteen (18) months prior to each five (5) year anniversary of the start date under the third-party transmission service agreement, PacifiCorp will reevaluate and, if necessary, adjust the amount of LTF PTP transmission capacity necessary to export the Excess Generation.

**Option 2 – Fixed forecasted costs.**

Within ten (10) business days following PacifiCorp's receipt of Seller's election under clause 2.b. above, PacifiCorp will prepare and provide to Seller the proposed monthly fixed charge (the "Monthly Transmission Rate") that Seller pays to PacifiCorp for the costs it incurs in securing LTF PTP transmission service from the applicable third-party transmission provider for exporting Excess Generation, including workpapers and any other pertinent materials supporting the calculation. Such Monthly Transmission Rate will be determined based on the values provided in Table A of this Oregon Standard Avoided Cost Rate Schedule, as applicable for the relevant third-party transmission provider. If the applicable third-party transmission provider is not identified in Table A, PacifiCorp will prepare a Monthly Transmission Rate using the same methodology as was used to develop the values in Table A using the applicable posted rates of the third-party transmission provider.

**Option 2 – Fixed forecasted costs**

Seller has ten (10) business days from the receipt of the proposed Monthly Transmission Rate to inform PacifiCorp whether it (a) elects to pay the transmission charges associated with this Option 2; (b) elects not to pay the transmission charges associated with this Option 2 and elects Option 1 instead; or (c) elects not to pay the transmission charges associated with this Option 2 and elects to terminate the PPA. If PacifiCorp does not receive Seller's response within thirty (30) days following the delivery of the proposed Monthly Transmission Rate from PacifiCorp, Seller shall be deemed to have elected clause (c) of this paragraph and the PPA shall immediately terminate with no further action of either party. Such termination of the PPA under this paragraph shall not be deemed an event of default under the PPA and no party shall have any further obligations or liability to the other party relating to the PPA.

(continued)

Seller compensates PacifiCorp for the Monthly Transmission Rate one month in arrears through a netting of the Monthly Transmission Rate against PacifiCorp's monthly payment for generation under the PPA. Eighteen (18) months prior to each five (5) year anniversary of the start date under the third-party transmission service agreement, PacifiCorp will reevaluate and, if necessary, adjust the amount of LTF PTP transmission capacity necessary to export the Excess Generation. In addition, on each five year anniversary of the start date under the transmission service agreement between PacifiCorp and the third-party transmission provider, the Monthly Transmission Rate will be adjusted based on the applicable forecasted rates provided in Table A of PacifiCorp's Oregon Standard Avoided Cost Rate Schedule then in effect on such five year anniversary date; provided, however, that any posted rates of an applicable third-party transmission provider not captured in the methodology below but billed to PacifiCorp will also be included in the Monthly Transmission Rate on a prospective basis. If the applicable third-party transmission provider is not identified in Table A, PacifiCorp will adjust the Monthly Transmission Rate using the same methodology as was used to develop the values in Table A using the applicable posted rates of the third-party transmission provider then in effect on such five year anniversary date.

4. If under either Option 1 or Option 2 above, PacifiCorp is notified by the third-party transmission provider that the necessary LTF PTP transmission service request cannot be granted for the term requested, PacifiCorp shall promptly notify Seller and provide the supporting documentation received from the third-party transmission provider. Within thirty (30) days of receipt of such notice under this Section 4, and except as limited below, Seller shall elect one of the following:
  - a. Seller will agree to amend the QF PPA to (i) adjust the scheduled initial delivery date and the scheduled commercial operation date, if necessary, to align with the estimated date when LTF PTP transmission service is available; (ii) provide for Seller's reimbursement to PacifiCorp for any study costs it may incur with the third-party transmission provider; (iii) adjust the Monthly Transmission Rate to align with the revised dates under (i), and (iv) adjust the PPA contract price to reflect the change to the scheduled commercial operation date;
  - b. Seller will terminate the PPA and such termination by Seller shall not be an event of default under the PPA and no damages or other liabilities under the PPA related to such termination will be owed by one party to the other party.

If PacifiCorp does not receive Seller's response within forty-five (45) days following the date of PacifiCorp's notice to Seller under this Section 4, Seller shall be deemed to have elected clause (b) of this paragraph and the PPA shall immediately terminate with no further action of either Party. Seller may not elect (a) above if the estimated date for availability of LTF PTP transmission service results in an anticipated scheduled commercial operation date that is more than thirty-six (36) months following the effective date of the PPA.

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(continued)

**TABLE A**
**FIXED MONTHLY THIRD-PARTY TRANSMISSION RATES**
**Bonneville Power Administration (BPA)**

The fixed Monthly Transmission Rate for BPA consists of three components. Components A and B are multiplied by the Excess Generation in kilowatts (kW) as determined by the DNR Request described in Section 1 of this Exhibit. Component C is multiplied by the monthly generation delivery quantity exported over the third-party transmission provider's transmission system to PacifiCorp. The Monthly Transmission Rate is summed across the four components as illustrated in the below formula.

$$\text{Monthly Transmission Rate (\$)} = (A + B) * \text{Excess Generation (kW)} + C * V \text{ (MWh)}$$

Where:

A = Long-Term Firm, Point-to-Point Transmission Service (PTP) (\$/kW-month)

B = Scheduling, Control and Dispatch Service (SCD) (\$/kW-month)

C = Losses (L) (\$/MWh)

**Bonneville Power Administration**

Year	A Long Term Point-to-Point (PTP) \$/KW-Month	B Scheduling, Control & Dispatch \$/KW-Month	A+B Capacity Sub-total \$/KW-Month	C Losses <sup>(1)</sup> \$/MWh
2020	\$1.533	\$0.365	<b>\$1.898</b>	\$0.52
2021	\$1.571	\$0.374	<b>\$1.945</b>	\$0.54
2022	\$1.611	\$0.383	<b>\$1.994</b>	\$0.60
2023	\$1.651	\$0.393	<b>\$2.044</b>	\$0.64
2024	\$1.692	\$0.403	<b>\$2.095</b>	\$0.72
2025	\$1.734	\$0.413	<b>\$2.147</b>	\$0.77
2026	\$1.778	\$0.423	<b>\$2.201</b>	\$0.82
2027	\$1.822	\$0.434	<b>\$2.256</b>	\$0.82
2028	\$1.868	\$0.445	<b>\$2.313</b>	\$0.82
2029	\$1.915	\$0.456	<b>\$2.370</b>	\$0.89
2030	\$1.962	\$0.467	<b>\$2.430</b>	\$0.92

Notes:

- (1) Losses are calculated by multiplying the BPA losses factor times the Calendar Year Contract Price from the Standard Avoided Cost Rate Schedule times scheduled volume of energy moved across BPA's system in the month. Losses will vary by volume and contract price. Contract price used in table is the standard avoided cost price for wind outside of PacifiCorp's BAA then in effect in Oregon Standard Avoided Cost Rate Schedule. Volume will be monthly volume from PPA times the ratio of the Excess Generation to the total nameplate capacity of the facility. On each five year anniversary of the start date under the transmission service agreement between PacifiCorp and BPA, the Losses will be adjusted based on the applicable forecasted rates provided in Table A of PacifiCorp's Oregon Standard Avoided Cost Rate Schedule then in effect on such five year anniversary date.

(continued)

**TABLE A**
**FIXED MONTHLY THIRD-PARTY TRANSMISSION RATES**
**Portland General Electric (PGE)**

The fixed Monthly Transmission Rate for Portland General consists of four components. Components A, B and C are multiplied by the Excess Generation in kilowatts (kW) as determined by the DNR Request described in Section 1 of this Exhibit. Component D is multiplied by the monthly generation delivery quantity exported over the third-party transmission provider's transmission system to PacifiCorp. The Monthly Transmission Rate is summed across the all components as illustrated in the below formula.

$$\text{Monthly Transmission Rate (\$)} = (A + B + C) * \text{Excess Generation (kW)} + D * V \text{ (MWh)}$$

A = Long-Term Firm, Point-to-Point Transmission Service (PTP) (\$/kW-month)

B = Scheduling, Control and Dispatch Service (SCD) (\$/kW-month)

C = Reactive Supply & Voltage Control Service (RSVC) (\$/kW-month)

D = Losses (L) (\$/MWh)

**Portland General Electric**

Year	A Long Term Point-to- Point (PTP) \$/KW-Month	B Scheduling, Control & Dispatch \$/KW-Month	C Reactive Supply & Voltage Control \$/KW-Month	A+B+C Capacity Sub-total \$/KW-Month	D Losses <sup>(2)</sup> \$/MWh
2020 <sup>(3)</sup>	\$0.523	\$0.012	\$0.038	<b>\$0.574</b>	\$0.43
2021	\$0.536	\$0.013	\$0.039	<b>\$0.588</b>	\$0.45
2022	\$0.549	\$0.013	\$0.040	<b>\$0.603</b>	\$0.49
2023	\$0.563	\$0.013	\$0.041	<b>\$0.618</b>	\$0.53
2024	\$0.577	\$0.014	\$0.042	<b>\$0.633</b>	\$0.59
2025	\$0.592	\$0.014	\$0.043	<b>\$0.649</b>	\$0.64
2026	\$0.607	\$0.014	\$0.045	<b>\$0.666</b>	\$0.68
2027	\$0.622	\$0.015	\$0.046	<b>\$0.682</b>	\$0.68
2028	\$0.637	\$0.015	\$0.047	<b>\$0.699</b>	\$0.68
2029	\$0.653	\$0.016	\$0.048	<b>\$0.717</b>	\$0.74
2030	\$0.669	\$0.016	\$0.049	<b>\$0.735</b>	\$0.76

Notes:

- (2) Losses are calculated by multiplying the PGE losses factor times the Calendar Year Contract Price from the Standard Avoided Cost Rate Schedule times scheduled volume of energy moved across PGE's system in the month. Losses will vary by volume and contract price. Contract price used in table is the standard avoided cost price for wind outside of PacifiCorp's BAA then in effect in Oregon Standard Avoided Cost Rate Schedule. Volume will be estimated monthly volume from PPA times the ratio of the Excess Generation to the total nameplate capacity of the facility. On each five year anniversary of the start date under the transmission service agreement between PacifiCorp and PGE, the Losses will be adjusted based on the applicable forecasted rates provided in Table A of PacifiCorp's Oregon Standard Avoided Cost Rate Schedule then in effect on such five year anniversary date.
- (3) Components A, B and C are escalated each year by PacifiCorp's acknowledged integrated resource plan escalation rate for third-party transmission service. Component D is not escalated.

**Effective for service on and after February 26, 2020**