825 NE Multnomah St Portland, OR 97232



December 1, 2022

# VIA ELECTRONIC FILING

Public Utility Commission of Oregon Attn: Filing Center 201 High Street SE, Suite 100 Salem, OR 97301-3398

## Re: Docket UM 1401—Qualifying Facility Large Generator Interconnection Agreement

On November 30, 2022, PacifiCorp d/b/a Pacific Power (PacifiCorp) submitted the attached Agreement to Amend the Qualifying Facility Large Generator Interconnection Agreements (QF-LGIA) described further below, in compliance with Commission Order No. 10-132. The letter inadvertently stated that the Agreement to Amend the Qualifying Facility QF-LGIA was dated October 22, 2022, rather than November 22, 2022. PacifiCorp submits this errata to correct the date of the amendment referenced in the cover letter. While there are no other changes to the filing, PacifiCorp is resubmitting this filing in its entirety for ease of reference.

On November 22, 2022, PacifiCorp and Fresh Air Energy II, LLC executed an amendment to the QF-LGIA that was originally executed by the parties on January 20, 2021. The amendment modified the following sections of the agreement.

- Appendix A The cost estimate was updated along with contingent facilities and a change to length of line rebuild.
- Appendix B Milestones including Commercial Operation date were updated.
- Appendix C Updated to reflect changes to the interconnection customer's generating facility equipment.
- Appendix D Updated to reflect changes to required data transfer points.
- Appendix F Updated contact information
- Attachment A Updated to reflect changes to the interconnection customer's generating facility equipment.
- Attachment B Updated to reflect changes to scope of work.

Please direct informal correspondence and questions regarding this filing to Cathie Allen, Manager, Regulatory Affairs, at (503) 813-5934.

Sincerely,

= M/m

Matthew McVee Vice President, Regulatory Policy and Operations

Enclosure

#### AGREEMENT TO AMEND QUALIFYING FACILITY LARGE GENERATOR INTERCONNECTION AGREEMENT

This **Agreement To Amend Qualifying Facility Large Generator Interconnection Agreement** ("Agreement") is made and entered into this <u>22nd</u> day of <u>November</u>, 20<u>22</u>, by and between PacifiCorp, an Oregon corporation (the "Transmission Provider") and Fresh Air Energy II, LLC, a California limited liability company (the "Interconnection Customer"). Transmission Provider and Interconnection Customer may be referred to as a "Party" or collectively as the "Parties."

#### RECITALS

**WHEREAS**, Transmission Provider and Interconnection Customer have entered into a Qualifying Facility Large Generator Interconnection Agreement, dated January 20, 2021 (the "Interconnection Agreement");

**WHEREAS**, Transmission Provider and Interconnection Customer have mutually agreed to amend one or more appendices, attachments, and/or exhibits to the Interconnection Agreement; and

WHEREAS, Articles 29.9 and 29.10 of the Interconnection Agreement state that the Parties may by mutual agreement amend the Interconnection Agreement or its Appendices by a written instrument duly executed by the Parties, and such amendment shall become effective and a part of this Interconnection Agreement upon satisfaction of all Applicable Laws and Regulations;

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

- 1.0 The Parties acknowledge and mutually agree that the following attached appendices and exhibits will be substituted in their entirety for the same appendices and exhibits in the Interconnection Agreement:
  - Appendix A
  - Appendix B
  - Appendix C
  - Appendix D
  - Appendix F
  - Exhibit 1 to Appendix A
  - Exhibit 1 to Appendix B
- 2.0 Service under the Interconnection Agreement with the amended appendices and exhibits will commence only upon execution by both Parties.
- 3.0 The Interconnection Agreement, with the attached substitute appendices and exhibits shall constitute the entire agreement between the Parties.

4.0 All other provisions of the Interconnection Agreement will continue to apply.

**IN WITNESS WHEREOF,** the Parties have executed this Agreement in duplicate originals, each of which shall constitute and be an original effective Agreement between the Parties.

PacifiCorp Digitally signed by Rick		
By:	Rick Vail Vail Date: 2022.11.22 07:37:43 -08'00'	
Title:	VP, Transmission	
Date:	11/22/2022	
Jalara C		
<i>John G</i> John Gorman (	ОГИДИ Oct 25, 2022 17:12 GMT+7)	
Fresh Air Energy II, LLC		
By:	John Gorman	
Title:	Authorized Signatory	
	0-+ 25 2022	

# **Appendix A to QF-LGIA**

# Interconnection Facilities, Network Upgrades and Distribution Upgrades

### 1. Interconnection Facilities

- (a) Interconnection Customer's Interconnection Facilities: a short bus tie between the GSU step-up transformer and the Point of Interconnection substation (please see Attachment A)
- (b) **Transmission Provider's Interconnection Facilities:** a line position (includes interchange metering, disconnect switches, and associated deadends and other structures) and a single breaker at the Point of Interconnection substation (Please see Attachment A)

## 2. Network Upgrades:

- (a) Stand Alone Network Upgrades: a new single breaker Point of Interconnection substation with bus built to accommodate additional breakers (to be built at approximately line structure 3/27, or at 42.126777°N, 121.960272°W)
- (b) Other Network Upgrades: loop in/out of transmission line to Point of Interconnection substation, modifications to relay scheme at Q757 Point of Interconnection substation, rebuild of approximately 12 miles of 69 kV line to the Weyerhaeuser tap, modifications at the Hamaker Mountain communications site, and communications upgrades at Klamath substation, Weyerhaeuser substation, and the Portland Control Center.

## 3. Distribution Upgrades: None

**4. Contingent Facilities:** As identified in the System Impact Study dated September 20, 2022 and the Facilities Study dated October 14, 2022 for this Project, the following Network Upgrades are required to be in-service prior to this project:

o None

**5. Point of Interconnection ("POI"):** The point at which Transmission Provider Interconnection Facilities connect to the substation bus at the POI substation (see Attachment A).

**6. Point of Change of Ownership:** The point at which Interconnection Customer and Transmission Provider Interconnection Facilities meet (see Attachment A).

7. One-Line Diagram: is attached to this Agreement as Attachment A.

8. Estimated Facilities Cost: \$9,814,000

# Appendix B to QF-LGIA Milestones

Milestone Interconnection Customer Executes Interconnection Agreement	<b>Date</b> January 20, 2021
†Interconnection Customer Provides of Financial Security	August 31, 2021
Interconnection Customer Provides Approval for Transmission Provider to Begin Engineering & Procurement Activities	January 6, 2023
*Interconnection Customer Provides Initial Design Information	February 10, 2023
Transmission Provider Commences Engineering & Procurement	February 20, 2023
Interconnection Customer Provides Energy Imbalance Market Modeling Data	March 17, 2023
Interconnection Customer Property/Permits/ROW Procured	June 7, 2024
Transmission Provider Property/Permits/ROW Procured	August 16, 2024
*Interconnection Customer Provides Final Design Information	September 20, 2024
Transmission Provider Completes Engineering Design	December 20, 2024
Interconnection Customer Voltage Coordination Study Commences	December 20, 2024
Interconnection Customer Provides Approval for Transmission Provider to Begin Construction Activities	January 10, 2025
Transmission Provider Begins Construction	March 17, 2025
Interconnection Customer Commissioning & Maintenance Plans Provided	July 11, 2025
Transmission Provider and Interconnection Customer Completes Construction	August 29, 2025
Transmission Provider Completes Commissioning	October 10, 2025
Transmission Provider Completes Commissioning Document Review	October 17, 2025
Interconnection Customer's Facilities Receive Backfeed Power	October 20, 2025
Initial Synchronization/Generation Testing	October 23, 2025
Commercial Operation	November 21, 2025

†Financial Security is determined to be \$1,540,000

\*Interconnection Customer initial design package shall include final generating facility location, inverter/turbine selection, basic protection package, tie line route and collector system locations and data as applicable. Interconnection Customer final design package shall include PE stamped issued for construction ("IFC") drawings for generating facility, collector substation, tie line as well as an updated PSS/e model and updated WECC approved model, electromagnetic transient ("EMT") model and a detailed short circuit model of its generation system using the ASPEN OneLine short circuit simulation program as applicable. The WECC model parameters must be adjusted to reflect the plant's actual anticipated performance. The plant controller must be included in the model. If there is to be coordination between facilities or a master VAR controller, this must be included in the detailed WECC dynamic model, as well as in the PSS/e user-written model.

\*\* For the avoidance of doubt, the Commercial Operation Date in Appendix B of this LGIA is contingent upon the completion of all of the Contingent Facilities listed in Appendix A. If the completion of ANY of the Contingent Facilities is delayed beyond the estimated completion date(s) contained in Appendix A, the Transmission Provider will determine in its sole discretion whether the Commercial Operation Date and associated milestones listed in Appendix B of this LGIA need to be modified accordingly, and will inform the Interconnection Customer at the earliest reasonable opportunity of such a change. If the completion of ALL of the Contingent Facilities occurs before the estimated dates contained in this Appendix A, the Transmission Provider will determine in its sole discretion whether the Commercial Operation Date and associated milestones listed in Appendix B of this LGIA can be modified accordingly, and will inform the Interconnection Customer at the earliest reasonable opportunity of such a change.

# Appendix C to QF-LGIA

#### **Interconnection Details**

**Description of the Large Generating Facility:** The Interconnection Customer's Large Generating Facility consists of nineteen (19) 3150 kVA Sungrow SG3150U solar inverters and twelve (12) 5000 kVA Sungrow SC5000UD battery storage inverters connected to a single 36/48/60 MVA 34.5-69kV transformer (Z=8%). The total requested interconnection capacity at the Point of Interconnection is 50 MW. The Large Generating Facility is located in Klamath County, Oregon. Please see Attachment A.

**Control Area Requirements:** Interconnection Customer shall interconnect and operate the Large Generating Facility in accordance with the Transmission Provider's Facility Interconnection Requirements for Transmission Systems, as may be revised from time to time, attached hereto as Exhibit 1 to Appendix C and by this reference incorporated herein.

#### **Interconnection Details:**

Metering. With reference to Article 7.1, Transmission Provider will own and maintain the bidirectional revenue Metering Equipment in Transmission Provider's Point of Interconnection substation at the Interconnection Customer's expense.

Under Frequency and Over Frequency Conditions. Consistent with QF-LGIA Article 9.6.3, Transmission Provider shall design, procure, install and maintain frequency and voltage protection to trip feeder breakers in accordance with the settings shown in Exhibit 1 to Appendix C.

Reactive Power and Voltage Schedule. Subject to QF-LGIA Article 9.5.1 and Transmission Provider Policy 139, all interconnecting synchronous and non-synchronous generators are required to design their Generating Facilities with reactive power capabilities necessary to operate within the full power factor range of 0.95 leading to 0.95 lagging. This power factor range shall be dynamic and can be met using a combination of the inherent dynamic reactive power capability of the generator or inverter, dynamic reactive power devices and static reactive power devices. For non-synchronous generators, the power factor requirement is to be measured at the high-side of the generator substation. The Generating Facility must provide dynamic reactive power to the system over the full range of real power output. If the Generating Facility is not capable of providing positive reactive support (i.e., supplying reactive power to the system) immediately following the removal of a fault or other transient low voltage perturbations, the facility will be required to add dynamic voltage support equipment. These additional dynamic reactive devices shall have correct protection settings such that the devices will remain on line and active during and immediately following a fault event.

Generators shall be equipped with automatic voltage-control equipment and normally operated with the voltage regulation control mode enabled unless written authorization, or directive, from the Transmission Provider is given to operate in another control mode (e.g., constant power factor control). The control mode of generating units shall be accurately represented in operating studies. The generators shall be capable of operating continuously at their rated power output within +/- 5% of its rated terminal voltage. Pursuant to NERC standard PRC-002 and MOD-033, Phasor

Measurement Units will be required at any Generating Facilities with an individual or aggregate nameplate capacity of 75 MVA or greater.

As required by NERC standard VAR-001-1a, the Transmission Provider will provide a voltage schedule for the Point of Interconnection. In general, Generating Facilities should be operated so as to maintain the voltage at the Point of Interconnection, or other designated point as deemed appropriated by Transmission Provider, in accordance with Transmission Provider Policy 139.

Generating Facilities capable of operating with a voltage droop are required to do so. Studies will be required to coordinate voltage droop settings if there are other facilities in the area. It will be the Interconnection Customer's responsibility to ensure that a voltage coordination study is performed, in coordination with Transmission Provider, and implemented with appropriate coordination settings prior to unit testing. If the need for a master controller is identified, the cost and all related installation requirements will be the responsibility of the Interconnection Customer. Participation by the Generation Facility in subsequent interaction/coordination studies will be required pre- and post-commercial operation in order ensure system reliability.

All generators must meet the Federal Energy Regulatory Commission ("FERC") and WECC low voltage ride-through requirements.

As the Transmission Provider cannot submit a user written model to WECC for inclusion in base cases, a standard model from the WECC Approved Dynamic Model Library is required 180 days prior to trial operation. The list of approved generator models is continually updated and is available on the http://www.WECC.biz website.

<u>Property Requirements</u>. Subject to QF-LGIA Articles 5.12 and 5.13, Interconnection Customer is required to obtain for the benefit of Transmission Provider at Interconnection Customer's sole cost and expense all real property rights, including but not limited to fee ownership, easements and/or rights of way, as applicable, for Transmission Provider owned Facilities using Transmission Provider's standard forms. Transmission Provider shall not be obligated to accept any such real property right that does not, at Transmission Provider's sole discretion, confer sufficient rights to access, operate, construct, modify, maintain, place and remove Transmission Provider's standard forms. Further, all real property on which Transmission Provider's Facilities are to be located must be environmentally, physically and operationally acceptable to the Transmission Provider at its sole discretion.

Subject to QF-LGIA Article 5.14, Interconnection Customer is responsible for obtaining all permits required by all relevant jurisdictions for the project, including but not limited to, conditional use permits and construction permits; provided however, Transmission Provider shall obtain, at Interconnection Customer's cost and schedule risk, the permits necessary to construct Transmission Provider's Facilities that are to be located on real property currently owned or held in fee or right by Transmission Provider.

Subject to applicable provisions in the Agreement and an express written waiver by an authorized officer of Transmission Provider, all of the foregoing permits and real property rights (conferring rights on real property that is environmentally, physically and operationally acceptable to Transmission Provider) shall be acquired as provided herein as a condition to Transmission Provider's contractual obligation to construct or take possession of facilities to be owned by the Transmission Provider under this Agreement. Transmission Provider shall have no liability for

any project delays or cost overruns caused by delays in acquiring any of the foregoing permits and/or real property rights, whether such delay results from the failure to obtain such permits or rights or the failure of such permits or rights to meet the requirements set forth herein. Further, any completion dates, if any, set forth herein with regard to Transmission Provider's obligations shall be equitably extended based on the length and impact of any such delays.

# 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.

Automatic Data Transfer. Throughout the term of this Agreement, Interconnection Customer shall provide the data specified below by automatic data transfer to the Transmission Provider Control Center specified by Transmission Provider or to a Third-Party System Operator designated by Transmission Provider (or both):

From the Interconnection Customer's collector substation:

<u>Analogs:</u>

- Real power flowing through the 69 34.5 kV transformer
- <u>Reactive power flowing through the 69 34.5 kV transformer</u>
- o <u>34.5kV Inverter circuit breakers (6) real power MW (F1-F6)</u>
- o <u>34.5kV Inverter circuit breakers (6) reactive power MVAR (F1-F6)</u>
- o <u>Global Horizontal Irradiance (GHI)</u>
- Average Plant Atmospheric Pressure (Bar)
- <u>Average Plant Temperature (Celsius)</u>
- o Max Generator Limit MW (one set point control and feedback)
- <u>Potential Power MW</u>
- <u>BESS current energy capacity (MWh)</u>
- <u>BESS current energy capacity (%)</u>
- BESS cycles or health (cycle count or % health)

#### Status:

- o <u>69 kV Transformer circuit breaker 52TP</u>
- o <u>34.5 kV Inverter circuit breakers (6) (F1-F6)</u>

**Billing Meter Data.** Bi-directional revenue meter at the Point of Interconnection will not be configured to allow direct dial-up access by Interconnection Customer. The Transmission Provider will provide alternatives, at the Interconnection Customer's expense, upon request.

Additional Data. Interconnection Customer shall, at its sole expense, provide any additional Generating Facility data reasonably required and necessary for the Transmission Provider to operate the Transmission System in accordance with Good Utility Practice and Exhibit 1 to Appendix C, Facility Interconnection Requirements for Transmission Systems.

<u>Relay and Control Settings</u>. Should the Interconnection Customer require modification to the settings associated with control/protective devices connected to the distribution and/or transmission system they will contact the Transmission Provider and provide in writing the

justification and/or need for the proposed modifications. This will allow the Transmission Provider time to analyze and ensure there are no negative impacts to the associated connected systems and customers. Any modifications of control and/or relay settings without review and acknowledgement of acceptance by Transmission Provider will be disconnection from the Transmission Provider system until such time as changes are reviewed and accepted.

#### Appendix F to QF-LGIA

#### Addresses for Delivery of Notices and Billings

#### Notices:

Transmission Provider:	
<u>US Mail Deliveries:</u>	PacifiCorp Attn: Central Cashiers Office 825 NE Multnomah Street, Suite 550 Portland, OR 97232
Other Deliveries:	PacifiCorp Attn: Transmission Services 825 NE Multnomah Street, Suite 1600 Portland OR 97232
Phone Number:	503-813-6774

Interconnection Customer: Fresh Air Energy II LLC c/o Ecoplexus, Inc. Attn: John Gorman 600 Park Offices Drive, Suite Durham, NC 27709 Email: johng@ecoplexus.com & legalnotices@ecoplexus.com 415-626-1802

#### **Billings and Payments:**

<u>Transmission Provider:</u> PacifiCorp Attn: Central Cashiers Office 825 NE Multnomah Street, Suite 550 Portland, OR 97232

Interconnection Customer:

Fresh Air Energy II LLC c/o Ecoplexus, Inc. Attn: John Gorman PO Box 2265 Mansfield, TX 76063 Email: <u>accountspayable@ecoplexus.com</u> 415-240-4751

Alternative Forms of Delivery of Notices (telephone, facsimile or email):

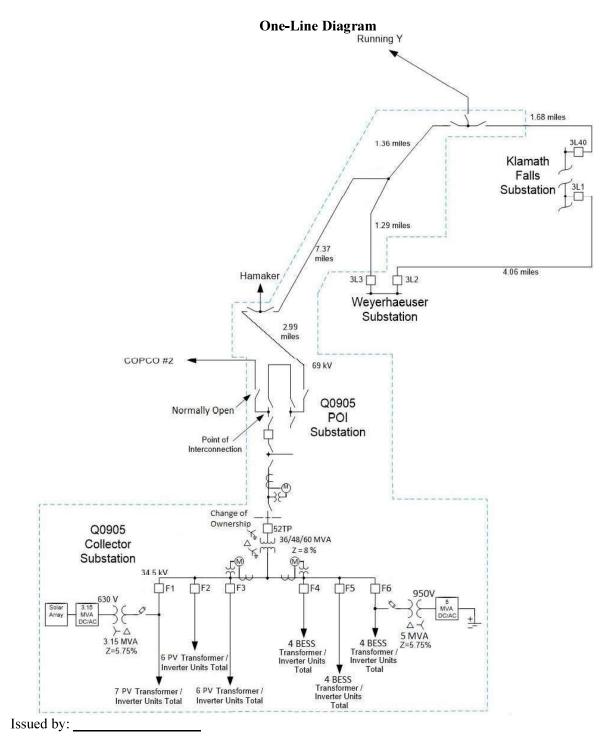
Transmission Provider

Director, Transmission Services 503-813-7237		
Manager, Transmission Scheduling	503-813-5342	
Manager, Interconnection Services	503-813-6496	
Transmission Business Facsimile	503-813-6893	

OASIS Address:

http://www.oasis.pacificorp.com/oasis/ppw/main.htmlx

Interconnection Customer: Ecoplexus Interconnection Email: interconnections@ecoplexus.com & spiscitello@ecoplexus.com



Issued on: \_\_\_\_\_

Effective: \_\_\_\_\_

#### Attachment B to QF-LGIA

#### Scope of Work

#### **Generating Facility Modifications**

The following outlines the design, procurement, construction, installation, and ownership of equipment at the Interconnection Customer's Generation Facility.

#### INTERCONNECTION CUSTOMER TO BE RESPONSIBLE FOR

- Design the Generating Facility with reactive power capabilities necessary to operate within the full power factor range of 0.95 leading to 0.95 lagging as measured at the high side of the Interconnection Customer's GSU transformer. This power factor range shall be dynamic and can be met using a combination of the inherent dynamic reactive power capability of the generator or inverter, dynamic reactive power devices and static reactive power devices to make up for losses.
- Design the generating facility such that it can provide positive reactive support (i.e., supply reactive power to the system) immediately following the removal of a fault or other transient low voltage perturbations or install dynamic voltage support equipment. These additional dynamic reactive devices shall have correct protection settings such that the devices will remain on line and active during and immediately following a fault event.
- Equip the Generating Facility with automatic voltage-control equipment and operate with the voltage regulation control mode enabled unless explicitly authorized to operate another control mode by the Transmission Provider.
- Operate the Generating Facility so as to maintain the voltage at the Point of Interconnection, or other designated point as deemed appropriated by Transmission Provider, at a voltage schedule to be provided by the Transmission Provider following testing. Voltage will typically be required to operate between 1.00 and 1.04 per unit.
- Operate the Generating Facility with a voltage droop.
- Have any Transmission Provider required studies, such as a voltage coordination study, performed and provide results to Transmission Provider. Any additional requirements identified in these studies will be the responsibility of the Interconnection Customer.
- Meet the Federal Energy Regulatory Commission (FERC) and WECC low voltage ride-through requirements as specified in the interconnection agreement.
- Provide test results to the Transmission Provider verifying that the inverters for this Project have been programmed to meet all PRC-024 requirements rather than manufacturer IEEE distribution standards.
- Provide the Transmission Provider a standard model from the WECC Approved Dynamic Model Library.
- Provide the Transmission Provider the manufacturer Electromagnetic Transient Modeling ("EMT") model a minimum of 180 days prior to Commercial Operation.
- Design the Generating Facility control system such that it can receive an analog output from the Transmission Provider for setpoint control and provide an analog input back to the Transmission Provider on the status of the setpoint.
- Procure and install a generator step up transformer that will be a source of ground current for phase to ground faults on the 69 kV transmission system.

Please note that the transformer proposed by the Interconnection Customer currently is not capable of this requirement.

- Design and construct the collector substation such that the ground grid can be connected to the POI substation ground grid to support the installation of a Transmission Provider owned and maintained bus differential scheme. The Interconnection Customer is responsible to ensure the ground grid design supports safe step and touch potentials.
- Design, provide and install conduits between the Interconnection Customer collector substation and the marshalling cabinet to be installed just inside the fence of the POI substation to support copper circuits installed between the facilities.
- Design, provide and install control cabling (number and size TBD) and hard wire the Interconnection Customer's source devices to the marshalling cabinet. Replicated values are not acceptable.
- Provide and install a set of current transformers to be fed into the bus differential relays with a maximum current transformer ratio matching the maximum CT ratio of the breakers at the POI substation. Provide and install conduit and cabling to the POI substation marshalling cabinet with these outputs.
- Provide the following data points from the collector substation via hardwire to the marshalling cabinet located in the POI substation. Please note that these points are based on the most recent design information provided by the Interconnection Customer and could change based on final design: <u>Analogs:</u>
  - $\circ$  Real power flowing through the 69 34.5 kV transformer
  - $\circ$  Reactive power flowing through the 69 34.5 kV transformer
  - o 34.5kV Inverter circuit breakers (6) real power MW (F1-F6)
  - o 34.5kV Inverter circuit breakers (6) reactive power MVAR (F1-F6)
  - Global Horizontal Irradiance (GHI)
  - Average Plant Atmospheric Pressure (Bar)
  - Average Plant Temperature (Celsius)
  - Max Generator Limit MW (one set point control and feedback)
  - Potential Power MW
  - BESS current energy capacity (MWh)
  - BESS current energy capacity (%)
  - BESS cycles or health (cycle count or % health)
  - <u>Status:</u>
    - 69 kV Transformer circuit breaker 52TP
    - 34.5 kV Inverter circuit breakers (6) (F1-F6)
- Provide and install conductor, shield wire and line hardware in sufficient quantities to allow the Transmission Provider to terminate the segment running from the collector substation deadend structure into the POI substation deadend structure. The last segment will be owned by the Transmission Provider.
- Provide a separate graded, grounded and fenced area along the perimeter of the Interconnection Customer's collector substation for the Transmission Provider to install a control building. The site will share a fence and ground grid with the Interconnection Customer collector substation and have separate, unencumbered access for the Transmission Provider. Fencing, gates and road access shall meet Transmission Provider standards. The Interconnection Customer shall provide a Transmission Provider approved easement for its control building.

- Perform a CDEGS grounding analysis for both the collector substation site and the Transmission Provider control building site and provide the results to the Transmission Provider.
- Provide permanent AC power to the Transmission Provider's control building.
- Procure and install Transmission Provider approved H-Frame structures for the Transmission Provider's instrument transformers. The installation locations shall be coordinated with the Transmission Provider.
- Install complete conduit and control cable provided by the Transmission Provider from each of the Transmission Provider's instrument transformers to the Transmission Provider's collector substation control building. Leave sufficient quantities of control cable to allow the Transmission Provider to terminate the cable inside its control building.
- Install the Transmission Provider provided instrument transformers.
- Procure and install disconnect switches on each side of each of the instrument transformers.
- Provide Transmission Provider unfettered and maintained access to the Transmission Provider's instrument transformers.
- Install Transmission Provider approved fiber optic cable in conduit from the Transmission Provider's collector substation control building to the POI substation fence line. Leave sufficient amounts of cable for the Transmission Provider to terminate the fiber in both its collector substation control building and POI substation control building.
- Provide Transmission Provider approved easements for all Transmission Provider Interconnection Facilities to be installed in the Interconnection Customer's collector substation.
- Arrange for and provide permanent retail service for power that will flow from the Transmission Provider's system when the Project is not generating with the Transmission Provider's retail business unit.
- Provide any construction or backup retail service necessary for the Project.
- Provide a professional engineer ("PE") stamped maintenance plan package for all Interconnection Customer protective equipment prior to energization.

#### TRANSMISSION PROVIDER TO BE RESPONSIBLE FOR

- Provide the Interconnection Customer the designated point at which the voltage is to be maintained and the associated voltage schedule.
- Identify any necessary studies that the Interconnection Customer must have performed.
- Provide the Interconnection Customer the necessary specifications to allow the ground grid of the Interconnection Customer's collector substation and the POI substation to be tied together.
- Provide the Interconnection Customer the necessary specifications for the bus between the Interconnection Customer's collector substation and the new POI substation to be connected.
- Coordinate with Interconnection Customer on the location, size, and types of conduits and control cables between the POI substation and the collector substation.
- Install a control building on the property prepared by the Interconnection Customer.
- Procure and install a backup DC battery system for the Transmission Provider control building.
- Procure and install a communications racks and associated communications equipment in the Transmission Provider's control building.

- Coordinate with the Interconnection Customer on the location of the Transmission Provider's instrument transformers.
- Provide the Interconnection Customer the specifications for the instrument transmission installation structures.
- Procure and provide to the Interconnection Customer two sets of 34.5 kV instrument transformers to be on installed on each solar and storage strings.
- Design, procure and install two sets of 34.5 kV revenue metering equipment including metering panels, primary and secondary revenue quality meters, test switches, junction boxes and secondary metering wire.
- Provide the control cable to be installed by the Interconnection Customer from the instrument transformers to the Transmission Provider's control building and coordinate on the location of the cable.
- Terminate the fiber optic cable provided by the Interconnection Customer in the control building communications panel.
- Establish an Ethernet connection for retail sales and generation accounting via the MV-90 translation system.

#### **Point of Interconnection**

The following outlines the design, procurement, construction, installation, and ownership of equipment at the Point of Interconnection.

#### INTERCONNECTION CUSTOMER TO BE RESPONSIBLE FOR

- Coordinate with the Transmission Provider on the procurement of the property rights for the location of the new POI substation if the Interconnection Customer has a desired location for the substation and is able to provide the Transmission Provider ownership of the property.
- Coordinate with the Transmission Provider on the commissioning of the communications coming from the Interconnection Customer's collector substation.

#### **TRANSMISSION PROVIDER TO BE RESPONSIBLE FOR**

- Procure the necessary permits and/or property rights to allow for the construction and ownership of the new POI substation. If the Interconnection Customer is able to provide required property, coordinate to transfer ownership.
- Design, procure and construct, own and maintain a new 69 kV single breaker substation, designed for three breaker ring bus expansion which will include the following major pieces of equipment:
  - $\circ$  (1) 69 kV breaker
  - $\circ$  (6) 69 kV CCVT
  - $\circ$  (1) 69 kV SSVT
  - (5) 115 kV Group Operated Vertical Break, Horizontally Mounted Switch
  - (3) 115 kV Group Operated Vertical Break, Vertically Mounted Switch, with motor operators
  - (1) 115 kV Group Operated Vertical Break, Vertically Mounted Switch
  - $\circ$  (1) Bus differential CT junction cabinet
  - $\circ$  (9) 48 KV MCOV Arrester
  - $\circ$  (1) Control House
  - $\circ$  (1) 125 VDC Battery System
  - $\circ$  (3) 69 kV Metering CT/VT
- Perform a CDEGS grounding analysis of the POI substation location.

- Terminate the transmission lines running from Klamath and Copco 2 substations into the POI substation dead-end structures.
- Terminate the last bus/line segment running from the Interconnection Customer's collector substation deadend structure into the POI substation deadend structure using Interconnection Customer provided and installed conductor, shield wire and line hardware.
- Design, procure and install a marshalling cabinet near the Interconnection Customer's collector substation shared fence line.
- Provide and install conduit and control cabling between the marshalling cabinet and the control building and bus differential cabinet.
- Design, procure and install a bus differential relay system for the connection to the Interconnection Customer's collector substation.
- Procure and install a relay for under/over voltage and over/under frequency protection of the system.
- Procure and install a set of line current differential relay systems for the 69 kV lines looped into the POI substation.
- Include the following data points from the new POI substation into the new substation RTU:

Analogs:

- Net Generation MW
- Net Generator MVAr
- Energy Register kWH
- 69 kV A phase voltage
- o 69 kV B phase voltage
- o 69 kV C phase voltage
- Procure and install the necessary communication equipment to tie the new POI substation RTU into the Transmission Provider's communications network including fiber nodes, multiplex, router, battery system and charger.
- Procure and install a microwave system to allow communication between the POI substation and the Transmission Provider's Hamaker Mountain communications site including backup power system.
- Design, procure and install 69 kV revenue metering equipment for the Project including two (2) revenue quality meters, test switch, instrument transformers, metering panels, junction box and secondary metering wire.
- Provide and install an Ethernet connection for retail sales and generation accounting via the MV-90 translation system.
- Procure and install AC and DC service for the new POI substation.

#### Other

The following outlines the design, procurement, construction, installation, and ownership of equipment past the Point of Interconnection.

#### **TRANSMISSION PROVIDER TO BE RESPONSIBLE FOR**

- Line 18 Transmission Line
  - Rebuild approximately 10.3 miles of transmission line between the Q0905 POI substation and Weyerhaeuser Tap point.
  - Rebuild approximately 2 miles of transmission line between the Weyerhaeuser Tap and Westside Tap.
  - Rebuild approximately 1.3 miles between the Weyerhaeuser substation and Weyerhaeuser Tap.
  - Move the existing switch 3L132 at structure 13/21 (Q0905 POI to Fall Creek Tap line section) to the new line switch toward Fall Creek Tap at the Q0905 POI substation.

- Klamath Falls Substation
  - Procure and install communications equipment to support the required protection and data requirements.
  - Implement dead line checking functionality to the lines to be monitored for the transfer trip scheme.
- Weyerhaeuser Substation
  - Procure and install a microwave system to establish a link to the Transmission Provider's Hamaker Mountain communications site.
  - Procure and install communications equipment including a new RTU to support the required protection and data requirements.
- Hamaker Mountain Communications Site
  - Raise the existing microwave tower to approximately 110' to develop a link to the tower in the POI substation.
- Transfer Trip Scheme
  - Develop and implement a transfer trip scheme to trip the Interconnection Customer's Generating Facility offline for the following system conditions:
    - Circuit breaker 3L40 is open and 3L2, 3L3, or 3L1 are also open.
- System Operations Centers
  - Update databases to include the Interconnection Customer's Generating Facility, associated Interconnection Facilities and Network Upgrades.

# QUALIFYING FACILITY LARGE GENERATOR INTERCONNECTION AGREEMENT (QF-LGIA)

# (Applicable to Qualifying Facilities in Oregon that exceed 20 MW)

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### 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 <u>20th</u> day of <u>January</u> 20<u>21</u>, by and between <u>Fresh Air Energy II, LLC (Q905)</u>, a <u>limited liability company</u> organized and existing under the laws of the State of <u>California</u> ("Interconnection Customer" with a Large Generating Facility), and <u>PacifiCorp</u>, a <u>corporation</u> organized and existing under the laws of the State of Oregon ("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.

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#### 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 shalt 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.

**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 Provider's OATT before the Transmission Provider can offer the 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 Customer requires a new Large Generator Interconnection Customer requires a new Large Generator Interconnection Customer is responsible for initiating the interconnection 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 the 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:
  - With respect to any portion of Transmission Provider's Interconnection Facilities 2.4.1 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 Network Resource Interconnection Service.** Interconnection Customer will be provided Network Resource Interconnection Service under this QF-LGIA.
  - **4.1.1 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.
  - 4.1.2 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 Pointto-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 13.4.1. 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 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 to 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 OF-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: (Current Tax Rate x (Gross Income Amount — Present Value of Tax Depreciation))/(1-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); <u>provided, however,</u> 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 OF-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 a cordance 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

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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 predetermined 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.

Requirements for Protection. In compliance with Good Utility Practice, 9.6.5 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.
  - 11.6.1Interconnection Customer Compensation for Actions During<br/>Emergency Condition. Transmission Provider or RTO or ISO shall<br/>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. 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 shutdown, 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 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 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 OF-LGIA; or (6) is required, in accordance with Article 22.1.7 of the OF-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 1 b.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 OF-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 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 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 threemember 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 OF-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-LG1P or such Appendix to the QP-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.

Pacifi	Corp
By:	Rick Vail Vail Date: 2021.01.20 14:18:47 -08'00'
Title:	Rick Vail VP, Transmission
	01/20/2021

# Fresh Air Energy II, LLC (Q905)

Spintello

By:

Title: SVP - Development West Region

Date: 1/20/2021

# Appendix A to QF-LGIA

# Interconnection Facilities, Network Upgrades and Distribution Upgrades

# 1. Interconnection Facilities

- (a) Interconnection Customer's Interconnection Facilities: a short bus tie between the GSU step-up transformer and the Point of Interconnection substation (please see Attachment A)
- (b) Transmission Provider's Interconnection Facilities: a line position (includes interchange metering, disconnect switches, and associated deadends and other structures) and a single breaker at the Point of Interconnection substation (Please see Attachment A)

# 2. Network Upgrades:

- (a) Stand Alone Network Upgrades: a new single breaker Point of Interconnection substation with bus built to accommodate additional breakers (to be built at approximately line structure 3/27, or at 42.126777°N, 121.960272°W)
- (b) Other Network Upgrades: loop in/out of transmission line to Point of Interconnection substation, modifications to relay scheme at Q757 Point of Interconnection substation, rebuild of approximately 8.75 miles of 69 kV line to the Weyerhaeuser tap, modifications at the Hamaker Mountain communications site, and communications upgrades at Klamath substation, Weyerhaeuser substation, and the Portland Control Center.

# 3. Distribution Upgrades: None

**4. Contingent Facilities:** As identified in the System Impact Study dated May 10, 2018 and the Facilities Study dated April 8, 2020 for this Project, the following Network Upgrades are required to be in-service prior to this project:

- Communications and protective equipment upgrades assigned to higher priority Interconnection Request Q0757 (October 2022, Estimated cost \$400,000).
  - Installation of approximately 4 miles of fiber optic cable on Line 68 between Klamath Falls substation and Weyerhaeuser substation.
  - Installation of protection and communications equipment in both Klamath Falls and Weyerhaeuser substations.

**5. Point of Interconnection ("POI"):** The point at which Transmission Provider Interconnection Facilities connect to the substation bus at the POI substation (see Attachment A).

**6. Point of Change of Ownership:** The point at which Interconnection Customer and Transmission Provider Interconnection Facilities meet (see Attachment A).

7. One-Line Diagram: is attached to this Agreement as Attachment A.

8. Estimated Facilities Cost: \$7,067,000

# Appendix B to QF-LGIA Milestones

Milestone Interconnection Customer Executes Interconnection Agreement	Date December 13, 2020
†Interconnection Customer Provides of Financial Security	February 4, 2021
Interconnection Customer Provides Approval for Transmission Provider to Begin Engineering & Procurement Activities	April 6, 2021
*Interconnection Customer Provides Initial Design Information	May 6, 2021
Transmission Provider Commences Engineering & Procurement	May 6, 2021
Interconnection Customer Provides Energy Imbalance Market Modeling Data	June 21, 2021
Interconnection Customer Property/Permits/ROW Procured	September 10, 2021
*Interconnection Customer Provides Final Design Information	October 18, 2021
Transmission Provider Property/Permits/ROW Procured	November 1, 2021
Transmission Provider Completes Engineering Design	February 3, 2022
Interconnection Customer Voltage Coordination Study Commences	February 3, 2022
Interconnection Customer Provides Approval for Transmission Provider to Begin Construction Activities	April 1, 2022
Transmission Provider Begins Construction	May 4, 2022
Interconnection Customer Commissioning & Maintenance Plans Provided	August 17, 2022
**Contingent Facilities Complete	October 15, 2022
Transmission Provider and Interconnection Customer Completes Construction	November 2, 2022
Transmission Provider Completes Commissioning	December 1, 2022
Transmission Provider Completes Commissioning Document Review	December 8, 2022
Interconnection Customer's Facilities Receive Backfeed Power	December 9, 2022
Initial Synchronization/Generation Testing	January 6, 2023

#### **Commercial Operation**

†Financial Security is determined to be \$1,540,000

\*Interconnection Customer initial design package shall include final generating facility location, inverter/turbine selection, basic protection package, tie line route and collector system locations and data as applicable. Interconnection Customer final design package shall include PE stamped issued for construction ("IFC") drawings for generating facility, collector substation, tie line as well as an updated PSS/e model and updated WECC approved model, electromagnetic transient ("EMT") model and a detailed short circuit model of its generation system using the ASPEN OneLine short circuit simulation program as applicable. The WECC model parameters must be adjusted to reflect the plant's actual anticipated performance. The plant controller must be included in the model. If there is to be coordination between facilities or a master VAR controller, this must be included in the detailed WECC dynamic model, as well as in the PSS/e user-written model.

\*\* For the avoidance of doubt, the Commercial Operation Date in Appendix B of this LGIA is contingent upon the completion of all of the Contingent Facilities listed in Appendix A. If the completion of ANY of the Contingent Facilities is delayed beyond the estimated completion date(s) contained in Appendix A, the Transmission Provider will determine in its sole discretion whether the Commercial Operation Date and associated milestones listed in Appendix B of this LGIA need to be modified accordingly, and will inform the Interconnection Customer at the earliest reasonable opportunity of such a change. If the completion of ALL of the Contingent Facilities occurs before the estimated dates contained in this Appendix A, the Transmission Provider will determine in its sole discretion whether the Commercial Operation Date and associated milestones listed in Appendix B of this LGIA can be modified accordingly, and will inform the Interconnection Customer at the earliest reasonable opportunity of such a change.

# Appendix C to QF-LGIA Interconnection Details

**Description of the Large Generating Facility:** The Interconnection Customer's Large Generating Facility consists of twenty (20) Sungrow SG3115OU inverters for a total requested output of 50 MW as measured at the Point of Interconnection. On the low side of each inverter are three (3), for a total of sixty (60) 1.25 MVA DC-DC converters and batteries (the batteries will charge strictly from the solar arrays). The inverters are connected to 3.15 MVA 630 V – 34.5 kV transformers (5.75% impedance). Three (3) strings of transformers are then connected to a single 33/44/55 MVA 34.5 – 69 kV (7.5% impedance) transformer. The Large Generating Facility is located in Klamath County, Oregon. Please see Attachment A.

**Control Area Requirements:** Interconnection Customer shall interconnect and operate the Large Generating Facility in accordance with the Transmission Provider's Facility Interconnection Requirements for Transmission Systems, as may be revised from time to time, attached hereto as Exhibit 1 to Appendix C and by this reference incorporated herein.

#### **Interconnection Details:**

Metering. With reference to Article 7.1, Transmission Provider will own and maintain the bidirectional revenue Metering Equipment in Transmission Provider's Point of Interconnection substation at the Interconnection Customer's expense.

Under Frequency and Over Frequency Conditions. Consistent with QF-LGIA Article 9.6.3, Transmission Provider shall design, procure, install and maintain frequency and voltage protection to trip feeder breakers in accordance with the settings shown in Exhibit 1 to Appendix C.

Reactive Power and Voltage Schedule. Subject to QF-LGIA Article 9.5.1 and Transmission Provider Policy 139, all interconnecting synchronous and non-synchronous generators are required to design their Generating Facilities with reactive power capabilities necessary to operate within the full power factor range of 0.95 leading to 0.95 lagging. This power factor range shall be dynamic and can be met using a combination of the inherent dynamic reactive power capability of the generator or inverter, dynamic reactive power devices and static reactive power devices. For non-synchronous generators, the power factor requirement is to be measured at the high-side of the generator substation. The Generating Facility must provide dynamic reactive power to the system over the full range of real power output. If the Generating Facility is not capable of providing positive reactive support (i.e., supplying reactive power to the system) immediately following the removal of a fault or other transient low voltage perturbations, the facility will be required to add dynamic voltage support equipment. These additional dynamic reactive devices shall have correct protection settings such that the devices will remain on line and active during and immediately following a fault event.

Generators shall be equipped with automatic voltage-control equipment and normally operated with the voltage regulation control mode enabled unless written authorization, or directive, from the Transmission Provider is given to operate in another control mode (e.g., constant power factor control). The control mode of generating units shall be accurately represented in operating studies.

The generators shall be capable of operating continuously at their rated power output within +/-5% of its rated terminal voltage. Pursuant to NERC standard PRC-002 and MOD-033, Phasor Measurement Units will be required at any Generating Facilities with an individual or aggregate nameplate capacity of 75 MVA or greater.

As required by NERC standard VAR-001-1a, the Transmission Provider will provide a voltage schedule for the Point of Interconnection. In general, Generating Facilities should be operated so as to maintain the voltage at the Point of Interconnection, or other designated point as deemed appropriated by Transmission Provider, in accordance with Transmission Provider Policy 139.

Generating Facilities capable of operating with a voltage droop are required to do so. Studies will be required to coordinate voltage droop settings if there are other facilities in the area. It will be the Interconnection Customer's responsibility to ensure that a voltage coordination study is performed, in coordination with Transmission Provider, and implemented with appropriate coordination settings prior to unit testing. If the need for a master controller is identified, the cost and all related installation requirements will be the responsibility of the Interconnection Customer. Participation by the Generation Facility in subsequent interaction/coordination studies will be required pre- and post-commercial operation in order ensure system reliability.

All generators must meet the Federal Energy Regulatory Commission ("FERC") and WECC low voltage ride-through requirements.

As the Transmission Provider cannot submit a user written model to WECC for inclusion in base cases, a standard model from the WECC Approved Dynamic Model Library is required 180 days prior to trial operation. The list of approved generator models is continually updated and is available on the http://www.WECC.biz website.

<u>Property Requirements</u>. Subject to QF-LGIA Articles 5.12 and 5.13, Interconnection Customer is required to obtain for the benefit of Transmission Provider at Interconnection Customer's sole cost and expense all real property rights, including but not limited to fee ownership, easements and/or rights of way, as applicable, for Transmission Provider owned Facilities using Transmission Provider's standard forms. Transmission Provider shall not be obligated to accept any such real property right that does not, at Transmission Provider's sole discretion, confer sufficient rights to access, operate, construct, modify, maintain, place and remove Transmission Provider's standard forms. Further, all real property on which Transmission Provider's Facilities are to be located must be environmentally, physically and operationally acceptable to the Transmission Provider at its sole discretion.

Subject to QF-LGIA Article 5.14, Interconnection Customer is responsible for obtaining all permits required by all relevant jurisdictions for the project, including but not limited to, conditional use permits and construction permits; provided however, Transmission Provider shall obtain, at Interconnection Customer's cost and schedule risk, the permits necessary to construct Transmission Provider's Facilities that are to be located on real property currently owned or held in fee or right by Transmission Provider.

Subject to applicable provisions in the Agreement and an express written waiver by an authorized officer of Transmission Provider, all of the foregoing permits and real property rights (conferring rights on real property that is environmentally, physically and operationally acceptable to Transmission Provider) shall be acquired as provided herein as a condition to Transmission

Provider's contractual obligation to construct or take possession of facilities to be owned by the Transmission Provider under this Agreement. Transmission Provider shall have no liability for any project delays or cost overruns caused by delays in acquiring any of the foregoing permits and/or real property rights, whether such delay results from the failure to obtain such permits or rights or the failure of such permits or rights to meet the requirements set forth herein. Further, any completion dates, if any, set forth herein with regard to Transmission Provider's obligations shall be equitably extended based on the length and impact of any such delays.

# 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.

Automatic Data Transfer. Throughout the term of this Agreement, Interconnection Customer shall provide the data specified below by automatic data transfer to the Transmission Provider Control Center specified by Transmission Provider or to a Third-Party System Operator designated by Transmission Provider (or both):

From the Interconnection Customer's collector substation:

Analog Written to the RTU:

o Max Gen Limit MW Set Point

Analogs:

- Max Gen Limit MW Set Point feed back
- o 34.5 kV Real power F1
- o 34.5 kV Reactive power F1
- o 34.5 kV Real power F2
- 34.5 kV Reactive power F2
- o 34.5 kV Real power F3
- o 34.5 kV Reactive power F3
- o Global Horizontal Irradiance (GHI)
- Average Plant Atmospheric Pressure (Bar)
- Average Plant Temperature (Celsius)

#### Status:

- o 69 kV line breaker 52TP
- o 34.5 kV breaker F1
- o 34.5 kV breaker F2
- 34.5 kV breaker F3

**Billing Meter Data.** Bi-directional revenue meter at the Point of Interconnection will not be configured to allow direct dial-up access by Interconnection Customer. The Transmission Provider will provide alternatives, at the Interconnection Customer's expense, upon request.

Additional Data. Interconnection Customer shall, at its sole expense, provide any additional Generating Facility data reasonably required and necessary for the Transmission Provider to operate the Transmission System in accordance with Good Utility Practice and Exhibit 1 to Appendix C, Facility Interconnection Requirements for Transmission Systems.

<u>Relay and Control Settings</u>. Should the Interconnection Customer require modification to the settings associated with control/protective devices connected to the distribution and/or transmission system they will contact the Transmission Provider and provide in writing the

justification and/or need for the proposed modifications. This will allow the Transmission Provider time to analyze and ensure there are no negative impacts to the associated connected systems and customers. Any modifications of control and/or relay settings without review and acknowledgement of acceptance by Transmission Provider will be disconnection from the Transmission Provider system until such time as changes are reviewed and accepted.

# **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:	
<u>US Mail Deliveries:</u>	PacifiCorp Attn: Central Cashiers Office 825 NE Multnomah Street, Suite 550 Portland, OR 97232
Other Deliveries:	PacifiCorp Attn: Transmission Services 825 NE Multnomah Street, Suite 1600 Portland OR 97232
Phone Number:	503-813-6774

Interconnection Customer: Fresh Air Energy II LLC Attn: Manager of Interconnections 101 2nd St, Ste. 1250 San Francisco, CA 94105

#### **Billings and Payments:**

<u>Transmission Provider:</u> PacifiCorp Attn: Central Cashiers Office 825 NE Multnomah Street, Suite 550 Portland, OR 97232

Interconnection Customer:

Fresh Air Energy II LLC Attn: Manager of Interconnections 101 2nd St, Ste. 1250 San Francisco, CA 94105

#### Alternative Forms of Delivery of Notices (telephone, facsimile or email):

Transmission ProviderDirector, Transmission Services 503-813-7237Manager, Transmission Scheduling503-813-5342Manager, Interconnection Services503-813-6496Transmission Business Facsimile503-813-6893

OASIS Address: http://www.oasis.pacificorp.com/oasis/ppw/main.htmlx

Interconnection Customer: Fresh Air Energy II LLC Attn: Manager of Interconnections 415-663-3836

# Appendix G to QF-LGIA

# 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. <u>Technical Standards Applicable to a Wind Generating Plant</u>B.

# 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 prefault 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.
- 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

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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 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. <u>Power Factor Design Criteria (Reactive Power)</u>

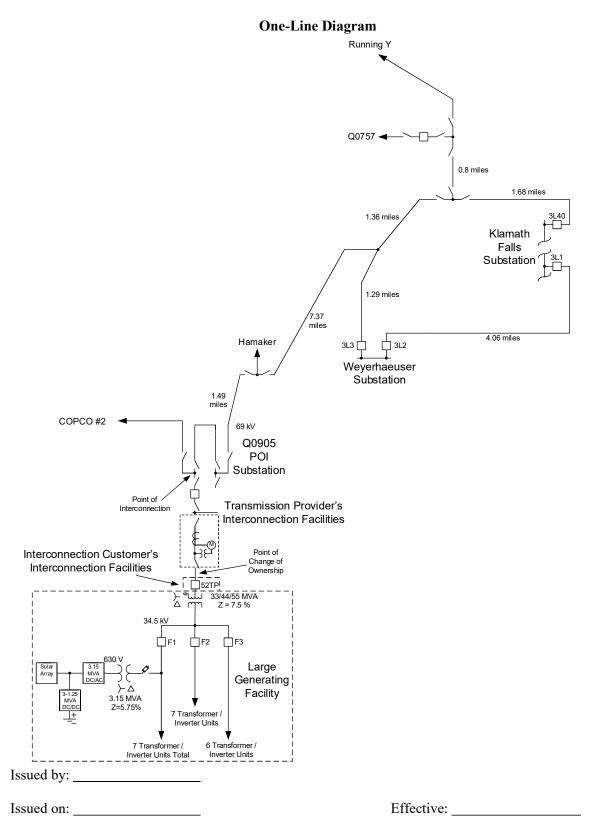
A wind generating plant shall maintain a power factor within the range of 0.95 leading to 0.95 lagging, measured at the Point of Interconnection as defined in this QF-LGIA, if the Transmission Provider's System Impact Study shows that such a requirement is necessary to ensure safety or reliability. The 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. <u>Supervisory Control and Data Acquisition (SCADA) Capability</u>

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.

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#### Attachment B to QF-LGIA

#### Scope of Work

#### **Generating Facility Modifications**

The following outlines the design, procurement, construction, installation, and ownership of equipment at the Interconnection Customer's Generation Facility.

#### INTERCONNECTION CUSTOMER TO BE RESPONSIBLE FOR

- Procure all necessary permits, lands, rights of way and easements required for the construction and continued maintenance of the Interconnection Customer's Generating Facility and collector substation.
- Design, procure, construct, own and maintain the Interconnection Customer's Generating Facility and associated collector substation. The Interconnection Customer's collector substation shall be constructed adjacent (less than 800') to the new POI substation.
- Design the Generating Facility with reactive power capabilities necessary to operate within the full power factor range of 0.95 leading to 0.95 lagging as measured at the high side of the Interconnection Customer's GSU transformer. This power factor range shall be dynamic and can be met using a combination of the inherent dynamic reactive power capability of the generator or inverter, dynamic reactive power devices and static reactive power devices to make up for losses.
- Design the generating facility such that it can provide positive reactive support (i.e., supply reactive power to the system) immediately following the removal of a fault or other transient low voltage perturbations or install dynamic voltage support equipment. These additional dynamic reactive devices shall have correct protection settings such that the devices will remain on line and active during and immediately following a fault event.
- Equip the Generating Facility with automatic voltage-control equipment and operate with the voltage regulation control mode enabled unless explicitly authorized to operate another control mode by the Transmission Provider.
- Operate the Generating Facility so as to maintain the voltage at the POI, or other designated point as deemed appropriated by Transmission Provider, at a voltage schedule to be provided by the Transmission Provider following testing.
- Operate the Generating Facility with a voltage droop.
- Participate in any Transmission Provider required studies, such as a voltage coordination study. The determination of what studies will be required will be based on the likely configuration of the Transmission Provider's system at the time of detailed design. Any additional requirements identified in these studies will be the responsibility of the Interconnection Customer.
- Meet the Federal Energy Regulatory Commission ("FERC") and WECC low voltage ridethrough requirements as specified in the interconnection agreement.
- Provide test results to the Transmission Provider verifying that the inverters for this Project have been programmed to meet all PRC-024 requirements rather than manufacturer IEEE distribution standards.
- Provide the Transmission Provider a standard model from the WECC Approved Dynamic Model Library.
- Install a step-up transformer that will be a source of ground current for phase to ground faults on the 69 kV transmission system.
- Design the collector substation such that the ground grid can be connected to the POI substation ground grid to support the installation of a Transmission Provider owned and maintained bus differential scheme. The Interconnect Customer is responsible to ensure the ground grid design supports safe step and touch potentials.

- Design, provide and install conduits between the Interconnection Customer collector substation and the marshalling cabinet just inside the fence of the POI substation to support copper circuits installed between the facilities.
- Design, provide and install control cabling (number and size TBD) and hard wire the Interconnection Customer's source devices to the marshalling cabinet. Replicated values are not acceptable.
- Provide the following points which are based on the Interconnection Customer's most recent design information. Please note that this list of points could change if the Interconnection Customer's final design changes:

Analog Written to the RTU:

o Max Gen Limit MW Set Point

Analogs:

- Max Gen Limit MW Set Point feed back
- o 34.5 kV Real power F1
- o 34.5 kV Reactive power F1
- o 34.5 kV Real power F2
- o 34.5 kV Reactive power F2
- o 34.5 kV Real power F3
- 34.5 kV Reactive power F3
- Global Horizontal Irradiance (GHI)
- Average Plant Atmospheric Pressure (Bar)
- Average Plant Temperature (Celsius)

Status:

- o 69 kV line breaker 52TP
- o 34.5 kV breaker F1
- o 34.5 kV breaker F2
- o 34.5 kV breaker F3
- Install a set of current transformers from the 69 kV transformer breaker and provide the output to be fed into the Transmission Provider's bus differential relays with current transformer ratio matching the CT ratio of the breaker at the POI substation.
- Provide and install conductor, shield wire and line hardware in sufficient quantities to allow the Transmission Provider to terminate the segment running from the collector substation deadend structure into the POI substation deadend structure. The last segment will be owned by the Transmission Provider.
- Arrange for and provide permanent retail service for power that will flow from the Transmission Provider's system when the Project is not generating with the Transmission Provider's retail business unit. This arrangement must be in place prior to approval for backfeed.
- Provide any construction or backup retail service necessary for the Project.
- Provide the Public Utility a Professional Engineer ("PE") approved maintenance plan for all Interconnection Customer facilities prior to commencement of generation activities.

#### TRANSMISSION PROVIDER TO BE RESPONSIBLE FOR

- Provide the Interconnection Customer the designated point at which the voltage is to be maintained and the associated voltage schedule.
- Identify any necessary studies that the Interconnection Customer must participate in.
- Provide the Interconnection Customer the necessary specifications to allow the ground grid of the Interconnection Customer's collector substation and the POI substation to be tied together.
- Provide the Interconnection Customer the necessary specifications for the bus between the Interconnection Customer's collector substation and the new POI substation to be connected.
- Coordinate with Interconnection Customer on the location of conduits and control cables between the POI substation and the collector substation.

#### **Point of Interconnection**

The following outlines the design, procurement, construction, installation, and ownership of equipment at the POI.

#### INTERCONNECTION CUSTOMER TO BE RESPONSIBLE FOR

• Provide a separate graded, grounded and fenced area adjacent to (sharing a common fence) the Interconnection Customer's collector substation for the Transmission Provider's POI substation as required by the Transmission Provider's site work design specifications and drawings.

#### TRANSMISSION PROVIDER TO BE RESPONSIBLE FOR

- Procure all necessary easements, rights of way and land acquisition for the construction of the new POI substation.
- Design, procure and construct a new 69 kV single breaker POI substation adjacent to the Interconnection Customer's collector substation which will include the following major pieces of equipment:
  - $\circ$  (1) 69 kV breaker
  - $\circ$  (1) 69 kV CCVT
  - $\circ$  (1) 69 kV SSVT
  - o (4) 115 kV Group Operated Vertical Break, Horizontally Mounted Switch
  - o (4) 115 kV Group Operated Vertical Break, Vertically Mounted Switch
  - $\circ$  (1) Bus differential CT junction cabinet
  - $\circ$  (9) 48 KV MCOV Arrester
  - $\circ$  (1) Control House
  - (1) 125 VDC Battery System
  - o RTU
  - Control Building
  - Ground Grid
  - o Fencing
- Perform a CDEGS grounding analysis to determine requirements for both the Interconnection Customer collector substation and Transmission Provider POI substation. Provide requirements to Interconnection Customer.
- Terminate the transmission lines running from Copco #2 and Klamath Falls substations in new line positions.
- Terminate the last bus/line segment running from the Interconnection Customer's collector substation deadend structure into the POI substation deadend structure using Interconnection Customer provided and installed conductor, shield wire and line hardware.
- Procure and install a marshalling cabinet near the Interconnection Customer's collector substation.
- Provide and install conduit and control cabling between the marshalling cabinet and the control building and bus differential cabinet.
- Design, procure and install a bus differential relay system for the connection to the Interconnection Customer's collector substation.
- Procure and install a relay for under/over voltage and over/under frequency protection of the system.
- Procure and install line relay systems to monitor the 69 kV network to which the Project is being interconnected.
- Include the following data points from the new POI substation into the new substation RTU: <u>Analogs:</u>
  - Net Generation MW
  - Net Generator MVAr
  - Energy Register

- Install a microwave system to support protection and data communication including monopole tower, antennas, waveguide, radios, 48V battery/charger system, dehydrator, channel bank, fuse panel, DSX panel, router and switch. The microwave shall be designed to communicate with the Transmission Provider's existing Hamaker Mountain communications site.
- Design, procure and install 69 kV revenue metering equipment for the Project including two (2) revenue quality meters, test switch, instrument transformers, metering panels, junction box and secondary metering wire.
- Provide and install an Ethernet connection for retail sales and generation accounting via the MV-90 translation system.

#### Other

The following outlines the design, procurement, construction, installation, and ownership of equipment past the POI.

#### TRANSMISSION PROVIDER TO BE RESPONSIBLE FOR

- Copco 2-Westside Tap Transmission Line
  - Loop the line in/out of the new POI substation which will require the installation of two transmission structures and approximately 1,000 feet of conductor.
  - Rebuild approximately 9 miles of the transmission line between the new POI substation and the Weyerhaeuser tap with 397.5 ACSR conductor.
- Klamath Falls substation
  - Modify relay settings to send a transfer trip single to the POI substation for relevant system conditions.
- Weyerhaeuser substation
  - Modify relay settings to send a transfer trip single to the POI substation for relevant system conditions.
- Hamaker Mountain Communications Site
  - Evaluate the loading and space of the existing microwave tower for the installation of a new antenna. If necessary, strengthen and/or increase in height of the tower to allow for the installation of a new antenna.
- System Operations Centers
  - Update databases to include Interconnection Customer and Transmission Provider Interconnection Facilities and Network Upgrades.

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# Attachment C to QF-LGIA

# Facility Connection Requirements for Transmission Systems

Please see attached

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